



Development Charges Background Study

County of Haldimand

March 5, 2019

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List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
D.C.	Development charge
D.C.A.	Development Charges Act, 1997, as amended
G.F.A.	Gross floor area
L.P.A.T.	Local Planning Appeal Tribunal
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
S.W.M.	Stormwater management
sq.ft.	square foot
sq.m	square metre



Executive Summary



Executive Summary

1. The report provided herein represents the Development Charges (D.C.) Background Study for the County of Haldimand required by the Development Charges Act, 1997 (D.C.A.). This report has been prepared in accordance with the methodology required under the D.C.A. The contents include the following:

- Chapter 1 – Overview of the legislative requirements of the Act;
- Chapter 2 – Review of present D.C. policies of the County;
- Chapter 3 – Summary of the residential and non-residential growth forecasts for the County;
- Chapter 4 – Approach to calculating the D.C.;
- Chapter 5 – Review of historical service standards and identification of future capital requirements to service growth and related deductions and allocations;
- Chapter 6 – Calculation of the D.C.s;
- Chapter 7 – D.C. policy recommendations and rules; and
- Chapter 8 – By-law implementation.

2. D.C.s provide for the recovery of growth-related capital expenditures from new development. The D.C.A. is the statutory basis to recover these charges. The methodology is detailed in Chapter 4; a simplified summary is provided below:

- 1) Identify amount, type and location of growth;
- 2) Identify servicing needs to accommodate growth;
- 3) Identify capital costs to provide services to meet the needs;
- 4) Deduct:
 - Grants, subsidies and other contributions;
 - Benefit to existing development;
 - Statutory 10% deduction (soft services);
 - Amounts in excess of 10-year historic service calculation;
 - D.C. reserve funds (where applicable);



- 5) Net costs are then allocated between residential and non-residential benefit; and
 - 6) Net costs divided by growth to provide the D.C.
3. A number of changes to the D.C. process need to be addressed as a result of Bill 73. These changes have been incorporated throughout the report and in the updated draft by-law, as necessary. These items include:
- a. Area-rating: Council must consider the use of area-specific charges.
 - b. Asset Management Plan for New Infrastructure: The D.C. background study must include an asset management plan that deals with all assets proposed to be funded, in whole or in part, by D.C.s. The asset management plan must show that the assets are financially sustainable over their full lifecycle.
 - c. 60-day Circulation Period: The D.C. background study must be released to the public at least 60-days prior to passage of the D.C. by-law.
 - d. Timing of Collection of Development Charges: The D.C.A. now requires D.C.s to be collected at the time of the first building permit.
4. The growth forecast (Chapter 3) on which the County-wide D.C. is based, projects the following population, housing and non-residential floor area for the 10-year (2019 to 2028), 20-year (2019 to 2038), and urban 20-year (2019 to 2038) periods.

Measure	10-year 2019-2028	20-year 2019-2038	Urban 20-year 2019-Urban 20 Year
(Net) Population Increase	6,376	13,433	13,445
Residential Unit Increase	2,696	5,648	5,393
Non-Residential Gross Floor Area Increase (sq.ft.)	2,185,900	3,995,700	3,995,700

Source: Watson & Associates Economists Ltd. Forecast 2019

5. On May 20, 2014, the County of Haldimand passed By-law 1441-14 under the D.C.A. The by-law imposes D.C.s on residential and non-residential uses. This by-law will expire on May 20, 2019. The County is undertaking a D.C. public



process and anticipates passing a new by-law in advance of the expiry date. The mandatory public meeting has been set for April 16, 2019 with adoption of the by-law on May 13, 2019.

6. The County's D.C.s currently in effect are \$12,125 for single detached dwelling units for full services. Non-residential charges are \$3.07 per square foot for full services. This report has undertaken a recalculation of the charge based on future identified needs (presented in Schedule ES-1 for residential and non-residential). Charges have been provided on a County-wide basis for all non water/wastewater/stormwater services and on an urban-area basis for all water, wastewater, and stormwater services. The corresponding single detached unit charge is \$21,063. The non-residential charge is \$4.72 per square foot of building area (\$50.81 per sq.m). These rates are submitted to Council for its consideration.
7. The D.C.A. requires a summary be provided of the gross capital costs and the net costs to be recovered over the life of the by-law. This calculation is provided by service and is presented in Table 6-5. A summary of these costs is provided below:

Total gross expenditures planned over the next five years	\$ 107,542,398
Less:	
Benefit to existing development	\$ 29,881,971
Post planning period benefit	\$ 21,677,664
Amount already funded from reserve fund	\$ 9,408
Mandatory 10% deduction for certain services	\$ 1,667,395
Grants, subsidies and other contributions	\$ -
Net Costs to be recovered from development charges	\$ 54,305,960

Hence, \$53.24 million (or an annual amount of \$10.65 million) will need to be contributed from taxes and rates, or other sources. Of this amount, \$21.68 million will be included in subsequent D.C. study updates to reflect the portion of capital that benefits growth anticipated to occur outside of the D.C. forecast periods.

Based on the above table, the County plans to spend \$107.54 million over the next five years, of which \$54.31 million (50%) is recoverable from D.C.s. Of this net amount, \$44.25 million is recoverable from residential development and



\$10.05 million from non-residential development. It is noted also that any exemptions or reductions in the charges would reduce this recovery further.

8. Considerations by Council – The background study represents the service needs arising from residential and non-residential growth over the forecast periods.

The following services are calculated based on an urban 20-year forecast:

- Stormwater Drainage and Control Services;
- Wastewater Services; and
- Water Services.

The following services are calculated based on a 20-year forecast:

- Services Related to a Highway;
- Public Works Facilities, Fleet & Equipment; and
- Fire Protection Services.

All other services are calculated based on a 10-year forecast. These include:

- Parking;
- Indoor and Outdoor Recreation Services;
- Library Services;
- Administration (studies);
- Waste Diversion;
- Cemeteries; and
- Ambulance.

Council will consider the findings and recommendations provided in the report and, in conjunction with public input, approve such policies and rates it deems appropriate. These directions will refine the draft D.C. by-law which is appended in Appendix G. These decisions may include:

- adopting the charges and policies recommended herein;
- considering additional exemptions to the by-law; and
- considering reductions in the charge by class of development (obtained by removing certain services on which the charge is based and/or by a general reduction in the charge).



Table ES-1
Haldimand County
Schedule of Development Charges

Service	RESIDENTIAL					NON-RESIDENTIAL	
	Single and Semi-Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	Special Care/Special Dwelling Units	(per sq.ft. of Gross Floor Area)	(per sq.m. of Gross Floor Area)
Municipal Wide Services:							
Services Related to a Highway	1,970	1,469	946	1,817	749	0.78	8.40
Public Works	238	178	114	220	90	0.10	1.08
Fire Protection Services	690	515	331	637	262	0.29	3.12
Parking Services	91	68	44	84	35	0.04	0.43
Indoor & Outdoor Recreation Services	9,386	7,001	4,506	8,659	3,568	0.57	6.14
Library Services	1,132	844	543	1,044	430	0.07	0.75
Administration	225	168	108	208	86	0.09	0.97
Cemeteries	70	52	34	65	27	0.03	0.32
Ambulance	235	175	113	217	89	0.09	0.97
Waste Diversion	163	122	78	150	62	0.02	0.22
Total Municipal Wide Services	14,200	10,592	6,817	13,101	5,398	2.08	22.39
Urban Services							
Stormwater Drainage and Control Services	121	90	58	112	46	0.05	0.54
Wastewater Services	4,776	3,562	2,293	4,406	1,816	1.83	19.70
Water Services	1,966	1,466	944	1,814	747	0.76	8.18
Total Urban Services	6,863	5,118	3,295	6,332	2,609	2.64	28.42
GRAND TOTAL RURAL AREA	14,200	10,592	6,817	13,101	5,398	2.08	22.39
GRAND TOTAL URBAN AREA	21,063	15,710	10,112	19,433	8,007	4.72	50.81



Report



Chapter 1

Introduction



1. Introduction

1.1 Purpose of this Document

This background study has been prepared pursuant to the requirements of the D.C.A. (s.10) and, accordingly, recommends new D.C.s and policies for the County of Haldimand.

The County retained Watson & Associates Economists Ltd. (Watson), to undertake the D.C. study process throughout 2018 and early 2019. Watson worked with County staff in preparing the D.C. analysis and 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 County's D.C. background study, as summarized in Chapter 4. It also addresses the requirement for "rules" (contained in Chapter 7) and the proposed by-law to be made available as part of the approval process (included as Appendix G).

In addition, the report is designed to set out sufficient background on the legislation (Chapter 4), Haldimand's current D.C. policies (Chapter 2) and the policies underlying the proposed by-law, to make the exercise understandable to those who are involved.

Finally, it addresses post-adoption implementation requirements (Chapter 8) 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

The public meeting required under Section 12 of the D.C.A., has been scheduled for April 16, 2019. Its purpose is to present the study to the public and to solicit public input. The meeting is also being held to answer any questions regarding the study's purpose, methodology, and the proposed modifications to the County's D.C.s.

In accordance with the legislation, the background study and proposed D.C. by-law will be available for public review on March 5, 2019.

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

- A stakeholder meeting to solicit feedback from relevant stakeholders;
- Consideration of responses received prior to, at, or immediately following the Public Meeting; and
- Finalization of the report and Council consideration of the by-law subsequent to the public meeting.

Figure 1-1 outlines the proposed schedule to be followed with respect to the D.C. by-law adoption process.



Figure 1-1
Schedule of Key D.C. Process Dates for the County of Haldimand

1. Data collection, staff review, D.C. calculations, and policy work	September to December 2018
2. Council Workshop	January 15, 2019
3. Stakeholder meeting	March 21, 2019
4. Background study and proposed by-law available to public	March 5, 2019
5. Public meeting advertisement placed in newspaper(s)	No later than March 26, 2019
6. Public meeting of Council	April 16, 2019
7. Council considers adoption of background study and passage of by-law	May 13, 2019
8. Newspaper notice given of by-law passage	By 20 days after passage
9. Last day for by-law appeal	40 days after passage
10. County makes pamphlet available (where by-law not appealed)	By 60 days after in force date



1.3 Changes to the D.C.A.: Bill 73

With the amendment of the D.C.A. (as a result of Bill 73 and O.Reg. 428/15), there are a number of areas that must be addressed to ensure that the County is in compliance with the D.C.A., as amended. The following provides an explanation of the changes to the Act that affect the County's Background Study and how they have been dealt with to ensure compliance with the amended legislation.

1.3.1 Area Rating

Bill 73 has introduced two new sections where Council must consider the use of area-specific charges:

- 1) Section 2(9) of the Act now requires a municipality to implement area-specific D.C.s for either specific services which are prescribed and/or for specific municipalities which are to be regulated. (Note that at this time, no municipalities or services are prescribed by the Regulations.)
- 2) Section 10(2) c.1 of the D.C.A. requires that, "the development charges background study shall include consideration of the use of more than one development charge by-law to reflect different needs for services in different areas."

In regard to the first item, there are no services or specific municipalities identified in the regulations which must be area-rated. The second item requires Council to consider the use of area rating.

1.3.2 Asset Management Plan for New Infrastructure

The new legislation now requires that a D.C. background study must include an Asset Management Plan (s.10 (2) c.2). The asset management plan must deal with all assets that are proposed to be funded, in whole or in part, by D.C.s. The current regulations provide very extensive and specific requirements for the asset management plan related to transit services; however, they are silent with respect to how the asset management plan is to be provided for all other services. As part of any asset management plan, the examination should be consistent with the municipality's existing assumptions, approaches and policies on asset management planning. This examination may include both qualitative and quantitative measures such as examining



the annual future lifecycle contributions needs (discussed further in Appendix F of this report).

1.3.3 60-Day Circulation of D.C. Background Study

Previously the legislation required that a D.C. background study be made available to the public at least two weeks prior to the public meeting. The amended legislation now provides that the D.C. background study must be made available to the public (including posting on the municipal website) at least 60 days prior to passage of the D.C. by-law. No other changes were made to timing requirements for such things as notice of the public meeting and notice of by-law passage.

This D.C. study is being provided to the public on March 5, 2019 to ensure the new requirements for release of the study is met.

1.3.4 Timing of Collection of D.C.s

The D.C.A. has been refined by Bill 73 to require that D.C.s are collected at the time of the first building permit. For the majority of development, this will not impact the County's present process. There may be instances, however, where several building permits are to be issued and either the size of the development or the uses will not be definable at the time of the first building permit. In these instances, the County may enter into a delayed payment agreement in order to capture the full development.

1.3.5 Other Changes

It is also noted that a number of other changes were made through Bill 73 and O.Reg. 428/15 including changes to the way in which Transit D.C. service standards are calculated, the inclusion of Waste Diversion, and the ability for collection of additional levies. The County does not provide transit services, Section 5.2.7 details the service standard and capital needs information with respect to waste diversion services, and Appendix E contains the County's revised Local Service Policy.



Chapter 2

Current County of Haldimand Policy



2. Current County of Haldimand Policy

2.1 Schedule of Charges

On May 20, 2014, the County of Haldimand passed By-law 1441-14 under the D.C.A. This by-law imposes D.C.s for residential and non-residential uses and expires on May 20, 2019. The table below provides the rates currently in effect, as at May 20, 2018.

Table 2-1
County of Haldimand
Current D.C. Rates

Service	Residential				Non-Residential	
	Single & Semi Detached	Multiples	Apartments with >= 2 Bedrooms	Apartments with < 2 Bedrooms	per sq.ft.	per sq.m
Municipal Wide Services:						
Roads and Related	1,455	995	687	1,262	0.63	6.79
Public Works - Buildings & Fleet	217	148	102	189	0.09	0.94
Parking Services	83	57	40	72	0.04	0.47
Fire Protection Services	976	668	460	847	0.41	4.45
Leisure Services	4,294	2,935	2,024	3,722	0.40	4.33
Library Board	714	488	336	619	0.07	0.70
General Government	211	144	100	182	0.10	1.05
Cemeteries	122	83	57	105	0.05	0.59
Ambulance	126	87	59	110	0.05	0.59
Waste Diversion	-	-	-	-	-	-
Total Municipal Wide Services	8,200	5,605	3,865	7,110	1.85	19.91
Urban Services						
Stormwater Drainage and Control Services	284	194	134	247	0.10	1.08
Wastewater Services	1,947	1,331	918	1,688	0.60	6.46
Water Services	1,694	1,158	799	1,469	0.52	5.60
Total Urban Services	3,926	2,683	1,851	3,404	1.22	13.13
Grand Total Urban Area	12,125	8,289	5,716	10,514	3.07	33.05

2.2 Services Covered

The following services are covered under By-law 1441-14:

- Roads & Related;
- Public Works;
- Parking Spaces;
- Fire Protection;
- Leisure Services (Indoor and Outdoor Recreation Services);
- Library Board;
- General Government;
- Cemeteries;
- Ambulance;



- Water Services;
- Wastewater Services; and
- Stormwater Services.

2.3 Timing of D.C. Calculation and Payment

D.C.s are payable at the time of building permit issuance and are collected by the County of Haldimand Building Department. Council may authorize, in accordance with Section 27 of the Act, an agreement with a person to permit, on such terms as Council may require, the payment of a development charge before or after it is otherwise payable under this by-law. Council may agree, in accordance with Sections 38, 39, 40 and 41 of the Act, to allow a person to perform work that relates to a service to which this development charge by-law relates, in return for a credit towards the development charges payable by the said person, upon terms specified by Council in its agreement with the person. No such credit shall exceed the total development charges payable by the person. Council may authorize a front-ending agreement in accordance with the provisions of Part III of the Act, upon such terms as Council may require, in respect of the development of land.

2.4 Indexing

Rates shall be indexed on the anniversary date of the D.C. by-law by the percentage change recorded in the average annual Non-Residential Building Construction Price Index produced by Statistics Canada.

2.5 Redevelopment Allowance

Development charges payable in a redevelopment shall be calculated by reducing the development charges payable by the maximum number of former residential units or by the maximum non-residential former gross floor area (as the case may be) which had been on the same property within ten (10) years of an action or approval required in Section 4 of By-law 1441-14 but has since been demolished. Any such reduction shall not produce a refund.



2.6 Exemptions

The following non-statutory exemptions are provided under By-law 1441-14:

- Development which is or would be classified under the Assessment Act as exempt from taxation for realty taxes such as a place of worship; and
- Bona fide farm operation.



Chapter 3

Anticipated Development in the County of Haldimand



3. Anticipated Development in the County of Haldimand

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 Haldimand County will be required to provide services, over a 10-year (2019 to 2029), 20-year (2019 to 2039), and a longer term (2019 to 2041) time horizon.

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

In compiling the growth forecast, the following specific information sources were consulted to assess the residential and non-residential development potential for Haldimand County over the forecast period, including:

- Haldimand County Population, Housing and Employment Forecast Update, 2011-2041, April 9, 2014;
- Haldimand County Population, Housing and Employment Forecast Update and Associated Land Needs Assessment, 2016-2046, 2019¹;
- Historical residential and non-residential building permit data for 2008 to 2018 period; and
- Available Census data regarding population, housing and employment.

¹ Haldimand County Population, Housing and Employment Forecast Update and Land Needs Assessment by Watson & Associates Economists Ltd., 2019. This report is scheduled to be released in the Spring of 2019.



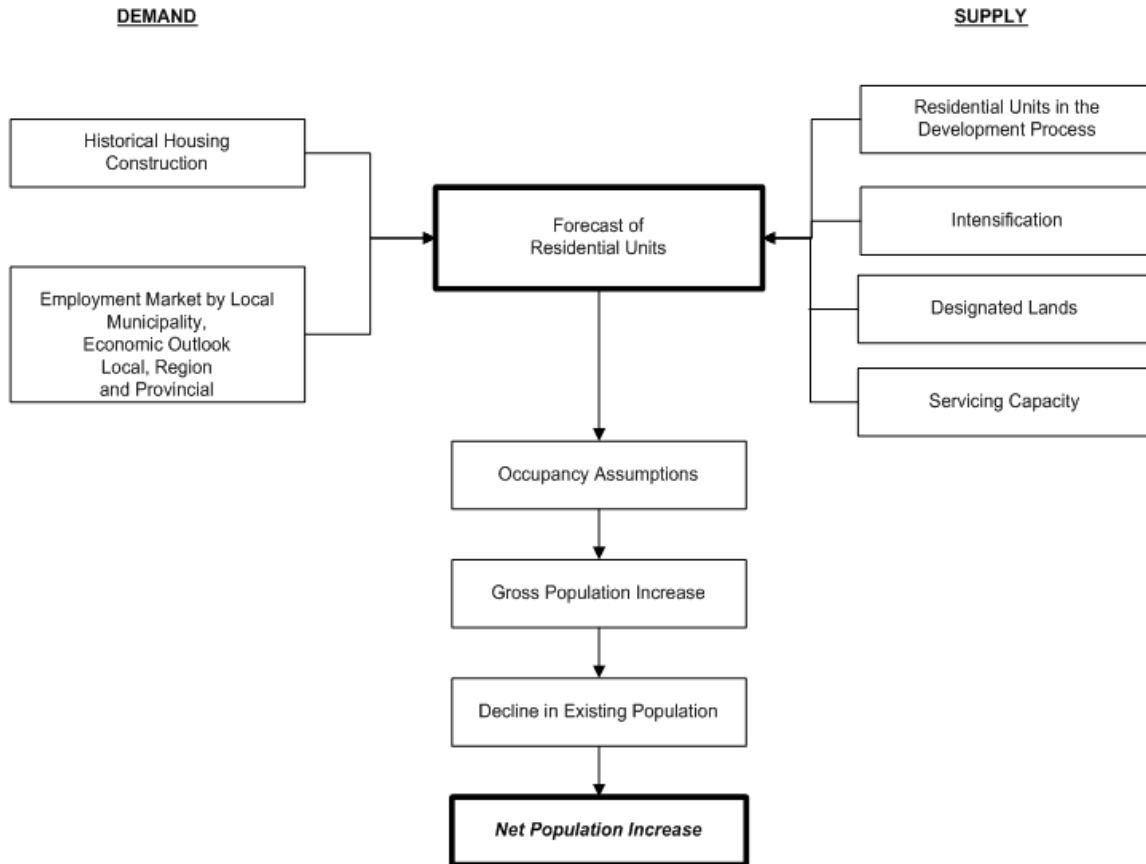
3.3 Summary of Growth Forecast

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 Haldimand County 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.

As identified in Table 3-1 and Schedule 1, the County's population is anticipated to reach approximately 53,950 by 2029, and 61,000 by 2039, resulting in an increase of 6,380 and 13,430 persons, respectively, over the 10-year and 20-year forecast periods. The population forecast summarized in Schedule 1 excludes the net Census undercount, which is estimated at approximately 2.6%. The Census undercount represents the net number of persons missed during Census enumeration. In calculating Haldimand County's D.C. growth forecast, the net Census undercount has been excluded from the growth forecast. Accordingly, all references provided herein to the population forecast exclude the net Census undercount.



Figure 3-1
Household Formation-based Population and Household Projection Model





**Table 3-1
County of Haldimand
Residential Growth Forecast Summary**

	Year	Population (Including Census undercount) ¹	Excluding Census Undercount			Housing Units					Persons Per Unit (P.P.U.) with undercount	Person Per Unit (P.P.U.): without undercount	
			Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi- Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households			Equivalent Institutional Households
Historical	Mid-2001	45,430	43,728	538	43,190	13,650	640	1,175	90	15,555	489	2.921	2.811
	Mid-2006	47,202	45,212	742	44,470	14,510	685	1,085	40	16,320	675	2.892	2.770
	Mid-2011	46,043	44,875	651	44,224	14,785	910	1,085	50	16,830	592	2.736	2.666
	Mid-2016	46,780	45,605	583	45,022	15,320	1,040	1,070	75	17,505	530	2.672	2.605
Forecast	Mid-2019	48,800	47,573	608	46,965	16,169	1,166	1,167	75	18,577	553	2.627	2.561
	Mid-2029	55,340	53,948	690	53,258	17,953	1,613	1,633	75	21,273	627	2.601	2.536
	Mid-2031	56,700	55,274	707	54,567	18,315	1,716	1,742	75	21,849	643	2.595	2.530
	Mid-2039	62,580	61,006	780	60,226	19,632	2,163	2,355	75	24,225	709	2.583	2.518
	Mid-2041	64,100	62,488	799	61,689	19,960	2,292	2,542	75	24,869	726	2.578	2.513
Incremental	Mid-2001 to Mid-2006	1,772	1,484	204	1,280	860	45	-90	-50	765	186		
	Mid-2006 to Mid-2011	-1,159	-337	113	-246	275	225	0	10	510	-83		
	Mid-2011 to Mid-2016	737	730	-68	798	535	130	-15	25	675	-62		
	Mid-2016 to Mid-2019	2,020	1,968	25	1,943	849	126	97	0	1,072	23		
	Mid-2019 to Mid-2029	6,540	6,375	82	6,293	1,784	446	466	0	2,696	74		
	Mid-2019 to Mid-2031	7,900	7,701	99	7,602	2,147	550	575	0	3,272	90		
	Mid-2019 to Mid-2039	13,780	13,433	172	13,261	3,463	997	1,188	0	5,648	156		
	Mid-2019 to Mid-2041	15,300	14,915	191	14,724	3,792	1,126	1,375	0	6,292	173		

Source: Watson & Associates Economists Ltd., 2019.

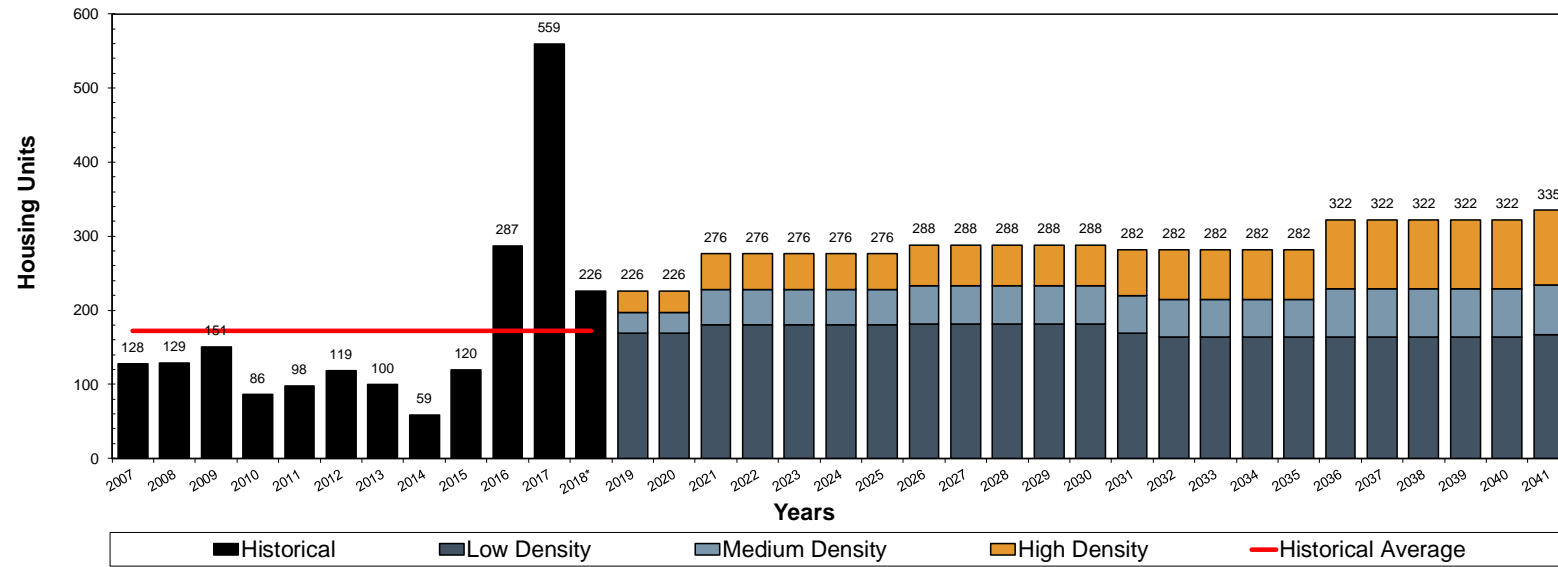
¹ Census undercount estimated at approximately 2.6%. Note: Population including the undercount has been rounded.

² Includes townhouses and apartments in duplexes.

³ Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Figure 3-2
Haldimand County
Annual Housing Forecast¹



Source: Historical housing activity derived from Haldimand County building permit data, 2007-2017.

¹ Growth forecast represents calendar year.

Note: 2018 is an estimate.



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

1. Unit Mix (Appendix A – Schedules 1 through 5, 7)

- The unit mix for the County was derived from the Haldimand County Population, Housing and Employment Forecast Update and Land Needs Assessment, 2019¹, as well as historical development activity (as per Schedule 7), and discussions with planning staff regarding the anticipated development trends for the County.
- Based on the above indicators, the 10-year household growth forecast is comprised of a unit mix of 66% low density (single detached and semi-detached), 17% medium density (multiples except apartments) and 17% high density (bachelor, 1-bedroom and 2-bedroom apartments).

2. Geographic Location of Residential Development (Appendix A – Schedule 2)

- Schedule 2 summarizes the anticipated amount, type and location of development for Haldimand County by urban settlement areas and remaining rural area.
- The percentage of forecast housing growth between 2019 and 2041 by development location is summarized below.

Development Location	Percentage Housing Growth, 2019 to 2041
Caledonia	61%
Cayuga	7%
Dunnville	7%
Hagersville	15%
Townsend	2%
Jarvis	3%
Remaining Rural Area	5%

¹ This report is scheduled to be released in the Spring of 2019.



3. 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 20-year planning period.

4. Population in New Units (Appendix A - Schedules 2 through 5)

- The number of permanent housing units to be constructed in Haldimand County during the short- and long-term periods is presented on Figure 3-2. Over the 10-year and 20-year forecast periods, the County is anticipated to average of approximately 270 and 282 new housing units per year, respectively.
- 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 (P.P.U.) by dwelling type for new units.
- Schedule 8a and Schedule 8b 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 adjusted to account for the P.P.U. trends which has been recently experienced in both new and older units. Adjusted 25-year average P.P.U.s by dwelling type are as follows:
 - Low density: 2.904
 - Medium density: 2.679
 - High density: 1.811

5. 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 and 20-year forecast period is approximately 930 and 1,620, respectively.

6. Employment (Appendix A, Schedules 10a, 10b, 10c and 12)

- Employment projections are largely based on 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/ population-related, institutional, and work at home, which are considered individually below.
- 2016 employment data¹ (place of work) for Haldimand County is outlined in Schedule 10a. The 2016 employment base is comprised of the following sectors:
 - 970 primary (6%);
 - 1,915 work at home employment (13%);
 - 4,735 industrial (32%);
 - 4,425 commercial/population related (30%); and
 - 2,845 institutional (19%).
- The 2016 employment by usual place of work, including work at home, is estimated at 14,890. An additional 3,138 employees have been identified for the County in 2016 that have no fixed place of work (N.F.P.O.W.).² The 2016 employment base, including N.F.P.O.W., totals approximately 18,028.
- Total employment, including work at home and N.F.P.O.W., for Haldimand County is anticipated to reach approximately 21,500 by 2029, and 24,690

¹ 2016 employment estimated by Watson & Associates Economists Ltd.

² 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."



by 2039. This represents an employment increase of 2,750 for the 10-year forecast period, and 5,930 for the 20-year 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.
- Total employment for Haldimand County (excluding work at home and N.F.P.O.W. employment) is anticipated to reach approximately 15,360 by 2029 and 17,690 by 2039. This represents an employment increase of 1,900 and 4,130 over the 10-year and 20-year forecast periods, respectively.

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:
 - 1,500 sq.ft. per employee for industrial;
 - 550 sq.ft. per employee for commercial/population-related; and
 - 700 sq.ft. per employee for institutional employment.
- The County-wide incremental G.F.A. increase is anticipated to be 1.64 million sq.ft. over the 10-year forecast period, 3.69 million sq.ft. over the 20-year forecast period and 4.14 million sq.ft. over the longer-term forecast period.
- In terms of percentage growth, the longer term incremental G.F.A. forecast by sector is broken down as follows:
 - industrial – 55%;
 - commercial/population-related – 27%; and
 - institutional – 18%.



- The percentage of forecast employment growth between 2019 and 2041 by development location is summarized below.

Development Location	Percentage Employment Growth, 2019 to 2041
Caledonia	61%
Cayuga	7%
Dunnville	10%
Hagersville	11%
Townsend	1%
Jarvis	4%
Remaining Rural Area	6%



Chapter 4

The Approach to the Calculation of the Charge



4. The Approach to the Calculation of the Charge

4.1 Introduction

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

4.2 Services Potentially Involved

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

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

4.3 Increase in the Need for Service

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



Figure 4-1
The Process of Calculating a Development Charge under the Act
that must be followed

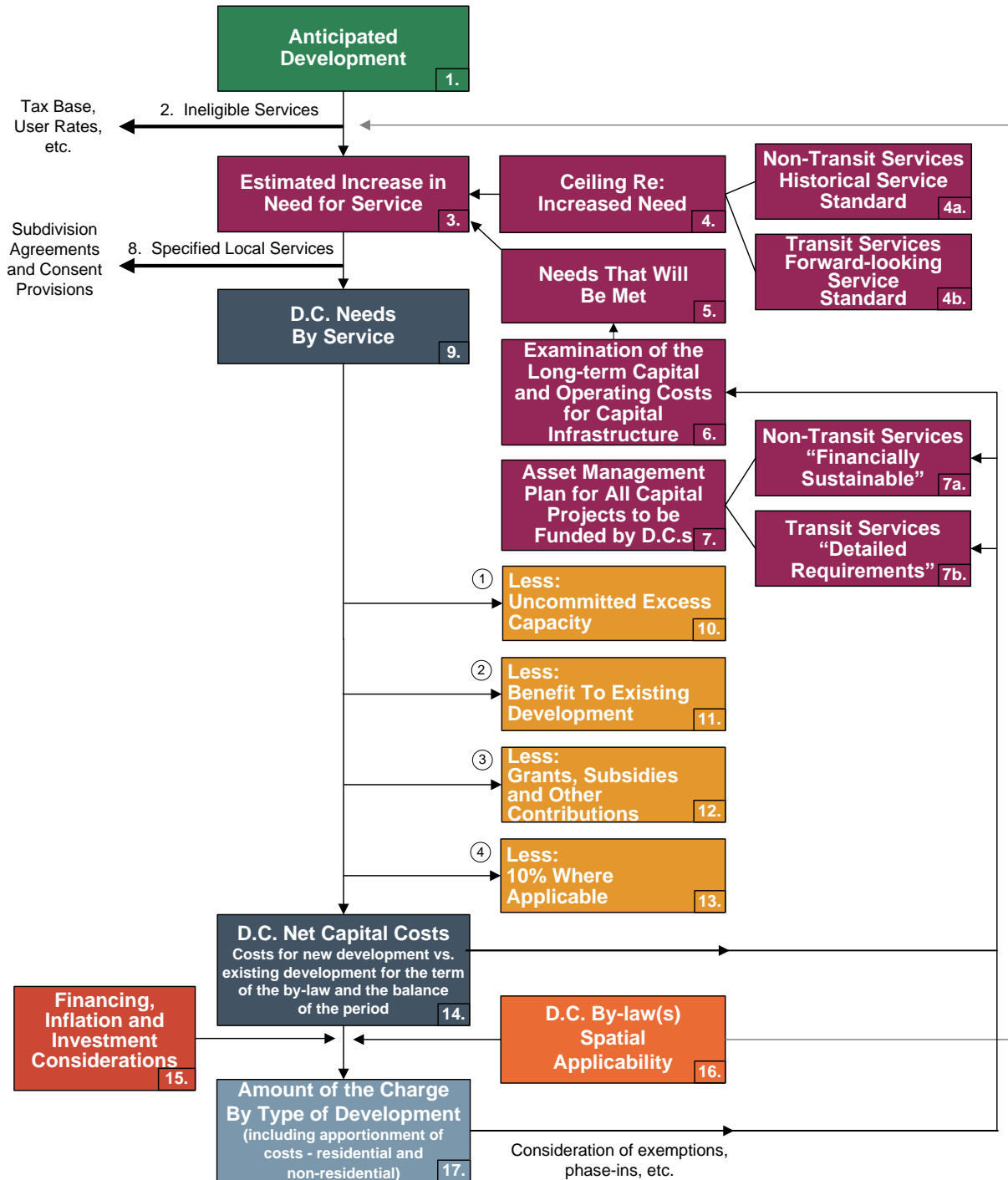




Table 4-1
Categories of Municipal Services to be Addressed as Part of the Calculation

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 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
	n/a	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
	n/a	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
	Yes	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
	n/a	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	Yes	10.1 Treatment plants	100
	Yes	10.2 Sewage trunks	100
	n/a	10.3 Local systems	0
	Yes	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	Yes	11.1 Treatment plants	100
	Yes	11.2 Distribution systems	100
	n/a	11.3 Local systems	0
	Yes	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	No	13.1 Police detachments	100
	No	13.2 Police rolling stock ¹	100
	No	13.3 Small equipment and gear	100
14. Homes for the Aged	No	14.1 Homes for the aged space	90
	No	14.2 Vehicles ¹	90
15. Child Care	No	15.1 Child care space	90
	No	15.2 Vehicles ¹	90
16. Health	No	16.1 Health department space	90
	No	16.2 Health department vehicles ¹	90
17. Social Housing	No	17.1 Social Housing space	90
18. Provincial Offences Act (P.O.A.)	No	18.1 P.O.A. space	90
19. Social Services	No	19.1 Social service space	90
20. Ambulance	Yes	20.1 Ambulance station space	90
	Yes	20.2 Vehicles ¹	90
21. Hospital Provision	Ineligible	21.1 Hospital capital contributions	0

¹with 7+ year life time



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
22. Provision of Headquarters for the General Administration of Municipalities and Area Municipal Boards	Ineligible	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	0-100

¹with a 7+ year life time

²same percentage as service component to which it pertains

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

4.4 Local Service Policy

Some of the need for services generated by additional development consists of local services related to a plan of subdivision. As such, they will be required as a condition of



subdivision agreements or consent conditions. The County's Local Service Policy is provided in Appendix E.

4.5 Capital Forecast

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

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

The capital costs include:

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

In order for an increase in need for service to be included in the D.C. calculation, County 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 County's approved and proposed capital budgets and master servicing/needs studies.



4.6 Treatment of Credits

Section 8, paragraph 5, of O.Reg. 82/98 indicates that a D.C. background study must set out “the estimated value of credits that are being carried forward relating to the service.” Subsection 17, paragraph 4, of the same Regulation indicates that “...the value of the credit cannot be recovered from future D.C.s,” if the credit pertains to an ineligible service. This implies that a credit for 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. There are no outstanding credit obligations to include in the D.C. calculations.

4.7 Existing Reserve Funds

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

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

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

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

The alternative would involve the County spending all reserve fund monies prior to renewing each by-law, which would not be a sound basis for capital budgeting. Thus, the County will use these reserve funds for the County’s cost share of applicable development-related projects, which are required but have not yet been undertaken, as a way of directing the funds to the benefit of the development which contributed them (rather than to future development, which will generate the need for additional facilities directly proportionate to future growth).



The County's D.C. Reserve Fund Balance by service at December 31, 2018 (adjusted) is shown below:

Service	December 31, 2018 Balance	Commitments	December 31, 2018 Balance (Adjusted)
Services Related to a Highway	(1,141,337)	261,217	(1,402,554)
Public Works	(80,567)	2,878	(83,445)
Cemeteries	152,981	-	152,981
Parking	106,094	-	106,094
Fire Protection Services	1,254,822	-	1,254,822
Indoor & Outdoor Recreation Services	1,828,151	717,273	1,110,878
Library Services	1,020,549	-	1,020,549
Administration	16,936	80,949	(64,013)
Ambulance	41,939	-	41,939
Stormwater Drainage and Control Services	(232,522)	374,707	(607,229)
Wastewater Services	(1,938,781)	2,620,367	(4,559,148)
Water Services	910,443	461,806	448,637
Total	1,938,708	4,519,197	(2,580,489)

Note: Amounts in brackets are deficit balances.

4.8 Deductions

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

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

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

4.8.1 Reduction Required by Level of Service Ceiling

This is designed to ensure that the increase in need included in 4.3 does "...not include an increase that would result in the level of service (for the additional development increment) exceeding the average level of the service provided in the Municipality over the 10-year period immediately preceding the preparation of the background study..."

¹ Reserve balance to be combined with Administration Studies.



O.Reg. 82.98 (s.4) goes further to indicate that “...both the quantity and quality of a service shall be taken into account in determining the level of service and the average level of service.”

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

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

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

4.8.2 Reduction for Uncommitted Excess Capacity

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

“Excess capacity” is undefined, but in this case must be able to meet some or all of the increase in need for service, in order to potentially represent a deduction. The deduction of 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.



4.8.3 Reduction for Benefit to Existing Development

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

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

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

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

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



existing facility to a new facility frees up capacity for use by others and generally results in only a very limited benefit to existing development. Further, where an increase in demand is not met for a number of years, a negative service impact to existing development is involved for a portion of the planning period.

4.8.4 Reduction for Anticipated Grants, Subsidies and Other Contributions

This step involves reducing the capital costs necessary to provide the increased services by capital grants, subsidies and other contributions (including direct developer contributions required due to the local service policy) made or anticipated by Council and in accordance with various rules such as the attribution between the share related to new vs. existing development. That is, some grants and contributions may not specifically be applicable to growth or where Council targets fundraising as a measure to offset impacts on taxes (O.Reg. 82.98 s.6).

4.8.5 The 10% Reduction

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

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

4.9 Municipal-wide vs. Area Rating

This step involves determining whether all of the subject costs are to be recovered on a uniform municipal-wide basis or whether some or all are to be recovered on an area-specific basis. Under the amended D.C.A., it is now mandatory to “consider” area-rating of services (providing charges for specific areas and services), however, it is not mandatory to implement area-rating. Further discussion is provided in section 7.4.4.



4.10 Allocation of Development

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

4.11 Asset Management

The new legislation now requires that a D.C. Background Study must include an Asset Management Plan (s. 10 (2) c.2). The asset management plan must deal with all assets that are proposed to be funded, in whole or in part, by D.C.s. The current regulations provide very extensive and specific requirements for the asset management plan related to transit services (as noted in the subsequent subsection); however, they are silent with respect to how the asset management plan is to be provided for all other services. As part of any asset management plan, the examination should be consistent with the municipality's existing assumptions, approaches and policies on the asset management planning. This examination has been included in Appendix F.

4.12 Transit

The most significant changes to the Act relate to the transit service. These changes relate to four areas of the calculations, as follows:

- A. Transit no longer requires the statutory 10% mandatory deduction from the net capital cost (section 5.2(i) of the D.C.A.).
- B. The Background Study requires the following in regard to transit costs (as per section 8(2) of the Regulations):
 1. The calculations that were used to prepare the estimate for the planned level of service for the transit services, as mentioned in subsection 5.2(3) of the Act.
 2. An identification of the portion of the total estimated capital cost relating to the transit services that would benefit,



- i. the anticipated development over the 10-year period immediately following the preparation of the background study, or
 - ii. the anticipated development after the 10-year period immediately following the preparation of the background study.
 3. An identification of the anticipated excess capacity that would exist at the end of the 10-year period immediately following the preparation of the background study.
 4. An assessment of ridership forecasts for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study, categorized by development types, and whether the forecasted ridership will be from existing or planned development.
 5. An assessment of the ridership capacity for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study.
- C. A new forward-looking service standard (as per 6.1(2) of the Regulations):
1. The service is a discrete service.
 2. No portion of the service that is intended to benefit anticipated development after the 10-year period immediately following the preparation of the background study may be included in the estimate.
 3. No portion of the service that is anticipated to exist as excess capacity at the end of the 10-year period immediately following the preparation of the background study may be included in the estimate.
- D. A very detailed asset management strategy and reporting requirements (section 6.1(3) of the Regulation) that includes lifecycle costs, action plans that will enable the assets to be sustainable, summary of how to achieve the proposed level of service, discussion on procurement measures and risk.

The County does not currently, and in the near future does not intend to, provide transit services. Therefore, the above calculations and reporting requirements are not required.



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

The nature of the capital projects and timing identified in the Chapter reflects Council's current intention. However, over time, County 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 Levels and 10-Year Capital Costs for D.C. Calculation

This section evaluates the development-related capital requirements for all of the “softer” services over a 10-year planning period. 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 *Parking*

The County currently provides parking services from 222,995 sq.ft. of outdoor parking spaces. Over the historical 10-year period, the County has averaged a per capita level of service of 4.92 sq.ft. This equates to an investment of \$54 per capita in parking services which provides \$346,727 in D.C. eligible funding over the 10-year forecast period.

The County has identified a provision for additional parking spaces in the County. This provision is in the amount of \$346,000 and is in addition to the reserve fund balance of \$106,094. After the 10% mandatory deduction, the amount included in the D.C. calculations is \$311,400.



The growth-related costs for parking have been allocated 73% residential and 27% non-residential based on the incremental growth in population to employment, for the 10-year forecast period.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Parking Facilities

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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
	2019-2028										73%	27%	
1	Provision for Municipal Parking Lots	2019-2028	346,000	-		346,000	-		346,000	34,600	311,400	227,322	84,078
	Total		346,000	-	-	346,000	-	-	346,000	34,600	311,400	227,322	84,078



5.2.2 Indoor & Outdoor Recreation Services

The County currently has 623.9 acres of parkland within its jurisdiction. This parkland consists of various sized neighbourhood and community parks. The County has, over the last 10-years, averaged a level of service equal to 13.8 acres of parkland per 1,000 population. Additionally, the County averaged 3.7 parkland amenities per 1,000 population, 0.20 sq.ft. of building facility space per capita, and 0.53 linear meters of trails per capita. Including parkland, parkland amenities (e.g. ball diamonds, playground equipment, soccer fields, etc.), and park trails, the level of service provided is approximately \$1,550 per capita. When applied over the forecast period, this average level of service translates into a D.C.-eligible amount of \$9,884,458.

Based on the projected growth over the 10-year forecast period, the County has identified approximately \$9.5 million in future growth capital costs for parkland development. These projects include, the development of additional parks including amenities and trails. A deduction with respect to the amount that benefits existing development has been made in the amount of approximately \$1.5 million. A further deduction of \$1,110,878 has been made to reflect the balance in the reserve fund. The net growth capital cost after the mandatory 10% deduction is \$6,085,702. This amount has been included in the D.C. calculations.

The County currently utilizes 117 parks and recreation vehicles to service the indoor and outdoor recreation facilities. The average level of service provided in the County has been 2.5 vehicles per 1,000 population which equates to a per capita investment of \$46. When applied over the 10-year forecast period, the D.C. eligible amount is calculated to be \$294,316.

No capital needs have been identified at this time with respect to additional vehicles.

With respect to indoor recreation facilities, there are currently many facilities provided by the County, located throughout Haldimand. Currently Haldimand provides a total of 363,638 sq.ft. of space. The average historical level of service for the previous ten years has been approximately 7.71 sq.ft. of space per capita or an investment of \$3,644 per capita. Based on this service standard, the County would be eligible to collect \$23,231,466 from D.C.s for facility space.



The County has provided for the need to collect for several outstanding debt payment obligations. These growth-related principal and discounted interest payments relate to the Haldimand County Caledonia Centre, Dunnville arena, and Cayuga arena. Additionally, the County has included a provision for additional recreation facility space in the amount of \$14 million. The County is undertaking a review of the appropriate type of facility space to construct; however, no decision has been made at this time. The total gross capital cost of these projects is \$19,874,736. As the debt payments included reflect only the growth-related portions of the debt and the additional facility space is a provision, no benefit to existing or 10% mandatory deductions have been applied. The net growth capital cost after the mandatory 10% deduction for the provision for additional facility space is \$18,474,736. This amount has been included in the D.C. calculations.

While indoor and outdoor recreation service usage is predominately residential-based, there is some use of facility space and outdoor recreation space by non-residential users. To acknowledge this use, the growth-related capital costs have been allocated 95% residential and 5% non-residential.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Parkland Development

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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												
1	Provision for Parkland Development & Amenities	2019-2028	4,000,000	-		4,000,000	-		4,000,000	400,000	3,600,000	3,420,000	180,000
2	Caledonia to Hagersville-via Mud Rd Hydro Corridor	2025-2026	2,025,000	-		2,025,000	1,498,800		526,200	52,620	473,580	449,901	23,679
3	Park Development & Master Plan Initiatives	2021-2028	400,000	-		400,000	-		400,000	40,000	360,000	342,000	18,000
4	Feeder Canal - Niagara to Dunnville Trail	2020-2021	1,030,000	-		1,030,000	-		1,030,000	103,000	927,000	880,650	46,350
5	Rail Park - Cedar St to Robinson Rd Trail	2019-2020	310,000	-		310,000	-		310,000	31,000	279,000	265,050	13,950
6	Dunnville Arena to Soccer Park Trail	2022-2023	810,000	-		810,000	-		810,000	81,000	729,000	692,550	36,450
7	Marshall Woodlot Trail	2023-2024	510,000	-		510,000	-		510,000	51,000	459,000	436,050	22,950
8	Burke Park to Haller Park to Black Creek Park to Kincardine to Empire Trail	2021-2022	410,000	-		410,000	-		410,000	41,000	369,000	350,550	18,450
	Reserve Fund Balance						1,110,878		(1,110,878)		(1,110,878)	(1,055,334)	(55,544)
	Total		9,495,000	-	-	9,495,000	2,609,678	-	6,885,322	799,620	6,085,702	5,781,417	304,285



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Indoor Recreation Facilities

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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
2019-2028												95%	5%
	Arenas												
1	HCCC Growth-Related Debt Charges (Principal)	2019-2028	749,890	-		749,890	-		749,890		749,890	712,396	37,495
2	HCCC Growth-Related Debt Charges (Interest Discounted)	2019-2028	38,786	-		38,786	-		38,786		38,786	36,847	1,939
3	Dunnville Arena Growth-Related Debt Charges (Principal)	2019-2033	1,728,900	-		1,728,900	-		1,728,900		1,728,900	1,642,455	86,445
4	Dunnville Arena Growth-Related Debt Charges (Interest Discounted)	2019-2033	286,153	-		286,153	-		286,153		286,153	271,846	14,308
5	Cayuga Arena Growth-Related Debt Charges (Principal)	2019-2033	2,634,900	-		2,634,900	-		2,634,900		2,634,900	2,503,155	131,745
6	Cayuga Arena Growth-Related Debt Charges (Interest Discounted)	2019-2033	436,107	-		436,107	-		436,107		436,107	414,302	21,805
7	Provision for Additional Recreation Facility Space	2019-2028	14,000,000			14,000,000	-		14,000,000	1,400,000	12,600,000	11,970,000	630,000
	Total		19,874,736	-	-	19,874,736	-	-	19,874,736	1,400,000	18,474,736	17,550,999	923,737



5.2.3 Library Services

The County provides library services from 6 facilities which currently totals 42,095 sq.ft. in library space. Over the past ten years, the average level of service was 0.86 sq.ft. of space per capita or an investment of \$402 per capita. In addition, the County has an inventory of library collection items (183,851 currently) which, over the last 10 years, has provided an average level of service of 4.07 items per capita or an investment of \$122 per capita. These collection items include various materials including books, periodicals, audio visual materials, electronic resources as well as subscriptions, all of which have a total value of approximately \$5.52 million. Based on these service standards, the County would be eligible to collect approximately \$3,340,960 from D.C.s for library services (over the 10-year period).

The County has identified the need for a library branch expansion in Cayuga and additional facility space elsewhere in the County (location still to be determined). As well, financing costs for the Cayuga branch expansion and debt costs for the Dunnville branch expansion have been included. Further, a provision for additional library collection materials has been identified. The gross cost of the projects included, totals \$6,465,309. A deduction in the amount of approximately \$2.12 million has been made to account for the amount of the Cayuga branch expansion that benefits existing development. In addition, the reserve fund balance of \$1,020,549 has been deducted from the calculations. The net growth-related capital cost after the mandatory 10% deduction is \$2,963,105.

While library usage is predominately residential based, there is some use of the facilities by non-residential users, for the purpose of research. To acknowledge this use, the growth-related capital costs have been allocated 95% residential and 5% non-residential.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Library Services

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)	Other Deductions*	Total	Residential Share 95%	Non-Residential Share 5%
	2019-2028												
	Cayuga Library												
1	Branch Expansion (from 2410 sq.ft. to 4125 sq.ft.)	2019	4,075,100	-	4,075,100	2,119,052		1,956,048	195,605	9,408	1,751,035	1,663,484	87,552
2	Cayuga Branch Expansion Financing Costs	2019-2028	198,900	-	198,900	-		198,900	19,890		179,010	170,060	8,951
	Dunnville Library												
3	Branch Expansion Growth-related Debt Principal	2019-2027	783,994	-	783,994	-		783,994			783,994	744,794	39,200
4	Branch Expansion Growth-related Debt Discounted Interest	2019-2027	30,315	-	30,315	-		30,315			30,315	28,799	1,516
5	Provision for Additional Library Collection Materials	2019-2028	777,000	-	777,000	-		777,000	77,700		699,300	664,335	34,965
6	Provision for Additional Facility Space	2019-2028	600,000	-	600,000	-		600,000	60,000		540,000	513,000	27,000
	Reserve Fund Balance					1,020,549		(1,020,549)			(1,020,549)	(969,522)	(51,027)
	Total		6,465,309	-	6,465,309	3,139,601	-	3,325,708	353,195	9,408	2,963,105	2,814,950	148,155



5.2.4 Administration (Studies)

The D.C.A. permits the inclusion of studies undertaken to facilitate the completion of the County's capital works program. The County has made provision for the inclusion of new studies undertaken to facilitate this D.C. process, as well as other studies which benefit growth (in whole or in part). The list of studies includes such studies as the following:

- Development Charge studies;
- Population and Employment Forecast studies;
- Planning and Development studies;
- Secondary Plans;
- Master Plans; and
- A Municipal Comprehensive Review.

The cost of these studies, including recovery of the reserve fund deficit of \$64,013 is \$1,074,013. \$231,250 has been deducted from the total capital costs for the amount that is attributable to existing benefit. The net growth-related capital cost, after the mandatory 10% deduction is \$764,888. This amount has been included in the D.C. calculations.

These costs have been allocated 73% residential and 27% non-residential based on the incremental growth in population to employment for the 10-year forecast period.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Administration Studies

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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
	2019-2028											73%	27%
	Growth Related Studies												
1	Development Charge Studies	2023	50,000	-		50,000	-		50,000	5,000	45,000	32,850	12,150
2	Development Charge Studies	2028	50,000	-		50,000	-		50,000	5,000	45,000	32,850	12,150
3	Population & Employment Forecast Update - Planning & Development Division	2023	30,000	-		30,000	-		30,000	3,000	27,000	19,710	7,290
4	Population & Employment Forecast Update - Planning & Development Division	2028	30,000	-		30,000	-		30,000	3,000	27,000	19,710	7,290
5	Development Study-Lakeshore Area & Urban Downtowns - Planning & Development Division	2021	50,000	-		50,000	-		50,000	5,000	45,000	32,850	12,150
6	Development Study-Lakeshore Area & Urban Downtowns - Planning & Development Division	2026	25,000	-		25,000	-		25,000	2,500	22,500	16,425	6,075
7	Dunnville Secondary Plan Implementation - Special Policy Areas	2027	150,000	-		150,000	-		150,000	15,000	135,000	98,550	36,450
8	Municipal Comprehensive Review (OP Update)	2019	475,000	-		475,000	118,750		356,250	35,625	320,625	234,056	86,569
9	Archaeological Master Plan	2022	150,000	-		150,000	112,500		37,500	3,750	33,750	24,638	9,113
	Reserve Fund Adjustment		64,013			64,013	-		64,013		64,013	46,730	17,284
	Total		1,074,013	-	-	1,074,013	231,250	-	842,763	77,875	764,888	558,368	206,520



5.2.5 Ambulance

The County currently provides 13,452 sq.ft. of ambulance facility space which total approximately \$5.73 million in value. Over the past ten years, the average level of service was 0.28 sq.ft. of space per capita or an investment of \$117 per capita. Based on this service standard, the County would be eligible to collect approximately \$747,714 from D.C.s for ambulance facility space (over the 10-year period).

The County of Haldimand has identified the need for a Caledonia ambulance base and has included financing costs. Additionally, growth-related debt payments related to the Cayuga and Hagersville ambulance bases have also been included for D.C. recovery. The total gross capital cost identified is \$1,774,951. A benefit to existing development deduction in the amount of \$1,076,800 has been applied to reflect the non-growth portion of the Caledonia ambulance base. An additional deduction of \$41,939 has been made to reflect the balance in the reserve fund. After the 10% mandatory deduction the resulting net D.C. recoverable amount of \$600,392 has been included in the D.C. calculations.

The County has 193 items of equipment and 9 ambulance vehicles. Over the past ten years, the average level of service was 3.2 items/vehicles per 1,000 population or an investment of \$51 per capita. Based on this service standard, the County would be eligible to collect approximately \$324,730 from D.C.s for ambulance equipment and vehicles (over the 10-year period).

For vehicles and equipment, \$225,000 has been identified for inclusion in the D.C. calculation for new first response vehicle equipment and a new ambulance. As these items are new additions to the fleet and are required to service growth, no benefit to existing development deduction has been applied. After the 10% mandatory deduction, the net D.C. recoverable amount included in the calculations is \$202,500.

The growth costs have been allocated 73% residential and 27% non-residential based on the incremental growth in population to employment, for the 10-year forecast period.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Ambulance Facilities

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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
	2019-2028											73%	27%
1	Caledonia Ambulance Base	2021	1,583,500	-		1,583,500	1,076,800		506,700	50,670	456,030	332,902	123,128
2	Caledonia Ambulance Base Financing Costs (Discounted growth-related interest)	2021	51,500			51,500	-		51,500	5,150	46,350	33,836	12,515
3	Cayuga Ambulance Base Growth Related Debt Charges (Principal)	2019-2026	61,200	-		61,200	-		61,200		61,200	44,676	16,524
4	Cayuga Ambulance Base Growth Related Debt Charges (Discounted Interest)	2019-2026	1,118	-		1,118	-		1,118		1,118	816	302
5	Hagersville Ambulance Base Growth Related Debt Charges (Principal)	2019-2026	76,240	-		76,240	-		76,240		76,240	55,655	20,585
6	Hagersville Ambulance Base Growth Related Debt Charges (Discounted Interest)	2019-2026	1,393	-		1,393	-		1,393		1,393	1,017	376
	Reserve Fund Balance						41,939		(41,939)		(41,939)	(30,615)	(11,324)
	Total		1,774,951	-	-	1,774,951	1,118,739	-	656,212	55,820	600,392	438,286	162,106



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Ambulance Vehicles and Equipment

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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
2019-2028											73%	27%	
1	First Response Vehicle (Equipment)	2022	50,000	-		50,000	-		50,000	5,000	45,000	32,850	12,150
2	Ambulance - EMS	2022	175,000	-		175,000	-		175,000	17,500	157,500	114,975	42,525
	Total		225,000	-	-	225,000	-	-	225,000	22,500	202,500	147,825	54,675



5.2.6 Cemeteries

The County currently provides 42.48 hectares of developed cemeteries valued at approximately \$5.66 million. The County has sustained the average level of service of 0.9 hectares per 1,000 population over the historical 10-year period. This average service level translates to an average per capita investment of \$123. Based on this service standard, the County would be eligible to collect approximately \$784,567 from D.C.s for cemeteries (over the 10-year period).

The County has identified the need for additional columbaria and pathways, along with a cemetery survey/layout and drainage study. The total capital cost for these works are anticipated to be \$435,000. A deduction of \$152,981 has been made to reflect the balance in the D.C. reserve fund. The resultant net growth-related cost, after the 10% mandatory deduction, is \$238,519. This amount has been included in the D.C. calculations.

The growth costs have been allocated 73% residential and 27% non-residential based on the incremental growth in population to employment, for the 10-year forecast period.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Cemeteries

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Subtotal	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
	2019-2028										73%	27%	
1	Caledonia - Columbarium and Pathways	2023	70,000	-		70,000	-		70,000	7,000	63,000	45,990	17,010
2	Hagersville - Columbarium and Pathways	2023	70,000	-		70,000	-		70,000	7,000	63,000	45,990	17,010
3	Hagersville - Cemetery Survey/Layout and Drainage	2021	25,000	-		25,000	-		25,000	2,500	22,500	16,425	6,075
4	Cayuga - Riverside Expansion Including Columbarium and Pathways	2025	200,000	-		200,000	-		200,000	20,000	180,000	131,400	48,600
5	Dunnville - Riverside Columbarium and Pathways	2023	70,000	-		70,000	-		70,000	7,000	63,000	45,990	17,010
	Reserve Fund Balance						152,981		(152,981)		(152,981)	(111,676)	(41,305)
	Total		435,000	-	-	435,000	152,981	-	282,019	43,500	238,519	174,119	64,400



5.2.7 Waste Diversion

Haldimand County currently provides waste diversion services out of 26,138 sq.ft. of facility space. This space totals approximately \$4.5 million including land and site works. Up to 2014 Haldimand shared waste diversion services with Norfolk County. Beginning in 2015, Haldimand began providing waste diversion services on its own. The average level of service provided over the last ten years is 0.30 sq.ft. of facility space per capita. Based on this level of service, the County could collect \$294,635 from D.C.s.

Haldimand County currently utilizes \$232,000 worth of equipment for waste diversion services. In addition, 13 vehicles service the County to collect and sort recyclable materials through contracts with Modern Landfill Inc. and Geo. Barnes & Sons Ltd. Over the historical 10-year period, the average level of investment per capita was \$34. When applied to the 10-year forecast period, the resultant D.C.-eligible amount is \$214,361 for waste diversion vehicles and equipment.

At this time, the County has included a provision for additional waste diversion capital needs in the amount of \$500,000. As this is a new service to be included in the D.C. by-law, no reserve fund currently exists for waste diversion services. After the 10% mandatory deduction, the D.C. recoverable amount is \$450,000. This amount has been included in the D.C. calculations.

While the majority of the waste diversion collection services relates to residential development, the County does provide a small attribution to collect waste diversion materials from non-residential development. Additionally, recycling sites are used by both residential and non-residential development from both County and private collections. As a result, the growth costs have been allocated 90% residential and 10% non-residential to reflect this.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
 Service: Waste Diversion Services

Prj .No	Increased Service Needs Attributable to Anticipated Development 2019-2028	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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 90%	Non-Residential Share 10%	
1	Provision for waste diversion services	2019-2028	500,000	-		500,000	-		500,000	50,000	450,000	405,000	45,000	
	Total		500,000	-	-	500,000	-	-	500,000	50,000	450,000	405,000	45,000	



5.3 Service Levels and 20-Year Capital Costs for Haldimand's D.C. Calculation

This section evaluates the development-related capital requirements for those services with 20-year capital costs.

5.3.1 Services Related to a Highway

Haldimand owns and maintains 1,320 km of earth, gravel, surface treated, and hot mix standard roads. The current replacement value of these roads is approximately \$582.17 million. Over the last ten years, the County has provided an average level of service of 27.6km per 1,000 population. This level of service equates to an average level of investment of \$11,862 per capita, resulting in a D.C.-eligible recovery amount of approximately \$159.35 million over the 20-year forecast period.

With respect to future needs, the County's share of the Cal-Argyle Street bridge replacement has been included, along with associated financing costs. Additionally, gravel road conversion works over a ten-year period, crosswalks in Caledonia, an arterial road in Caledonia, shoulder paving for active transportation, and the transportation-related portion of the master servicing plan update studies have been identified for inclusion in the D.C. calculations. The total gross capital cost of these works \$31,891,620. With the addition of the recovery of the negative reserve fund balance of \$1,402,554, the total gross capital cost is \$33,294,174. \$20,009,900 has been deducted for the share of the works that are deemed to benefit existing development. As a result, the net growth-related capital cost to include in the D.C. calculations is \$13,284,274.

The residential/non-residential allocation of 76%/26% for services related to a highway is based on the forecast ratio of population to employment over the 20-year forecast period.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County

Service: Services Related to a Highway

Prj .No	Increased Service Needs Attributable to Anticipated Development 2019-2038	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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 76%	Non-Residential Share 24%
1	Cal-Argyle St Bridge Replacement (MTO) County share of work	2022	1,368,500	-		1,368,500	-		1,368,500	1,040,060	328,440
2	Cal-Argyle St Bridge Replacement (MTO) County share of work - Financing Costs	2022	132,200	-		132,200	-		132,200	100,472	31,728
3	Gravel Road Conversion	2019-2028	21,073,420	-		21,073,420	19,654,700		1,418,720	1,078,227	340,493
4	Caledonia Decorative Crosswalks	2022	132,000	-		132,000	95,000		37,000	28,120	8,880
5	Caledonia Arterial Road - Engineering	2019	2,400,000	-		2,400,000	-		2,400,000	1,824,000	576,000
6	Caledonia Arterial Road - Construction	2021	5,900,000	-		5,900,000	-		5,900,000	4,484,000	1,416,000
7	Caledonia Master Servicing Plan Update	2023	50,000	-		50,000	-		50,000	38,000	12,000
8	Jarvis Master Servicing Plan Update	2023	15,000	-		15,000	-		15,000	11,400	3,600
9	Cayuga Master Servicing Plan Update	2022	30,000	-		30,000	-		30,000	22,800	7,200
10	Cayuga Master Servicing Plan Update	2027	30,000	-		30,000	-		30,000	22,800	7,200
11	Hagersville Master Servicing Plan Update	2020	30,000	-		30,000	-		30,000	22,800	7,200
12	Hagersville Master Servicing Plan Update	2025	30,000	-		30,000	-		30,000	22,800	7,200
13	Dunnville Master Servicing Plan Update	2021	30,000	-		30,000	-		30,000	22,800	7,200
14	Dunnville Master Servicing Plan Update	2026	30,000	-		30,000	-		30,000	22,800	7,200
15	Business Park Development - North Caledonia - study	2019	175,000	-		175,000	105,000		70,000	53,200	16,800
16	Rainham Rd Shoulder Paving - Sandusk to Rd 55 (Active Transportation)	2020	265,500	-		265,500	88,500		177,000	134,520	42,480
17	Road 20 Shoulder Paving - Parkview Rd to Rd 27 (Active Transportation)	2019	200,000	-		200,000	66,700		133,300	101,308	31,992
	Reserve Fund Adjustment		1,402,554	-		1,402,554	-		1,402,554	1,065,941	336,613
	Total		33,294,174	-	-	33,294,174	20,009,900	-	13,284,274	10,096,049	3,188,226



5.3.2 Public Works Facilities, Fleet & Equipment

The Public Works Department has a variety of vehicles and major equipment totalling approximately \$15.20 million. Additionally, the County utilizes 11 contracted vehicles for winter control. The inventory provides for an average per capita investment of \$403. Over the forecast period, the D.C.-eligible amount for vehicles and equipment is \$5,410,947 based on this service standard.

The County operates their Public Works service out of a number of facilities. The facilities provide 84,150 sq.ft. of building area, providing for an average level of service of 1.86 sq.ft. per capita or \$600 per capita. This level of service provides the County with a maximum D.C.-eligible amount for recovery over the 20-year forecast period of \$8,063,696.

There have been four projects identified for Public Works facilities, vehicles, and equipment. The total cost of the projects identified is \$1,853,445, including the recovery of the negative reserve fund balance of \$83,445. A benefit to existing development deduction of \$250,000 has been applied to recognise the non-growth-related share of the costs for the building storage & parts room at the Kohler Fleet Garage and the facility condition assessments. The net growth-related amount included in the D.C. calculations is \$1,603,445.

The residential/non-residential capital cost allocation for facilities and fleet is 76%/24% based on the incremental growth in population to employment for the 20-year forecast period.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Public Works

Prj .No	Increased Service Needs Attributable to Anticipated Development 2019-2038	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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 76%	Non-Residential Share 24%
1	Vehicle & Equipment Provision	2019-2038	1,000,000	-		1,000,000	-		1,000,000	760,000	240,000
2	Single Axle Plow/Sander - ROADS	2024	240,000	-		240,000	-		240,000	182,400	57,600
	Kohler Fleet Garage										
3	Building Storage & Parts Room	2019-2020	450,000	-		450,000	210,000		240,000	182,400	57,600
			-	-		-	-		-	-	-
	Roads Facilities		-	-		-	-		-	-	-
4	Facility Condition Assess (4) Facilities	2019	80,000	-		80,000	40,000		40,000	30,400	9,600
	Reserve Fund Adjustment		83,445	-		83,445	-		83,445	63,418	20,027
	Total		1,853,445	-	-	1,853,445	250,000	-	1,603,445	1,218,618	384,827



5.3.3 Fire Protection Services

Haldimand currently operates its fire services from 76,025 sq.ft. of facility space, providing for a per capita average level of service of 1.50 sq.ft. per capita or \$613 per capita. This level of service provides the County with a maximum D.C.-eligible amount for recovery over the forecast period of \$8,228,787.

The County has identified the need to replace and expand the Caledonia station as well as the Dunnville fire hall. A provision for future station expansions in Canborough has also been identified. Financing costs related to the expansions and previous fire station expansions in Cayuga, Hagersville, and South Haldimand have been included as well. The total gross capital cost identified for the above noted works is approximately \$9.90 million. Of this amount, \$5,334,600 is attributable to existing development and has been deducted from the capital costs. A further deduction of \$1,254,822 has been provided to reflect the balance in the reserve fund. Therefore, the net amount to be included in the D.C. calculations for the 20-year forecast period is \$3,108,893.

The fire department has a current inventory of 50 vehicles with a total replacement cost of approximately \$15.80 million. The total D.C.-eligible amount calculated for fire vehicles over the forecast period is \$4,848,776, based on a standard of \$361 per capita.

The need for an additional ladder truck and A.T.V./trailer has been identified, having a gross capital cost of \$1,440,000. As these vehicles are required for growth, no benefit to existing deduction have been applied. Therefore, the net growth-related cost included in the D.C. calculations is \$1,440,000.

The fire department currently utilizes a variety of equipment to provide fire services to the County. The equipment has a current total replacement cost of \$5.79 million. Over the historical 10-year period, the County has provided an average level of service of \$89 per capita, providing for a D.C.-eligible amount over the forecast period of \$1,200,239 for small equipment and gear.

The County has provided a provision for additional fire equipment to service growth-related needs over the forecast period. The total capital cost of the provision is \$100,000 and this amount has been included in the D.C. calculations.



Fire services costs are shared between residential and non-residential based on the population to employment ratio over the forecast period, resulting in 76% being allocated to residential development and 24% being allocated to non-residential development.



Infrastructure Costs Included in the D.C. Calculation

Haldimand County
Service: Fire Facilities

Prj .No	Increased Service Needs Attributable to Anticipated Development 2019-2038	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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 76%	Non-Residential Share 24%
1	Caledonia Station Replacement and Expansion (i.e. Locations in South & North Caledonia)	2021	3,255,000	-		3,255,000	2,473,800		781,200	593,712	187,488
2	Caledonia Station Replacement and Expansion (i.e. Locations in South & North Caledonia) - Financing Costs	2021	85,400			85,400	-		85,400	64,904	20,496
3	Fire Station Replacement - 226 Dunnville Fire Hall Stn#9	2026	3,125,300	-		3,125,300	2,312,700		812,600	617,576	195,024
4	Fire Station Replacement - 226 Dunnville Fire Hall Stn#9 - Financing Costs	2026	105,900	-		105,900	-		105,900	80,484	25,416
5	Provision for future station expansions in Canborough	2029-2038	1,968,750	-		1,968,750	748,100		1,220,650	927,694	292,956
6	Cayuga Fire Station #4 Growth-Related Debt Charges (Principal)	2019-2026	823,520	-		823,520	-		823,520	625,875	197,645
7	Cayuga Fire Station #4 Growth-Related Debt Charges (Discounted Interest)	2019-2026	15,045	-		15,045	-		15,045	11,434	3,611
8	Hagersville Fire Station #2 Growth-Related Debt Charges (Principal)	2019-2026	186,720	-		186,720	-		186,720	141,907	44,813
9	Hagersville Fire Station #2 Growth-Related Debt Charges (Discounted Interest)	2019-2026	3,411	-		3,411	-		3,411	2,593	819
10	South Haldimand Fire Station #11 Growth-Related Debt Charges (Principal)	2019-2026	323,360	-		323,360	-		323,360	245,754	77,606
11	South Haldimand Fire Station #11 Growth-Related Debt Charges (Discounted Interest)	2019-2026	5,908	-		5,908	-		5,908	4,490	1,418
	Reserve Fund Balance						1,254,822		(1,254,822)	(953,664)	(301,157)
	Total		9,898,314	-	-	9,898,314	6,789,422	-	3,108,893	2,362,758	746,134



5.4 Service Levels and Urban 20-Year Capital Costs for Haldimand's D.C. Calculation

This section evaluates the development-related capital requirements for those services with urban 20-year capital costs.

5.4.1 *Stormwater Drainage and Control Services*

The County has identified the need to undertake master servicing studies in Caledonia, Hagersville, Jarvis, Cayuga, and Dunnville. The amounts included reflect only the stormwater services portion of the studies. The total gross capital cost of the studies is \$165,000. A reserve fund adjustment of \$607,229 has been made to reflect the negative reserve fund balance. The net growth-related amount included in the D.C. calculations is \$772,229.

The growth costs have been allocated 76% residential and 24% non-residential based on the incremental growth in population to employment, for the urban 20-year forecast period.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Stormwater

Prj.No	Increased Service Needs Attributable to Anticipated Development 2019-2038	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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 76%	Non-Residential Share 24%
	Technical Reviews and Studies										
1	Caledonia Master Servicing Plan - Update	2023	30,000	-		30,000	-		30,000	22,800	7,200
2	Hagersville Master Servicing Plan - Update	2020	15,000	-		15,000	-		15,000	11,400	3,600
3	Hagersville Master Servicing Plan - Update	2025	15,000	-		15,000	-		15,000	11,400	3,600
4	Jarvis Master Servicing Plan - Update	2023	15,000	-		15,000	-		15,000	11,400	3,600
5	Cayuga Master Servicing Plan - Update	2022	15,000	-		15,000	-		15,000	11,400	3,600
6	Cayuga Master Servicing Plan - Update	2027	15,000	-		15,000	-		15,000	11,400	3,600
7	Dunnville Master Servicing Plan - Update	2021	30,000	-		30,000	-		30,000	22,800	7,200
8	Dunnville Master Servicing Plan - Update	2026	30,000	-		30,000	-		30,000	22,800	7,200
	Reserve Fund Adjustment		607,229	-		607,229	-		607,229	461,494	145,735
	Total		772,229	-	-	772,229	-	-	772,229	586,894	185,335



5.4.2 Water Services

The County has identified a number of capital projects required to service growth throughout Haldimand. Future watermain replacements have been identified at a total gross capital cost of \$2,975,000 with a benefit to existing deduction of \$2,528,750, and a net amount of \$446,250 for inclusion in the D.C. calculations.

\$300,000 worth of master servicing plans and a SCADA master plan have been identified with a benefit to existing deduction of \$55,300. The net growth-related cost for these studies is \$244,700.

Several other projects including financing costs for completed growth-related works, water plant improvements, an elevated storage tank replacement, and an elevated water tank have been identified. The total gross capital cost of all projects identified is \$33,538,050. Of this amount, \$4,741,340 has been deducted for the amount that benefits growth outside of the 20-year urban growth forecast. A further deduction of \$15,756,320 has been provided to account for the share of the costs that benefits existing development. Additionally, \$448,637 has been deducted from the calculations to reflect the balance in the reserve fund.

In total, after the deductions, the D.C. recoverable amount of \$12,591,752 has been included in the D.C. calculations.

The growth-related costs have been allocated between residential and non-residential development based the anticipated growth over the 20-year urban forecast period. This results in a 76% allocation to residential and a 24% allocation to non-residential.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Water Services

Prj.No	Increased Service Needs Attributable to Anticipated Development 2019-2038	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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 76%	Non-Residential Share 24%
Watermains											
1	Future Watermain Replacement	2023-2027	2,975,000	-		2,975,000	2,528,750		446,250	339,150	107,100
Technical Review and Studies											
2	Caledonia Master Servicing Plan - Update	2023	50,000	-		50,000	-		50,000	38,000	12,000
3	Hagersville Master Servicing Plan - Update	2020-2025	50,000	-		50,000	-		50,000	38,000	12,000
4	Janis Master Servicing Plan - Update	2023	20,000	-		20,000	-		20,000	15,200	4,800
5	Cayuga Master Servicing Plan - Update	2022-2027	50,000	-		50,000	-		50,000	38,000	12,000
6	Dunnville Master Servicing Plan - Update	2021-2026	60,000	-		60,000	-		60,000	45,600	14,400
7	SCADA Master Plan	2021-2026	70,000	-		70,000	55,300		14,700	11,172	3,528
Jarvis Water											
8	Jarvis Watermain Replacement Debt Growth-related Principal	2019-2027	509,999	-		509,999	-		509,999	387,600	122,400
9	Jarvis Watermain Replacement Debt Growth-related Interest	2019-2027	11,370	-		11,370	-		11,370	8,641	2,729
Water Plants/Transmission Systems											
10	Plant Optimization Program Implementation	2019-2020	495,000	-		495,000	439,500		55,500	42,180	13,320
11	Plant Capital Improvements	2021-2027	10,784,500	-		10,784,500	9,246,520		1,537,980	1,168,865	369,115
12	SCADA Maintenance	2019-2028	300,000	-		300,000	237,000		63,000	47,880	15,120
13	SCADA Technical Support	2019-2028	400,000	-		400,000	316,000		84,000	63,840	20,160
Dunnville Water											
14	WTP SCADA Computer & Network Equip	2020-2023	12,000	-		12,000	9,480		2,520	1,915	605
15	WTP Reservoir Expansion	2026	1,840,500	1,619,640		220,860	-		220,860	167,854	53,006
16	WTP PLC Upgrades/Replacements	2023	210,000	-		210,000	165,900		44,100	33,516	10,584
17	Remotes PLC Upgrades/Replacements	2024	52,000	-		52,000	41,080		10,920	8,299	2,621
Nanticoke Water											
18	Nanticoke Electrical Servicing Upgrades Debt - Growth-related Principal	2019-2027	90,667	-		90,667	-		90,667	68,907	21,760
19	Nanticoke Electrical Servicing Upgrades Debt - Growth-related Interest	2019-2027	2,021	-		2,021	-		2,021	1,536	485
20	Nanticoke Filter Building Expansion Debt - Growth-related Principal	2019-2027	386,330	-		386,330	-		386,330	293,611	92,719
21	Nanticoke Filter Building Expansion Debt - Growth-related Interest	2019-2027	8,613	-		8,613	-		8,613	6,546	2,067
22	Nanticoke High Rate Sedimentation Capacity Expansion Debt - Growth-related Principal	2019-2027	303,098	-		303,098	-		303,098	230,355	72,744
23	Nanticoke High Rate Sedimentation Capacity Expansion Debt - Growth-related Interest	2019-2027	6,757	-		6,757	-		6,757	5,135	1,622
24	Nanticoke Water System Filter Replacement Debt - Growth-related Principal	2019-2027	2,122,413	-		2,122,413	-		2,122,413	1,613,034	509,379
25	Nanticoke Water System Filter Replacement Debt - Growth-related Interest	2019-2027	47,316	-		47,316	-		47,316	35,960	11,356
26	Nanticoke Water Treatment Process-Growth-related Principal	2019-2027	676,191	-		676,191	-		676,191	513,905	162,286
27	Nanticoke Water Treatment Process-Growth-related Interest	2019-2027	15,075	-		15,075	-		15,075	11,457	3,618
28	Lowlift Pump Replacement	2019	375,000	-		375,000	225,000		150,000	114,000	36,000
29	WTP PLC Upgrades/Replacements	2020-2028	168,000	-		168,000	132,720		35,280	26,813	8,467
Caledonia Water											
30	Elevated Storage Tank Replacement	2019	5,373,200	1,381,700		3,991,500	2,302,800		1,688,700	1,283,412	405,288
31	Chloramination Feasibility Study	2021	35,000	-		35,000	26,250		8,750	6,650	2,100
32	Booster Station PLC Upgrades/Replacements	2025	38,000	-		38,000	30,020		7,980	6,065	1,915
33	Caledonia North Side Elevated Water Tank	2032	6,000,000	1,740,000		4,260,000	-		4,260,000	3,237,600	1,022,400
Reserve Fund Balance								448,637	(448,637)	(340,964)	(107,673)
Total			33,538,050	4,741,340	-	28,796,710	16,204,957	-	12,591,752	9,569,732	3,022,021



5.4.3 Wastewater Services

A number of wastewater projects have been identified for inclusion in the D.C. background study including technical reviews and studies, sewer manhole repairs and rehabilitations, growth-related debt payments, a forcemain twinning, and a number of plant-related capital improvements.

An upgrade project at the Caledonia wastewater treatment plant in the amount of \$45 million has been identified to service growth. This project will add an additional 7,000 cu.m per day and is anticipated to service new units only. The additional capacity equates to approximately 20,000 people. As the urban 20-year forecast provides for approximately 8,500 people, approximately 58% of the total cost of the project will benefit growth outside of the forecast. This results in a \$26.12 million deduction being applied for post-period benefit. The net growth-related capital cost associated with this project is \$18,915,204. This amount has been included in the D.C. calculations.

The total gross capital cost of all identified projects is \$83,107,384, including the recovery of the reserve fund deficit of \$4,559,148. A total post period benefit amount of \$31,905,296 has been deducted from the calculations. A further deduction of \$20,604,910 has been applied for the amount of the capital works that benefits existing development. The resulting net growth-related capital cost included in the D.C. calculations is \$30,597,178.

The growth-related costs have been allocated between residential and non-residential development based the anticipated growth over the 20-year urban forecast period. This results in a 76% allocation to residential and a 24% allocation to non-residential.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Wastewater Services

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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	Non-Residential Share
	2019-2038								76%	24%	
Technical Reviews and Studies											
1	Inflow & Infiltration Program Support	2019-2028	290,000	-		290,000	246,500		43,500	33,060	10,440
2	SCADA Master Plan Optimization	2021	35,000	-		35,000	26,600		8,400	6,384	2,016
3	SCADA Master Plan Optimization	2026	35,000	-		35,000	26,600		8,400	6,384	2,016
4	Janvis - Master Servicing Plan Update	2023	15,000	-		15,000	-		15,000	11,400	3,600
5	Cayuga - Master Servicing Plan Update	2022	25,000	-		25,000	-		25,000	19,000	6,000
6	Cayuga - Master Servicing Plan Update	2027	25,000	-		25,000	-		25,000	19,000	6,000
7	Caledonia - Master Servicing Plan Update	2023	50,000	-		50,000	-		50,000	38,000	12,000
8	Hagersville - Master Servicing Plan Update	2020	25,000	-		25,000	-		25,000	19,000	6,000
9	Hagersville - Master Servicing Plan Update	2025	25,000	-		25,000	-		25,000	19,000	6,000
10	Dunville - Master Servicing Plan Update	2021	30,000	-		30,000	-		30,000	22,800	7,200
11	Dunville - Master Servicing Plan Update	2026	30,000	-		30,000	-		30,000	22,800	7,200
Replacement & Upgrade Projects											
12	Sewer Manhole Repairs (I&I)	2019-2027	375,000	-		375,000	318,750		56,250	42,750	13,500
13	Sanitary Sewer Rehabilitations (I&I)	2020-2028	1,000,000	-		1,000,000	850,000		150,000	114,000	36,000
14	Janvis - Walpole St - Sewer Pipe Upsize (Peel to Talbot)	2019	97,000	-		97,000	58,200		38,800	29,488	9,312
Wastewater Plants											
15	Caledonia Water Pollution Control Plant - Balloon Payment Re-issuance Growth-related Principal	2019-2023	982,800	-		982,800	-		982,800	746,928	235,872
16	Caledonia Water Pollution Control Plant - Balloon Payment Re-issuance Growth-related Discounted Interest	2019-2023	50,834	-		50,834	-		50,834	38,634	12,200
17	Hagersville Wastewater Treatment Plant - Debt Charges - Growth-related Principal	2019-2020	702,350	-		702,350	-		702,350	533,786	168,564
18	Hagersville Wastewater Treatment Plant - Growth-related Discounted Interest	2019-2020	23,195	-		23,195	-		23,195	17,628	5,567
19	Janvis Lagoon Upgrades Growth Related Debt Charges (Principal)	2019-2027	111,248	-		111,248	-		111,248	84,548	26,699
20	Janvis Lagoon Upgrades Growth Related Debt Charges (Interest)	2019-2027	2,480	-		2,480	-		2,480	1,885	595
21	Caledonia WWTP Upgrades Growth Related Debt Charges (Principal)	2019-2027	570,021	-		570,021	-		570,021	433,216	136,805
22	Caledonia WWTP Upgrades Growth Related Debt Charges (Interest)	2019-2027	12,708	-		12,708	-		12,708	9,658	3,050
23	Plant Capital Improvements	2024-2028	13,852,500	-		13,852,500	13,644,500		208,000	158,080	49,920
24	Plant Optimization Program Support	2019-2020	90,000	-		90,000	76,500		13,500	10,260	3,240
25	SCADA Maintenance	2019-2028	200,000	-		200,000	152,000		48,000	36,480	11,520
26	SCADA Technical Support	2019-2028	400,000	-		400,000	304,000		96,000	72,960	23,040
27	Pump Station Repairs/Replacement	2021-2022	700,000	-		700,000	630,000		70,000	53,200	16,800
Sewer Operations Administration											
28	Effluent Water Quality & Impact Assessments	2019-2028	350,000	-		350,000	-		350,000	266,000	84,000
Caledonia Sewer											
29	Sludge Storage Tank Retrofit	2020	175,000	-		175,000	87,500		87,500	66,500	21,000
30	WWTP Wet Well Expansion	2019-2020	1,447,600	-		1,447,600	-		1,447,600	1,100,176	347,424
31	Caledonia Wastewater Treatment Plant	2019-2027	45,036,200	26,120,996		18,915,204	-		18,915,204	14,375,555	4,539,649
32	WWTP PLC Upgrade/Replacements	2028	115,000	-		115,000	87,400		27,600	20,976	6,624
Jarvis Sewer											
33	Additional Wastewater Treatment Capacity	2019	6,356,400	5,784,300		572,100	-		572,100	434,796	137,304
Hagersville Sewer											
34	Grit Removal System	2021	1,016,700	-		1,016,700	700,000		316,700	240,692	76,008
35	Digester Covers and Insulation	2021	450,000	-		450,000	360,000		90,000	68,400	21,600
36	Remotes - Control Equipment Replacement (SCADA)	2020-2022	112,000	-		112,000	85,120		26,880	20,429	6,451
37	WWTP PLC Upgrade/Replacements	2027-2028	290,000	-		290,000	220,400		69,600	52,896	16,704
Cayuga Sewer											
38	Cayuga-Ouse St Force Main Twinning	2019-2020	337,700	-		337,700	226,300		111,400	84,664	26,736
39	Ouse St PS Replacements	2019-2020	1,441,500	-		1,441,500	1,095,540		345,960	262,930	83,030
40	Remotes - Control Equipment Replacement (SCADA)	2019-2020	70,000	-		70,000	63,000		7,000	5,320	1,680
41	WWTP PLC Upgrade/Replacements	2024	160,000	-		160,000	121,600		38,400	29,184	9,216
42	McKay St. Pump Station Upgrades and Pump Replacements	2019	190,000	-		190,000	171,000		19,000	14,440	4,560
Dunville Sewer											
	Remotes - Control Equipment Replacement (SCADA)	2021	140,000	-		140,000	106,400		33,600	25,536	8,064
43	Digester Cover and Insulation	2023	475,000	-		475,000	380,000		95,000	72,200	22,800
44	John St. Pump Station Upgrades	2019-2020	630,000	-		630,000	567,000		63,000	47,880	15,120
Townsend Sewer											
	Reserve Fund Adjustment		4,559,148	-		4,559,148	-		4,559,148	3,464,953	1,094,195
Total			83,107,384	31,905,296	-	51,202,088	20,604,910	-	30,597,178	23,253,855	7,343,323



Chapter 6

D.C. Calculations



6. D.C. Calculations

Table 6-1 calculates the proposed uniform D.C.s to be imposed for infrastructure services based upon an urban 20-year horizon (stormwater, wastewater, and water). Table 6-2 calculates the proposed uniform D.C. to be imposed on anticipated development in the County for County-wide services over a 20-year planning horizon. Table 6-3 calculates the proposed uniform D.C. to be imposed on anticipated development in the County for County-wide services over a 10-year planning horizon

The calculation for residential development is generated on a per capita basis and is based upon five forms of housing types (single and semi-detached, apartments 2+ bedrooms, apartment's bachelor and 1 bedroom, all other multiples and special care/special dwelling units). The non-residential D.C. has been calculated on a per sq.ft. of gross floor area basis for all types of non-residential development (industrial, commercial and institutional).

The D.C.-eligible costs for each service component were developed in Chapter 5 for all County services, based on their proposed capital programs.

For the residential calculations, the total cost is divided by the "gross" (new resident) population to determine the per capita amount. The eligible D.C. cost calculations set out in Chapter 5 are based on the net anticipated population increase (the forecast new unit population less the anticipated decline in existing units). The cost per capita is then multiplied by the average occupancy of the new units (Appendix A, Schedule 5) to calculate the charge in Tables 6-1, 6-2, and 6-3.

With respect to non-residential development, the total costs in the uniform charge allocated to non-residential development (based on need for service) have been divided by the anticipated development over the planning period to calculate a cost per sq.ft. of gross floor area.

Table 6-4 summarizes the total D.C. that is applicable for County-wide services and Table 6-5 summarizes the gross capital expenditures and sources of revenue for works to be undertaken during the 5-year life of the by-law.



Table 6-1
Haldimand County
Development Charge Calculation
Urban Services
2019 to 2038

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	SDU	per sq.ft.
	\$	\$	\$	\$
1. <u>Stormwater Drainage and Control Services</u>				
1.1 Channels, drainage and ponds	586,894	185,335	121	0.05
	586,894	185,335	121	0.05
2. <u>Wastewater Services</u>				
2.1 Wastewater Services	23,253,855	7,343,323	4,776	1.83
	23,253,855	7,343,323	4,776	1.83
3. <u>Water Services</u>				
3.1 Water Services	9,569,732	3,022,021	1,966	0.76
	9,569,732	3,022,021	1,966	0.76
TOTAL	\$33,410,481	\$10,550,678	\$6,863	\$2.64
D.C.-Eligible Capital Cost	\$33,410,481	\$10,550,678		
Buildout Gross Population/GFA Growth (sq.ft.)	14,137	3,995,700		
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$2,363	\$2.64		
By Residential Unit Type				
	P.P.U.			
Single and Semi-Detached Dwelling	2.904	\$6,863		
Apartments - 2 Bedrooms +	2.166	\$5,119		
Apartments - Bachelor and 1 Bedroom	1.394	\$3,294		
Other Multiples	2.679	\$6,331		
Special Care/Special Dwelling Units	1.104	\$2,609		



Table 6-2
Haldimand County
Development Charge Calculation
County-wide Services
2019 to 2038

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
4. <u>Services Related to a Highway</u>				
4.1 Services Related to a Highway	10,096,049	3,188,226	1,970	0.78
4.2 Public Works	1,218,618	384,827	238	0.10
	11,314,666	3,573,053	2,208	0.88
5. <u>Fire Protection Services</u>				
5.1 Fire facilities	2,362,758	746,134	461	0.19
5.2 Fire vehicles	1,094,400	345,600	214	0.09
5.3 Small equipment and gear	76,000	24,000	15	0.01
	3,533,158	1,115,734	690	0.29
TOTAL	\$14,847,825	\$4,688,787	\$2,898	\$1.17
D.C.-Eligible Capital Cost	\$14,847,825	\$4,688,787		
20-Year Gross Population/GFA Growth (sq.ft.)	14,878	3,995,700		
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$998	\$1.17		
By Residential Unit Type	P.P.U.			
Single and Semi-Detached Dwelling	2.904	\$2,898		
Apartments - 2 Bedrooms +	2.166	\$2,162		
Apartments - Bachelor and 1 Bedroom	1.394	\$1,391		
Other Multiples	2.679	\$2,674		
Special Care/Special Dwelling Units	1.104	\$1,102		



Table 6-3
Haldimand County
Development Charge Calculation
County-wide Services
2019 to 2028

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
6. <u>Parking Services</u>				
6.1 Parking Services	227,322	84,078	91	0.04
	227,322	84,078	91	0.04
7. <u>Indoor & Outdoor Recreation Services</u>				
7.1 Parkland development, amenities & trails	5,781,417	304,285	2,325	0.14
7.2 Parks vehicles and equipment	-	-	-	-
7.3 Recreation facilities	17,550,999	923,737	7,061	0.43
	23,332,416	1,228,022	9,386	0.57
8. <u>Library Services</u>				
8.1 Library facilities	2,814,950	148,155	1,132	0.07
	2,814,950	148,155	1,132	0.07
9. <u>Administration</u>				
9.1 Studies	558,368	206,520	225	0.09
10. <u>Cemeteries</u>				
10.1 Cemeteries	174,119	64,400	70	0.03
	174,119	64,400	70	0.03
11. <u>Ambulance</u>				
11.1 Ambulance facilities	438,286	162,106	176	0.07
11.2 Vehicles	147,825	54,675	59	0.02
	586,111	216,781	235	0.09
12. <u>Waste Diversion</u>				
12.1 Waste diversion facilities, vehicles, equipment and other	405,000	45,000	163	0.02
	405,000	45,000	163	0.02
TOTAL	\$28,098,286	\$1,992,956	\$11,302	\$0.91
D.C.-Eligible Capital Cost	\$28,098,286	\$1,992,956		
10-Year Gross Population/GFA Growth (sq.ft.)	7,220	2,185,900		
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$3,891.73	\$0.91		
By Residential Unit Type				
	P.P.U.			
Single and Semi-Detached Dwelling	2.904	\$11,302		
Apartments - 2 Bedrooms +	2.166	\$8,429		
Apartments - Bachelor and 1 Bedroom	1.394	\$5,425		
Other Multiples	2.679	\$10,426		
Special Care/Special Dwelling Units	1.104	\$4,296		



Table 6-4
Haldimand County
Development Charge Calculation
Total All Services

	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
Urban-wide Services Build out	33,410,481	10,550,678	6,863	2.64
County-wide Services 20 Year	14,847,825	4,688,787	2,898	1.17
County-wide Services 10 Year	28,098,286	1,992,956	11,302	0.91
TOTAL	76,356,592	17,232,421	21,063	4.72



Table 6-5
Haldimand County
Gross Expenditure and Sources of Revenue Summary for Costs to be Incurred over the Life of the By-law

Service	Total Gross Cost	Sources of Financing						
		Tax Base or Other Non-D.C. Source				Post D.C. Period Benefit	D.C. Reserve Fund	
		Other Deductions	Benefit to Existing	Other Funding	Legislated Reduction		Residential	Non-Residential
1. Stormwater Drainage and Control Services 1.1 Channels, drainage and ponds	105,000	0	0	0	0	0	79,800	25,200
2. Wastewater Services 2.1 Wastewater Services	42,347,889	0	5,539,271	0	0	20,295,964	12,549,616	3,963,037
3. Water Services 3.1 Water Services	14,659,867	0	8,009,248	0	0	1,381,700	4,004,378	1,264,541
4. Services Related to a Highway 4.1 Services Related to a Highway 4.2 Public Works	21,264,910 780,000	0 0	10,182,550 250,000	0 0	0 0	0 0	8,422,594 402,800	2,659,766 127,200
5. Fire Protection Services 5.1 Fire facilities 5.2 Fire vehicles 5.3 Small equipment and gear	4,189,128 1,440,000 25,000	0 0 0	2,473,800 0 0	0 0 0	0 0 0	0 0 0	1,303,649 1,094,400 19,000	411,679 345,600 6,000
6. Parking Services 6.1 Parking Services	173,000	0	0	0	17,300	0	113,661	42,039
7. Indoor & Outdoor Recreation Services 7.1 Parkland development, amenities & trails 7.2 Parks vehicles and equipment 7.3 Recreation facilities	4,965,000 0 9,089,691	0 0 0	0 0 0	0 0 0	496,500 0 700,000	0 0 0	4,245,075 0 7,970,207	223,425 0 419,485
8. Library Services 8.1 Library facilities	5,315,444	9,408	2,119,052	0	274,400	0	2,766,955	145,629
9. Administration 9.1 Studies	755,000	0	231,250	0	52,375	0	344,104	127,271
10. Cemeteries 10.1 Cemeteries	235,000	0	0	0	23,500	0	154,395	57,105
11. Ambulance 11.1 Ambulance facilities 11.2 Vehicles	1,722,469 225,000	0 0	1,076,800 0	0 0	55,820 22,500	0 0	430,590 147,825	159,259 54,675
12. Waste Diversion 12.1 Waste diversion facilities, vehicles, equipment and other	250,000	0	0	0	25,000	0	202,500	22,500
Total Expenditures & Revenues	\$107,542,398	\$9,408	\$29,881,971	\$0	\$1,667,395	\$21,677,664	\$44,251,549	\$10,054,411



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

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 the section 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; and
- 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.

With respect to “the rules,” Section 6 states that a D.C. by-law must expressly address the matters referred to above re s.s.5(1) paragraphs 9 and 10, as well as how the rules apply to the redevelopment of land.

The rules provided are based on the County’s existing policies; however, there are items under consideration at this time and these may be refined prior to adoption of the by-law.



7.2 D.C. By-law Structure

It is recommended that:

- the County uses an urban area-specific D.C. calculation for water, wastewater, and stormwater services;
- the County imposes the D.C. for all non-water/wastewater/stormwater services on all areas of the County; and
- one Municipal D.C. by-law be used for all services.

7.3 D.C. By-law Rules

The following subsections set out the recommended rules governing the calculation, payment and collection of D.C.s in accordance with Section 6 of the D.C.A.

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

7.3.1 Payment in any Particular Case

In accordance with the D.C.A., 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 decade. Costs allocated to non-residential uses will be assigned based on the amount of square feet of gross floor area constructed for eligible uses (i.e. industrial, commercial and institutional).
- 2) Costs allocated to residential and non-residential uses are based upon a number of conventions, as may be suited to each municipal circumstance, e.g.
 - for Administration, parking, ambulance, and cemeteries, the costs have been based on a population vs. employment growth ratio (73%/27% for residential and non-residential, respectively) over the 10-year forecast period;
 - for Indoor and Outdoor Recreation and Library services, a 5% non-residential attribution has been made to recognize use by the non-residential sector;
 - for Waste diversion services, a 90% residential/ 10% non-residential allocation has been utilized;
 - for Services related to a highway, public works, and fire services, a 76% residential/24% non-residential attribution has been made based on a population vs. employment growth ratio over the 20-year forecast period; and
 - for Water, wastewater, and stormwater services a 76% residential/24% non-residential allocation has been made based on population vs. employment growth over the urban 20-year forecast period.

7.3.3 Application to Redevelopment of Land (Demolition and Conversion)

If a development involves the demolition of 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 equivalent to:



- 1) the number of dwelling units demolished/converted multiplied by the applicable residential D.C. in place at the time the D.C. is payable; and/or
- 2) the gross floor area of the building demolished/converted multiplied by the current non-residential D.C. in place at the time the D.C. is payable.

Development charges payable in a redevelopment shall be calculated by reducing the development charges payable by the maximum number of former residential units or by the maximum non-residential former gross floor area (as the case may be) which had been on the same property within ten (10) years of an action or approval but has since been demolished. Any such reduction shall not produce a refund.

7.3.4 Exemptions (full or partial)

a) Statutory exemptions

- industrial building additions of up to and including 50% of the existing gross floor area (defined in O.Reg. 82/98, s.1) of the building; for industrial building additions which exceed 50% of the existing gross floor area, only the portion of the addition in excess of 50% is subject to D.C.s (s.4(3)) of the D.C.A.;
- buildings or structures owned by and used for the purposes of any municipality, local board or Board of Education (s.3);
- residential development that results only in 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).

b) Non-statutory exemptions

- Development which is or would be classified under the Assessment Act as exempt from taxation for realty taxes such as a place of worship; and
- Farm operation constructed for bona fide farm uses.

7.3.5 Phasing in

No provisions for phasing in the D.C. are provided in the D.C. by-law.



7.3.6 Timing of Collection

A D.C. that is applicable under Section 5 of the D.C.A. shall be calculated and payable:

- where a permit is required under the Building Code Act in relation to a building or structure, the owner shall pay the D.C. prior to the issuance of the first permit or prior to the commencement of development or redevelopment as the case may be; and
- despite the above, Council, from time to time and at any time, may enter into agreements providing for all or any part of a D.C. to be paid before or after it would otherwise be payable.

7.3.7 Indexing

Indexing of the D.C.s shall be implemented on a mandatory basis annually commencing on the first anniversary date of this by-law and each anniversary date thereafter, in accordance with the Statistics Canada Quarterly, Non-Residential Building Construction Price Index (Table 18-10-0135-01)¹ for the most recent year-over-year period.

7.3.8 The Applicable Areas

The charges developed herein provide for varying charges within the County, as follows:

- All County-wide Services – the full residential and non-residential charge will be imposed on all lands within the County; and
- Water, Wastewater, and Stormwater – the full residential and non-residential charge will be imposed on the urban service areas of the County.

¹ O.Reg. 82/98 referenced “The Statistics Canada Quarterly, Construction Price Statistics, catalogue number 62-007” as the index source. Since implementation, Statistics Canada has modified this index twice and the above-noted index is the most current. The draft by-law provided herein refers to O.Reg. 82/98 to ensure traceability should this index continue to be modified over time.



7.4 Other D.C. By-law Provisions

It is recommended that:

7.4.1 Categories of Services for Reserve Fund and Credit Purposes

The County's D.C. collections are currently reserved in 12 separate reserve funds: Services related to a Highway, Public Works, Cemeteries, Parking, Fire Protection Services, Indoor & Outdoor Recreation Services, Library Services, Administration, Ambulance, Water Services, Wastewater Services, and Stormwater services. It is recommended that the County continue with these reserve funds and establish a fund for Waste Diversion services. Appendix D outlines the reserve fund policies that the County is required to follow as per the D.C.A.

7.4.2 By-law In-force Date

A by-law under the D.C.A. comes into force on the day after which the by-law is passed by Council.

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).

7.4.4 Area Rating

As noted earlier, Bill 73 has introduced two new sections where Council must consider the use of area specific charges:

1. Section 2(9) of the Act now requires a municipality to implement area-specific D.C.s for either specific services which are prescribed and/or for specific municipalities which are to be regulated (note that at this time, no municipalities or services are prescribed by the Regulations).
2. Section 10(2)c.1 of the D.C.A. requires that "the development charges background study shall include consideration of the use of more than one development charge by-law to reflect different needs for services in different areas."



In regard to the first item, there are no services or specific municipalities identified in the regulations which must be area-rated. The second item requires Council to consider the use of area-rating.

At present, the County's by-law provides for area-rating for water, wastewater, and stormwater services. All other County services are recovered based on a uniform, County-wide basis. There have been several reasons why these services have not been imposed on an area-specific basis including:

1. All County services, with the exception of water, wastewater and stormwater, require that the average 10-year service standard be calculated. This average service standard multiplied by growth in the County, establishes an upper ceiling on the amount of funds which can be collected from all developing landowners. Section 4(4) of O. Reg. 82/98 provides that "...if a development charge by-law applies to a part of the municipality, the level of service and average level of service cannot exceed that which would be determined if the by-law applied to the whole municipality." Put in layman terms, the average service standard multiplied by the growth within the specific area, would establish an area specific ceiling which would significantly reduce the total revenue recoverable for the County hence potentially resulting in D.C. revenue shortfalls and impacts on property taxes.
2. Extending on item 1, attempting to impose an area charge potentially causes equity issues in transitioning from a County-wide approach to an area specific approach. For example, if all services were now built (and funded) within area A (which is 75% built out) and this was funded with some revenues from areas B and C, moving to an area rating approach would see Area A contribute no funds to the costs of services in Areas B & C. The development charges would be lower in Area A (as all services are now funded) and higher in B and C. As well, funding shortfalls may then potentially encourage the municipality to provide less services to B and C due to reduced revenue.
3. Many services which are provided (roads, parks, recreation facilities, library) are not restricted to one specific area and are often used by all residents. For example, arenas located in different parts of the County will be used by residents from all areas depending on the programming of the facility (i.e. a public skate is



available each night, but at a different arena; hence usage of any one facility at any given time is based on programming availability).

For the reasons noted above, it is recommended that Council continue the D.C. approach to calculate the water, wastewater, and stormwater charges on an urban-wide basis and all other services on a uniform County-wide basis.

7.5 Other Recommendations

It is recommended that Council:

“Whenever appropriate, request that grants, subsidies and other contributions be clearly designated by the donor as being to the benefit of existing development or new development, as applicable;”

“Adopt the assumptions contained herein as an ‘anticipation’ with respect to capital grants, subsidies and other contributions;”

“Continue the D.C. approach to calculate the water, wastewater, and stormwater charges on an urban-wide basis and all other services on a uniform County-wide basis;”

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

“Approve the D.C. Background Study dated March 5, 2019, as amended (if applicable);”

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

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



Chapter 8

By-law Implementation



8. By-law Implementation

8.1 Public Consultation Process

8.1.1 Introduction

This chapter addresses the mandatory, formal public consultation process (Section 8.1.2), as well as the optional, informal consultation process (Section 8.1.3). The latter is designed to seek the co-operation and participation of those involved, in order to produce the most suitable policy. Section 8.1.4 addresses the anticipated impact of the D.C. on development from a generic viewpoint.

8.1.2 Public Meeting of Council

Section 12 of the D.C.A. 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, Council must determine whether a further meeting (under this section) is necessary (i.e. if the proposed by-law which is proposed for adoption has been changed in any respect, 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.)).

8.1.3 Other Consultation Activity

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

1. The first grouping is 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 County 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.
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 County D.C. policy. Their primary concern is frequently with the quantum of the charge, gross floor area exclusions such as basements, mechanical or indoor parking areas, or exemptions and phase-in or capping provisions in order to moderate the impact.

8.2 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 County 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.



8.3 Implementation Requirements

8.3.1 Introduction

Once the County has calculated the charge, prepared the complete background study, carried out the public process and passed a new by-law, the emphasis shifts to implementation matters.

These include notices, potential appeals and complaints, credits, front-ending agreements, subdivision agreement conditions and finally the collection of revenues and funding of projects.

The sections which follow overview the requirements in each case.

8.3.2 Notice of Passage

In accordance with s.13 of the D.C.A., when a D.C. by-law is passed, the County 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 no 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.

8.3.3 By-law Pamphlet

In addition to the "notice" information, the County 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 County must give one copy of the most recent pamphlet without charge, to any person who requests one.

8.3.4 Appeals

Sections 13 to 19 of the D.C.A. set out the requirements relative to making and processing a D.C. by-law appeal and 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 County 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.

The County is carrying out a public consultation process, in order to address the issues that come forward as part of that process, thereby avoiding or reducing the need for an appeal to be made.

8.3.5 Complaints

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

- the amount of the charge was incorrectly determined;
- the reduction 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. 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 County Council to the L.P.A.T.



8.3.6 Credits

Sections 38 to 41 of the D.C.A. set out a number of credit requirements, which apply where a County 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 County agrees to expand the credit to other services for which a D.C. is payable.

8.3.7 Front-Ending Agreements

The County 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 County 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. (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 County assesses whether this mechanism is appropriate for its use, as part of funding projects prior to County funds being available.

8.3.8 Severance and Subdivision Agreement Conditions

Section 59 of the D.C.A. 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;” and
- “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. 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 County in question is a commenting agency, in order to comply with subsection 59(4) of the D.C.A. it would need to provide to the approval authority, information regarding the applicable County D.C.s related to the site.

If the County 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 Haldimand County Residential Growth Forecast Summary

Year	Population (Including Census undercount) ¹	Excluding Census Undercount			Housing Units							Persons Per Unit (P.P.U.) with undercount	Person Per Unit (P.P.U.): without undercount
		Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi-Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households	Equivalent Institutional Households			
Historical	Mid-2001	45,430	43,728	538	43,190	13,650	640	1,175	90	15,555	489	2.921	2.811
	Mid-2006	47,202	45,212	742	44,470	14,510	685	1,085	40	16,320	675	2.892	2.770
	Mid-2011	46,043	44,875	651	44,224	14,785	910	1,085	50	16,830	592	2.736	2.666
	Mid-2016	46,780	45,605	583	45,022	15,320	1,040	1,070	75	17,505	530	2.672	2.605
Forecast	Mid-2019	48,800	47,573	608	46,965	16,169	1,166	1,167	75	18,577	553	2.627	2.561
	Mid-2029	55,340	53,948	690	53,258	17,953	1,613	1,633	75	21,273	627	2.601	2.536
	Mid-2031	56,700	55,274	707	54,567	18,315	1,716	1,742	75	21,849	643	2.595	2.530
	Mid-2039	62,580	61,006	780	60,226	19,632	2,163	2,355	75	24,225	709	2.583	2.518
	Mid-2041	64,100	62,488	799	61,689	19,960	2,292	2,542	75	24,869	726	2.578	2.513
Incremental	Mid-2001 to Mid-2006	1,772	1,484	204	1,280	860	45	-90	-50	765	186		
	Mid-2006 to Mid-2011	-1,159	-337	113	-246	275	225	0	10	510	-83		
	Mid-2011 to Mid-2016	737	730	-68	798	535	130	-15	25	675	-62		
	Mid-2016 to Mid-2019	2,020	1,968	25	1,943	849	126	97	0	1,072	23		
	Mid-2019 to Mid-2029	6,540	6,375	82	6,293	1,784	446	466	0	2,696	74		
	Mid-2019 to Mid-2031	7,900	7,701	99	7,602	2,147	550	575	0	3,272	90		
	Mid-2019 to Mid-2039	13,780	13,433	172	13,261	3,463	997	1,188	0	5,648	156		
	Mid-2019 to Mid-2041	15,300	14,915	191	14,724	3,792	1,126	1,375	0	6,292	173		

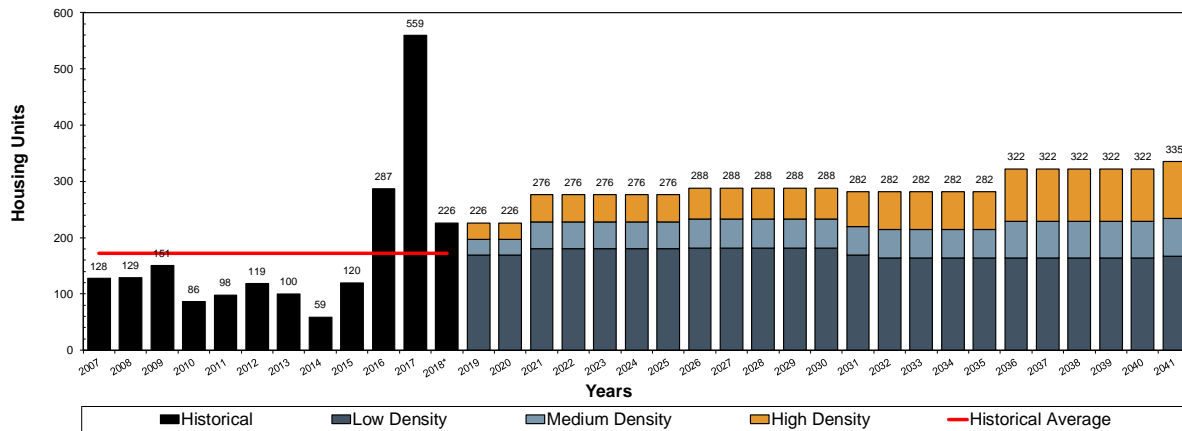
Source: Watson & Associates Economists Ltd., 2019.

¹ Census undercount estimated at approximately 2.6%. Note: Population including the undercount has been rounded.

² Includes townhouses and apartments in duplexes.

³ Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

Figure A-1
Annual Housing Forecast¹



Source: Historical housing activity derived from Haldimand County building permit data, 2007-2017.

¹ Growth forecast represents calendar year.

Note: 2018 is an estimate.



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

Development Location	Timing	Single & Semi-Detached	Multiples ¹	Apartments ²	Total Residential Units	Gross Population In New Units	Existing Unit Population Change	Net Population Increase, Excluding Institutional	Institutional Population	Net Population Including Institutional
Total Urban	2019 - 2029	1,765	446	466	2,677	7,164	-494	6,670	82	6,752
	2019 - 2031	2,082	550	575	3,207	8,559	-614	7,945	99	8,044
	2019 - 2039	3,208	997	1,188	5,393	14,137	-864	13,273	172	13,445
	2019 - 2041	3,486	1,126	1,375	5,987	15,630	-958	14,672	191	14,863
Caledonia	2019 - 2029	929	321	362	1,612	4,213	-215	3,998	31	4,029
	2019 - 2031	1,114	396	449	1,959	5,110	-267	4,843	38	4,881
	2019 - 2039	1,782	715	944	3,442	8,803	-376	8,427	65	8,492
	2019 - 2041	1,949	810	1,099	3,858	9,821	-416	9,405	72	9,477
Cayuga	2019 - 2029	180	24	14	219	614	-37	577	7	584
	2019 - 2031	208	29	18	255	715	-46	669	8	677
	2019 - 2039	306	52	39	397	1,099	-65	1,034	14	1,048
	2019 - 2041	330	58	45	433	1,196	-72	1,124	16	1,140
Dunnville	2019 - 2029	173	31	34	238	646	-120	526	24	550
	2019 - 2031	203	37	38	278	758	-149	609	29	638
	2019 - 2039	306	57	62	425	1,154	-209	945	50	995
	2019 - 2041	331	63	68	462	1,254	-232	1,022	56	1,078
Hagersville	2019 - 2029	401	46	40	486	1,359	-62	1,297	10	1,307
	2019 - 2031	458	58	50	566	1,575	-77	1,498	12	1,510
	2019 - 2039	656	115	103	874	2,400	-108	2,292	21	2,313
	2019 - 2041	705	130	117	952	2,607	-120	2,487	24	2,511
Townsend	2019 - 2029	30	9	7	45	122	-20	102	4	106
	2019 - 2031	34	11	8	53	142	-25	117	5	122
	2019 - 2039	47	17	15	79	209	-36	173	8	181
	2019 - 2041	50	19	16	85	225	-40	185	9	194
Jarvis	2019 - 2029	52	16	9	77	210	-40	170	6	176
	2019 - 2031	64	19	12	95	259	-50	209	7	216
	2019 - 2039	110	40	25	175	472	-70	402	12	414
	2019 - 2041	121	46	29	196	527	-78	449	14	463
Remaining Rural Areas	2019 - 2029	19	-	-	19	56	-432	-376	0	-376
	2019 - 2031	65	-	-	65	190	-534	-344	0	-344
	2019 - 2039	255	-	-	255	741	-753	-12	0	-12
	2019 - 2041	305	-	-	305	887	-834	53	0	53
Haldimand County	2019 - 2029	1,784	446	466	2,696	7,220	-927	6,294	82	6,376
	2019 - 2031	2,147	550	575	3,272	8,749	-1,148	7,601	99	7,700
	2019 - 2039	3,463	997	1,188	5,648	14,878	-1,617	13,261	172	13,433
	2019 - 2041	3,792	1,126	1,375	6,292	16,517	-1,792	14,725	191	14,916

Source: Watson & Associates Economists Ltd., 2019.

¹ Includes townhouses and apartments in duplexes.

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

Note: Numbers may not add up precisely due to rounding.



Schedule 3
Haldimand County
Current Year Growth Forecast
Mid 2016 to Mid 2019

		Population
Mid-2016 Population (1)		45,605
Occupants of New Housing Units, Mid-2016 to Mid-2019	<i>Units (2)</i>	1,072
	<i>multiplied by P.P.U. (3)</i>	2,550
	<i>gross population increase</i>	2,733
Occupants of New Equivalent Institutional Units, Mid-2016 to Mid-2019	<i>Units</i>	23
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	25
Decline in Housing Unit Occupancy, Mid-2016 to Mid-2019	<i>Units (4)</i>	17,505
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.045
	<i>total decline in population</i>	-790
Population Estimate to Mid-2019		47,573
<i>Net Population Increase, Mid-2016 to Mid-2019</i>		1,968

- (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>	2.641	79%	2.090
<i>Multiples (6)</i>	2.591	12%	0.305
<i>Apartments (7)</i>	1.701	9%	0.154
Total		100%	2.550

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 4a
Haldimand County
10-Year Growth Forecast
Mid 2019 to Mid 2029

		Population
Mid-2019 Population (1)		47,573
Occupants of New Housing Units, Mid-2019 to Mid-2029	<i>Units (2)</i>	2,696
	<i>multiplied by P.P.U. (3)</i>	2,678
	<i>gross population increase</i>	7,220
		7,220
Occupants of New Equivalent Institutional Units, Mid-2019 to Mid-2029	<i>Units</i>	74
	<i>multiplied by P.P.U. (3)</i>	1,108
	<i>gross population increase</i>	82
		82
Decline in Housing Unit Occupancy, Mid-2019 to Mid-2029	<i>Units (4)</i>	18,577
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.050
	<i>total decline in population</i>	-927
		-927
Population Estimate to Mid-2029		53,948
<i>Net Population Increase, Mid-2019 to Mid-2029</i>		6,375

(1) Mid-2019 Population (1) based on:

2016 Population (45,605) + Mid-2016 to Mid-2019 estimated housing units to beginning of forecast period (1,072 x 2.55 = 2,733) + (23 x 1.1 = 25) + (17,505 x -.045 = -790) = 47,573

(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	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	2.904	66%	1.922
<i>Multiples (6)</i>	2.679	17%	0.444
<i>Apartments (7)</i>	1.811	17%	0.313
<i>one bedroom or less</i>	1.394		
<i>two bedrooms or more</i>	2.166		
Total		100%	2.678

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) Mid-2019 households based upon 17,505 (2016 Census) + 1,072 (Mid-2016 to Mid-2019 unit estimate) = 18,577

(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 4b
Haldimand County
20-Year Growth Forecast
Mid 2019 to Mid 2039

		Population
Mid-2019 Population (1)		47,573
Occupants of New Housing Units, Mid-2019 to Mid-2039	<i>Units (2)</i>	5,648
	<i>multiplied by P.P.U. (3)</i>	2,634
	<i>gross population increase</i>	14,879
		14,879
Occupants of New Equivalent Institutional Units, Mid-2019 to Mid-2039	<i>Units</i>	156
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	172
		172
Decline in Housing Unit Occupancy, Mid-2019 to Mid-2039	<i>Units (4)</i>	18,577
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.087
	<i>total decline in population</i>	-1,617
		-1,617
Population Estimate to Mid-2039		61,006
<i>Net Population Increase, Mid-2019 to Mid-2039</i>		13,433

(1) Mid-2019 Population (1) based on:

2016 Population (17,511) + Mid 2016 to Early 2018 estimated housing units to beginning of forecast period (212 x = 518) + (7,090 x -0.0051 = -36) = 17,993

(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	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	2.904	61%	1.780
<i>Multiples (6)</i>	2.679	18%	0.473
<i>Apartments (7)</i>	1.811	21%	0.381
<i>one bedroom or less</i>	1.394		
<i>two bedrooms or more</i>	2.166		
Total		100%	2.634

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 2018 households based upon 7,090 (2016 Census) + 212 (Mid 2016 to Early 2018 unit estimate) = 7,302

(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
Haldimand County
Long Term Growth Forecast
Mid 2019 to Mid 2041

		Population
Mid-2019 Population (1)		47,573
Occupants of New Housing Units, Mid-2019 to Mid-2041	<i>Units (2)</i>	6,292
	<i>multiplied by P.P.U. (3)</i>	2,625
	<i>gross population increase</i>	16,516
Occupants of New Equivalent Institutional Units, Mid-2019 to Mid-2041	<i>Units</i>	173
	<i>multiplied by P.P.U. (3)</i>	1,104
	<i>gross population increase</i>	191
Decline in Housing Unit Occupancy, Mid-2019 to Mid-2041	<i>Units (4)</i>	18,577
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.096
	<i>total decline in population</i>	-1,792
Population Estimate to Mid-2041		62,488
<i>Net Population Increase, Mid-2019 to Mid-2041</i>		<i>14,915</i>

(1) Mid-2019 Population (1) based on:

2016 Population (17,511) + Mid 2016 to Early 2018 estimated housing units to beginning of forecast period (212 x = 518) + (7,090 x -0.0051 = -36) = 17,993

(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	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	2.904	60%	1.750
<i>Multiples (6)</i>	2.679	18%	0.479
<i>Apartments (7)</i>	1.811	22%	0.396
<i>one bedroom or less</i>	1.394		
<i>two bedrooms or more</i>	2.166		
Total		100%	2.625

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 2018 households based upon 7,090 (2016 Census) + 212 (Mid 2016 to Early 2018 unit estimate) = 7,302

(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
Haldimand County
Summary of Active Development Applications, Intensification and Residential Vacant
Land Supply Potential as of 2018¹

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ²	Apartments ³	Total
Registered Not Built	383	148	-	531
<i>% Breakdown</i>	72%	28%	0%	100%
Draft Plans Approved	3,608	330	266	4,204
<i>% Breakdown</i>	86%	8%	6%	100%
Application Under Review	314	375	474	1,163
<i>% Breakdown</i>	27%	32%	41%	100%
Vacant Lands Designated for Residential	5,837	1,088	854	7,779
<i>% Breakdown</i>	75%	14%	11%	100%
Additional Intensification	93	362	1,363	1,818
<i>% Breakdown</i>	5%	20%	75%	100%
Total	10,235	2,303	2,957	15,495
<i>% Breakdown</i>	66%	15%	19%	100%

Source: Haldimand County Planning Department as of June 2018.

¹ Schedule 2 provides an estimate of the remaining vacant land supply housing potential.

² Includes townhouses and apartments in duplexes.

³ Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6b
Haldimand County
Summary of Active Development Applications, Intensification and Residential Vacant
Land Supply Potential as of 2018¹
Caledonia

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ²	Apartments ³	Total
Registered Not Built	250	140	-	390
<i>% Breakdown</i>	64%	36%	0%	100%
Draft Plans Approved	2,491	204	266	2,961
<i>% Breakdown</i>	84%	7%	9%	100%
Application Under Review	224	182	310	716
<i>% Breakdown</i>	31%	25%	43%	100%
Vacant Lands Designated for Residential	443	83	65	591
<i>% Breakdown</i>	75%	14%	11%	100%
Additional Intensification	20	81	307	408
<i>% Breakdown</i>	5%	20%	75%	100%
Total	3,428	690	948	5,066
<i>% Breakdown</i>	68%	14%	19%	100%

Source: Haldimand County Planning Department as of June 2018.

¹ Schedule 2 provides an estimate of the remaining vacant land supply housing potential.

² Includes townhouses and apartments in duplexes.

³ Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6c
Haldimand County
Summary of Active Development Applications, Intensification and Residential Vacant
Land Supply Potential as of 2018¹
Cayuga

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ²	Apartments ³	Total
Registered Not Built	12	-	-	12
<i>% Breakdown</i>	100%	0%	0%	100%
Draft Plans Approved	138	60	-	198
<i>% Breakdown</i>	70%	30%	0%	100%
Application Under Review	-	-	12	12
<i>% Breakdown</i>	0%	0%	100%	100%
Vacant lands designated for Residential	344	64	50	458
<i>% Breakdown</i>	75%	14%	11%	100%
Additional Intensification	13	50	185	248
<i>% Breakdown</i>	5%	20%	75%	100%
Total	507	174	247	928
<i>% Breakdown</i>	55%	19%	27%	100%

Source: Haldimand County Planning Department as of June 2018.

¹ Schedule 2 provides an estimate of the remaining vacant land supply housing potential.

² Includes townhouses and apartments in duplexes.

³ Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6d
Haldimand County
Summary of Active Development Applications, Intensification and Residential Vacant
Land Supply Potential as of 2018¹
Dunnville

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ²	Apartments ³	Total
Registered Not Built	30	8	-	38
<i>% Breakdown</i>	<i>79%</i>	<i>21%</i>	<i>0%</i>	<i>100%</i>
Draft Plans Approved	-	14	-	14
<i>% Breakdown</i>	<i>0%</i>	<i>100%</i>	<i>0%</i>	<i>100%</i>
Application Under Review	64	40	62	166
<i>% Breakdown</i>	<i>39%</i>	<i>24%</i>	<i>37%</i>	<i>100%</i>
Vacant lands designated for Residential	254	47	37	338
<i>% Breakdown</i>	<i>75%</i>	<i>14%</i>	<i>11%</i>	<i>100%</i>
Additional Intensification	22	79	298	399
<i>% Breakdown</i>	<i>6%</i>	<i>20%</i>	<i>75%</i>	<i>100%</i>
Total	370	188	397	955
<i>% Breakdown</i>	<i>39%</i>	<i>20%</i>	<i>42%</i>	<i>100%</i>

Source: Haldimand County Planning Department as of June 2018.

¹ Schedule 2 provides an estimate of the remaining vacant land supply housing potential.

² Includes townhouses and apartments in duplexes.

³ Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6e
Haldimand County
Summary of Active Development Applications, Intensification and Residential Vacant
Land Supply Potential as of 2018¹
Hagersville

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ²	Apartments ³	Total
Registered Not Built	37	-	-	37
<i>% Breakdown</i>	<i>100%</i>	<i>0%</i>	<i>0%</i>	<i>100%</i>
Draft Plans Approved	776	52	-	828
<i>% Breakdown</i>	<i>94%</i>	<i>6%</i>	<i>0%</i>	<i>100%</i>
Application Under Review	18	75	-	93
<i>% Breakdown</i>	<i>19%</i>	<i>81%</i>	<i>0%</i>	<i>100%</i>
Vacant lands designated for Residential	774	143	112	1,029
<i>% Breakdown</i>	<i>75%</i>	<i>14%</i>	<i>11%</i>	<i>100%</i>
Additional Intensification	26	104	391	521
<i>% Breakdown</i>	<i>5%</i>	<i>20%</i>	<i>75%</i>	<i>100%</i>
Total	1,631	374	503	2,508
<i>% Breakdown</i>	<i>65%</i>	<i>15%</i>	<i>20%</i>	<i>100%</i>

Source: Haldimand County Planning Department as of June 2018.

¹ Schedule 2 provides an estimate of the remaining vacant land supply housing potential.

² Includes townhouses and apartments in duplexes.

³ Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6f
Haldimand County
Summary of Active Development Applications, Intensification and Residential Vacant
Land Supply Potential as of 2018¹
Townsend

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ²	Apartments ³	Total
Registered Not Built	-	-	-	-
<i>% Breakdown</i>				
Draft Plans Approved	-	-	-	-
<i>% Breakdown</i>				
Application Under Review	-	30	90	120
<i>% Breakdown</i>	0%	25%	75%	100%
Vacant lands designated for Residential	2,414	451	354	3,219
<i>% Breakdown</i>	75%	14%	11%	100%
Additional Intensification	-	-	-	-
<i>% Breakdown</i>				
Total	2,414	481	444	3,339
<i>% Breakdown</i>	72%	14%	13%	100%

Source: Haldimand County Planning Department as of June 2018.

¹ Schedule 2 provides an estimate of the remaining vacant land supply housing potential.

² Includes townhouses and apartments in duplexes.

³ Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6g
Haldimand County
Summary of Active Development Applications, Intensification and Residential Vacant
Land Supply Potential as of 2018¹
Jarvis

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ²	Apartments ³	Total
Registered Not Built	32	-	-	32
<i>% Breakdown</i>	<i>100%</i>	<i>0%</i>	<i>0%</i>	<i>100%</i>
Draft Plans Approved	134	-	-	134
<i>% Breakdown</i>	<i>100%</i>	<i>0%</i>	<i>0%</i>	<i>100%</i>
Application Under Review	-	48	-	48
<i>% Breakdown</i>	<i>0%</i>	<i>100%</i>	<i>0%</i>	<i>100%</i>
Vacant lands designated for Residential	1,608	300	236	2,144
<i>% Breakdown</i>	<i>75%</i>	<i>14%</i>	<i>11%</i>	<i>100%</i>
Additional Intensification	12	48	182	242
<i>% Breakdown</i>	<i>5%</i>	<i>20%</i>	<i>75%</i>	<i>100%</i>
Total	1,786	396	418	2,600
<i>% Breakdown</i>	<i>69%</i>	<i>15%</i>	<i>16%</i>	<i>100%</i>

Source: Haldimand County Planning Department as of June 2018.

¹ Schedule 2 provides an estimate of the remaining vacant land supply housing potential.

² Includes townhouses and apartments in duplexes.

³ Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6h
Haldimand County
Summary of Active Development Applications, Intensification and Residential Vacant
Land Supply Potential as of 2018¹
Jarvis

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ²	Apartments ³	Total
Registered Not Built	22	-	-	22
<i>% Breakdown</i>	<i>100%</i>	<i>0%</i>	<i>0%</i>	<i>100%</i>
Draft Plans Approved	69	-	-	69
<i>% Breakdown</i>	<i>100%</i>	<i>0%</i>	<i>0%</i>	<i>100%</i>
Application Under Review	8	-	-	8
<i>% Breakdown</i>	<i>100%</i>	<i>0%</i>	<i>0%</i>	<i>100%</i>
Vacant lands designated for Residential	-	-	-	-
<i>% Breakdown</i>				
Additional Intensification	-	-	-	-
<i>% Breakdown</i>				
Total	99	-	-	99
<i>% Breakdown</i>	<i>100%</i>	<i>0%</i>	<i>0%</i>	<i>100%</i>

Source: Haldimand County Planning Department as of June 2018.

¹ Schedule 2 provides an estimate of the remaining vacant land supply housing potential.

² Includes townhouses and apartments in duplexes.

³ Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 7
Haldimand County
Historical Residential Building Permits
Years 2008 to 2017

Year	Residential Building Permits			
	Singles & Semi Detached	Multiples ¹	Apartments ²	Total
2008	85	44	0	129
2009	123	28	0	151
2010	83	3	0	86
2011	84	11	3	98
2012	91	28	0	119
Sub-total	466	114	3	583
Average (2008 - 2012)	93	23	1	117
% Breakdown	79.9%	19.6%	0.5%	100.0%
2013	90	10	0	100
2014	48	11	0	59
2015	66	18	36	120
2016	220	29	38	287
2017	459	70	30	559
Sub-total	883	138	104	1,125
Average (2013 - 2017)	177	28	21	225
% Breakdown	78.5%	12.3%	9.2%	100.0%
2008 - 2017				
Total	1,349	252	107	1,708
Average	135	25	11	171
% Breakdown	79.0%	14.8%	6.3%	100.0%

Source: Haldimand County building permit data.

¹ Includes townhouses and apartments in duplexes.

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



Schedule 8a
Haldimand County
Person Per Unit by Age and Type of Dwelling
(2016 Census)

Age of Dwelling	Singles and Semi-Detached						Historical 25 Year Average	25 Year Forecast Average ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	-	-	1.846	2.891	-	2.641		
6-10	-	-	1.706	2.930	5.091	2.923		
11-15	-	-	2.033	3.133	4.313	3.000		
16-20	-	-	1.952	3.120	4.273	3.093	2.900	2.904
20-25	-	-	1.765	2.851	4.636	2.843		
25-35	-	-	2.037	2.858	4.323	2.888		
35+	-	1.500	1.805	2.637	3.791	2.539		
Total	-	1.573	1.837	2.767	4.042	2.687		

Age of Dwelling	Multiples ¹						Historical 25 Year Average	25 Year Forecast Average ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	-	-	-	-	-	-		
6-10	-	-	2.000	-	-	1.864		
11-15	-	-	-	-	-	-		
16-20	-	-	-	-	-	1.810	1.837	1.759
20-25	-	-	-	-	-	-		
25-35	-	-	-	2.438	-	2.231		
35+	-	1.091	2.059	2.592	-	2.134		
Total	-	1.132	1.952	2.453	-	2.073		

Age of Dwelling	Apartments ²						Historical 25 Year Average	25 Year Forecast Average ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	-	-	-	-	-	-		
6-10	-	-	-	-	-	1.533		
11-15	-	-	-	-	-	1.500		
16-20	-	-	-	-	-	-	1.517	1.382
20-25	-	-	-	-	-	-		
25-35	-	-	1.273	-	-	1.273		
35+	-	1.183	1.734	2.818	-	1.523		
Total	-	1.204	1.723	2.615	-	1.505		

Age of Dwelling	All Density Types					
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total
1-5	-	-	2.000	2.776	-	2.605
6-10	-	1.308	1.816	2.819	4.538	2.611
11-15	-	-	1.884	3.115	4.313	2.832
16-20	-	1.273	1.771	3.045	4.476	2.907
20-25	-	-	1.739	2.817	5.091	2.804
25-35	-	1.500	1.857	2.819	4.188	2.778
35+	-	1.325	1.820	2.645	3.708	2.441
Total	-	1.354	1.831	2.750	4.004	2.573

¹ Includes townhomes 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 8b
Province of Ontario
Person Per Unit by Age and Type of Dwelling
(2016 Census)

Age of Dwelling	Singles and Semi-Detached						Historical 25 Year Average	25 Year Forecast Average ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	3,292	1,859	2,024	3,343	4,630	3,354		
6-10	2,769	1,828	1,995	3,378	4,595	3,412		
11-15	3,192	1,850	1,978	3,359	4,530	3,398		
16-20	2,438	1,780	1,922	3,174	4,317	3,201	3,292	3,273
20-25	2,538	1,694	1,967	3,044	4,123	3,096		
25-35	2,500	1,665	1,950	2,908	3,929	2,960		
35+	2,013	1,493	1,864	2,645	3,714	2,574		
Total	2,385	1,569	1,894	2,890	4,062	2,864		

Age of Dwelling	Multiples ¹						Historical 25 Year Average	25 Year Forecast Average ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	2,182	1,521	1,935	2,814	4,438	2,591		
6-10	-	1,516	1,950	2,945	4,288	2,705		
11-15	2,368	1,639	1,957	2,975	4,696	2,773		
16-20	2,250	1,551	1,970	2,911	4,351	2,706	2,700	2,679
20-25	-	1,486	1,955	2,953	4,377	2,725		
25-35	1,690	1,452	2,004	2,962	4,232	2,773		
35+	1,427	1,337	1,973	2,873	3,830	2,565		
Total	1,668	1,407	1,968	2,909	4,093	2,655		

Age of Dwelling	Apartments ²						Historical 25 Year Average	25 Year Forecast Average ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	1,262	1,403	1,955	2,843	3,429	1,701		
6-10	1,244	1,399	1,972	2,893	3,395	1,753		
11-15	1,285	1,412	1,968	3,070	3,405	1,817		
16-20	1,246	1,408	2,091	3,144	4,418	1,934	1,830	1,811
20-25	1,237	1,369	2,136	3,332	3,571	1,947		
25-35	1,182	1,353	2,057	3,189	3,840	1,896		
35+	1,129	1,335	2,122	3,015	3,562	1,886		
Total	1,161	1,357	2,079	3,048	3,604	1,865		

Age of Dwelling	All Density Types					
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total
1-5	1,401	1,420	1,965	3,200	4,613	2,635
6-10	1,413	1,425	1,973	3,275	4,576	2,867
11-15	1,582	1,458	1,968	3,280	4,533	3,008
16-20	1,374	1,449	2,020	3,121	4,320	2,874
20-25	1,278	1,394	2,071	3,039	4,137	2,724
25-35	1,246	1,372	2,027	2,927	3,958	2,651
35+	1,170	1,349	2,002	2,694	3,717	2,370
Total	1,230	1,375	2,003	2,900	4,051	2,562

¹ Includes townhomes and apartments in duplexes.

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

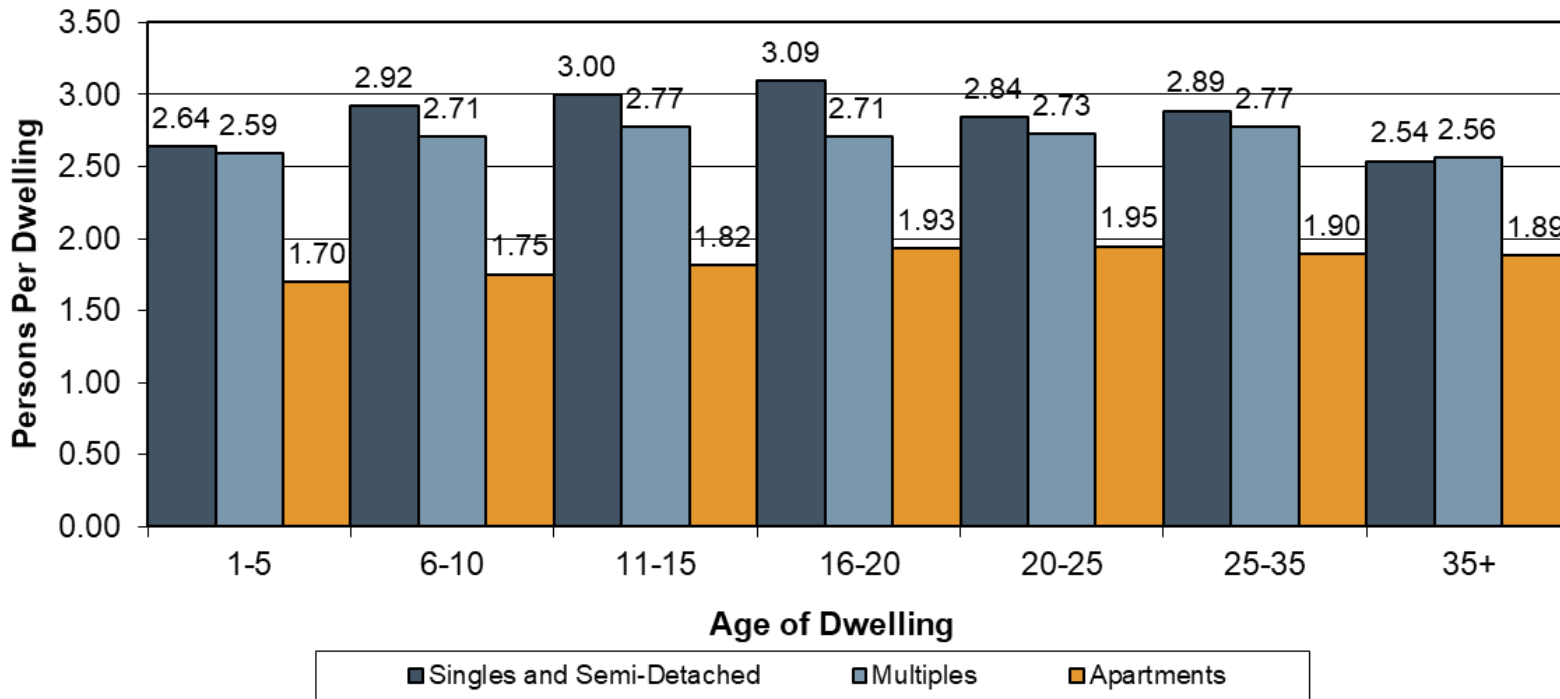
³ Adjusted based on 2001-2016 historical trends.

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
Haldimand County
Person Per Unit Structural Type and Age of Dwelling
(2016 Census)



Multiple and Apartment P.P.U.s are based on Province Of Ontario.



Schedule 10a Haldimand County Employment Forecast, 2019 to 2041

Period	Population	Activity Rate									Employment							Total Employment (Including N.F.P.O.W.)	Total (Excluding Work at Home)
		Primary	Work at Home	Industrial	Commercial/Population Related	Institutional	Total	N.F.P.O.W. ¹	Total Including N.F.P.O.W.	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-2001	43,728	0.018	0.084	0.127	0.089	0.053	0.372	0.051	0.422	805	3,665	5,558	3,893	2,335	16,255	2,210	18,465	12,590	
Mid-2006	45,212	0.018	0.078	0.125	0.097	0.060	0.377	0.057	0.434	830	3,505	5,633	4,383	2,705	17,055	2,585	19,640	13,550	
Mid-2011	44,875	0.019	0.037	0.122	0.100	0.068	0.346	0.067	0.414	855	1,680	5,470	4,490	3,050	15,545	3,015	18,560	13,865	
Mid-2016	45,605	0.021	0.042	0.104	0.097	0.062	0.326	0.069	0.395	970	1,915	4,735	4,425	2,845	14,890	3,138	18,028	12,975	
Mid-2019	47,573	0.021	0.042	0.103	0.097	0.062	0.325	0.069	0.394	984	2,000	4,917	4,608	2,950	15,460	3,299	18,758	13,460	
Mid-2029	53,948	0.019	0.043	0.102	0.101	0.063	0.328	0.071	0.399	1,034	2,324	5,506	5,428	3,388	17,680	3,825	21,505	15,356	
Mid-2031	55,274	0.019	0.043	0.102	0.103	0.063	0.330	0.071	0.401	1,044	2,394	5,620	5,694	3,490	18,242	3,928	22,170	15,848	
Mid-2039	61,006	0.018	0.044	0.103	0.106	0.064	0.334	0.071	0.405	1,084	2,674	6,265	6,461	3,876	20,359	4,329	24,688	17,685	
Mid-2041	62,488	0.018	0.044	0.103	0.107	0.064	0.335	0.071	0.406	1,094	2,748	6,435	6,671	3,995	20,943	4,437	25,380	18,195	
Incremental Change																			
Mid-2001 - Mid-2006	1,484	0.000	-0.006	-0.003	0.008	0.006	0.005	0.007	0.012	25	-160	75	490	370	800	375	1,175	960	
Mid-2006 - Mid-2011	-337	0.001	-0.040	-0.003	0.003	0.008	-0.031	0.010	-0.021	25	-1,825	-163	108	345	-1,510	430	-1,080	315	
Mid-2011 - Mid-2016	730	0.002	0.005	-0.018	-0.003	-0.006	-0.020	0.002	-0.018	115	235	-735	-65	-205	-655	123	-532	-890	
Mid-2016 - Mid-2019	1,968	-0.001	0.000	0.000	0.000	0.000	-0.002	0.001	-0.001	14	85	182	183	105	570	161	730	485	
Mid-2019 - Mid-2029	6,375	-0.002	0.001	-0.001	0.004	0.001	0.003	0.002	0.004	49	323	589	820	439	2,220	527	2,747	1,897	
Mid-2019 - Mid-2031	7,701	-0.002	0.001	-0.002	0.006	0.001	0.005	0.002	0.007	60	394	703	1,086	540	2,782	629	3,412	2,388	
Mid-2019 - Mid-2039	13,433	-0.003	0.002	-0.001	0.009	0.002	0.009	0.002	0.010	100	674	1,347	1,853	926	4,899	1,031	5,930	4,225	
Mid-2019 - Mid-2041	14,915	-0.003	0.002	0.000	0.010	0.002	0.010	0.002	0.012	110	748	1,518	2,063	1,045	5,483	1,138	6,622	4,735	
Annual Average																			
Mid-2001 - Mid-2006	297	0.000	-0.001	-0.001	0.002	0.001	0.001	0.001	0.002	5	-32	15	98	74	160	75	235	192	
Mid-2006 - Mid-2011	-67	0.000	-0.008	-0.001	0.001	0.002	-0.006	0.002	-0.004	5	-365	-33	22	69	-302	86	-216	63	
Mid-2011 - Mid-2016	146	0.000	0.001	-0.004	-0.001	-0.001	-0.004	0.000	-0.004	23	47	-147	-13	-41	-131	25	-106	-178	
Mid-2016 - Mid-2019	656	0.000	0.000	0.000	0.000	0.000	-0.001	0.000	0.000	5	28	61	61	35	190	54	243	162	
Mid-2019 - Mid-2029	638	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4	25	45	63	34	171	41	211	146	
Mid-2019 - Mid-2031	642	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	5	33	59	91	45	232	52	284	199	
Mid-2019 - Mid-2039	790	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	5	34	67	93	46	245	52	297	211	
Mid-2019 - Mid-2041	678	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	5	34	69	94	48	249	52	301	215	

Source: Watson & Associates Economists Ltd., 2019.

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
Haldimand County
Employment and Gross Floor Area (G.F.A.) Forecast, 2019 to 2041

Period	Population	Employment					Gross Floor Area in Square Feet (Estimated) ¹				
		Primary	Industrial	Commercial/ Population Related	Institutional	Total	Industrial	Commercial/ Population Related	Institutional	Total	
Mid-2001	43,728	805	5,558	3,893	2,335	12,590					
Mid-2006	45,212	830	5,633	4,383	2,705	13,550					
Mid-2011	44,875	855	5,470	4,490	3,050	13,865					
Mid-2016	45,605	970	4,735	4,425	2,845	12,975					
Mid-2019	47,573	984	4,917	4,608	2,950	13,460					
Mid-2024	50,678	1,008	5,220	4,912	3,133	14,273					
Mid-2029	53,948	1,034	5,506	5,428	3,388	15,356					
Mid-2031	55,274	1,044	5,620	5,694	3,490	15,848					
Mid-2039	61,006	1,084	6,265	6,461	3,876	17,685					
Mid-2041	62,488	1,094	6,435	6,671	3,995	18,195					
Incremental Change											
Mid-2001 - Mid-2006	1,484	25	75	490	370	960					
Mid-2006 - Mid-2011	-337	25	-163	108	345	315					
Mid-2011 - Mid-2016	730	115	-735	-65	-205	-890					
Mid-2016 - Mid-2019	1,968	14	182	183	105	485	273,600	100,600	73,400	447,600	
Mid-2019 - Mid-2029	8,343	49	589	820	439	1,897	882,900	451,200	307,000	1,641,100	
Mid-2019 - Mid-2031	9,669	60	703	1,086	540	2,388	1,053,900	597,300	378,100	2,029,300	
Mid-2019 - Mid-2039	13,433	100	1,347	1,853	926	4,225	2,020,800	1,018,900	648,200	3,687,900	
Mid-2019 - Mid-2041	14,915	110	1,518	2,063	1,045	4,735	2,276,400	1,134,700	731,600	4,142,700	
Annual Average											
Mid-2001 - Mid-2006	297	5	15	98	74	192					
Mid-2006 - Mid-2011	-67	5	-33	22	69	63					
Mid-2011 - Mid-2016	146	23	-147	-13	-41	-178					
Mid-2016 - Mid-2019	656	5	61	61	35	162	91,200	33,533	24,467	149,200	
Mid-2019 - Mid-2029	642	4	45	63	34	146	67,915	34,708	23,615	126,238	
Mid-2019 - Mid-2031	806	5	59	91	45	199	87,825	49,775	31,508	169,108	
Mid-2019 - Mid-2039	672	5	67	93	46	211	101,040	50,945	32,410	184,395	
Mid-2019 - Mid-2041	678	5	69	94	48	215	103,473	51,577	33,255	188,305	

Source: Watson & Associates Economists Ltd., 2019.

¹ Square foot per employee assumptions

Industrial	1,500
Commercial/ Population Related	550
Institutional	700



Schedule 10c
Haldimand County
Estimate of the Anticipated Amount, Type and Location of Non-Residential
Development for Which Development Charges Can be Imposed

Development Location	Timing	Industrial G.F.A. sq.ft. ¹	Commercial G.F.A. sq.ft. ¹	Institutional G.F.A. sq.ft. ¹	Total Non-Residential G.F.A. sq.ft. ²	Employment Increase ²
Total Urban	2019 - 2029	864,000	414,900	282,100	1,561,000	1,733
	2019 - 2031	1,032,000	549,600	347,900	1,929,500	2,184
	2019 - 2039	1,980,000	937,900	597,100	3,515,000	3,878
	2019 - 2041	2,232,000	1,044,000	672,700	3,948,700	4,347
Caledonia	2019 - 2029	538,500	275,000	187,600	1,001,100	1,127
	2019 - 2031	643,500	364,100	231,000	1,238,600	1,421
	2019 - 2039	1,233,000	621,500	395,500	2,250,000	2,517
	2019 - 2041	1,389,000	691,900	446,600	2,527,500	2,822
Cayuga	2019 - 2029	88,500	27,000	18,200	133,700	134
	2019 - 2031	105,000	35,800	22,400	163,200	167
	2019 - 2039	202,500	61,100	39,200	302,800	302
	2019 - 2041	228,000	68,200	44,100	340,300	339
Dunnville	2019 - 2029	132,000	31,400	21,700	185,100	176
	2019 - 2031	157,500	41,800	26,600	225,900	219
	2019 - 2039	303,000	71,500	45,500	420,000	397
	2019 - 2041	342,000	79,200	51,100	472,300	445
Hagersville	2019 - 2029	43,500	63,300	42,700	149,500	205
	2019 - 2031	52,500	83,600	53,200	189,300	263
	2019 - 2039	100,500	142,500	91,000	334,000	456
	2019 - 2041	114,000	159,000	102,200	375,200	511
Townsend	2019 - 2029	-	4,400	2,800	7,200	12
	2019 - 2031	-	6,100	3,500	9,600	16
	2019 - 2039	-	10,500	6,300	16,800	28
	2019 - 2041	-	11,600	7,000	18,600	31
Jarvis	2019 - 2029	61,500	13,800	9,100	84,400	79
	2019 - 2031	73,500	18,200	11,200	102,900	98
	2019 - 2039	141,000	30,800	19,600	191,400	178
	2019 - 2041	159,000	34,100	21,700	214,800	199
Remaining Rural	2019 - 2029	18,000	36,300	24,500	78,800	113
	2019 - 2031	21,000	47,900	30,100	99,000	144
	2019 - 2039	40,500	81,400	51,800	173,700	249
	2019 - 2041	45,000	90,800	58,800	194,600	279
Haldimand County	2019 - 2029	882,900	451,200	307,000	1,641,100	1,848
	2019 - 2031	1,053,900	597,300	378,100	2,029,300	2,329
	2019 - 2039	2,020,800	1,018,900	648,200	3,687,900	4,126
	2019 - 2041	2,276,400	1,134,700	731,600	4,142,700	4,626

Source: Watson & Associates Economists Ltd., 2019.

¹ Employment Increase does not include work at home and no fixed place of work.

² Square feet per employee assumptions:

Industrial	1,500
Commercial	550
Institutional	700

*Reflects Mid 2019 to Mid 2041 forecast period

Note: Numbers may not add up precisely due to rounding.



Schedule 11
Haldimand County
Non-Residential Construction Value
Years 2007 to 2016
(000's 2017 \$)

YEAR	Industrial				Commercial				Institutional				Total			
	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total
2007	12,734	787	291	13,812	428	668	0	1,096	2,548	1,173	407	4,129	15,711	2,628	698	19,037
2008	6,093	4,467	1,140	11,700	3,638	583	0	4,220	27	171	507	706	9,758	5,220	1,647	16,626
2009	5,699	3,336	0	9,034	38	1,285	283	1,606	2,180	1,180	0	3,359	7,917	5,800	283	14,000
2010	11,180	2,635	1,394	15,209	19,700	2,103	0	21,803	241	212	697	1,150	31,121	4,949	2,091	38,161
2012	16,145	1,944	1,506	19,595	652	4,146	0	4,798	0	969	590	1,559	16,797	7,059	2,096	25,952
2013	6,810	3,023	2,664	12,497	859	3,123	1,520	5,503	1,361	350	484	2,196	9,030	6,497	4,668	20,195
2014	26,556	1,778	952	29,286	2,653	2,123	0	4,776	6,016	689	1,859	8,564	35,225	4,590	2,810	42,626
2015	6,030	3,201	5,972	15,202	1,746	1,258	2,116	5,119	59	841	333	1,233	7,834	5,300	8,420	21,554
2016	7,591	2,398	0	9,989	4,194	2,064	660	6,918	50	222	1,204	1,476	11,835	4,684	1,864	18,382
2017	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	111,084	24,659	16,167	151,910	34,926	19,277	6,808	61,011	12,606	9,699	6,081	28,386	158,616	53,635	29,056	241,307
Percent of Total	73%	16%	11%	100%	57%	32%	11%	100%	44%	21%	100%	66%	66%	22%	12%	100%
Average	11,108	2,466	2,021	15,191	3,493	1,928	1,362	6,101	1,401	970	760	2,839	15,862	5,364	2,906	24,131
2007 - 2011 Period Total				65,340				33,896				13,360				112,597
2007 - 2011 Average				13,068				6,779				2,672				22,519
% Breakdown				58.0%				30.1%				11.9%				100.0%
2012 - 2016 Period Total				86,569				27,115				15,026				128,710
2012 - 2016 Average				17,314				5,423				3,005				25,742
% Breakdown				67.3%				21.1%				11.7%				100.0%
2007 - 2016 Period Total				151,910				61,011				28,386				241,307
2007 - 2016 Average				15,191				6,101				2,839				24,131
% Breakdown				63.0%				25.3%				11.8%				100.0%

Source: Statistics Canada Publication, 64-001-XIB

Note: Inflated to year-end 2017 (January, 2018) dollars using Reed Construction Cost Index



Schedule 12
Haldimand County
Employment to Population Ratio by Major Employment Sector, 2001 to 2016

NAICS		Year				Change			Comments
		2001	2006	2011	2016	01-06	06-11	11-16	
Employment by industry									
Primary Industry Employment									
11	<i>Agriculture, forestry, fishing and hunting</i>	1,680	1,585	1,290	1,555	-95	-295	265	Categories which relate to local land-based resources.
21	<i>Mining and oil and gas extraction</i>	140	130	195	125	-10	65	-70	
Sub-total		1,820	1,715	1,485	1,680	-105	-230	195	
Industrial and Other Employment									
22	<i>Utilities</i>	775	740	830	145	-35	90	-685	Categories which relate primarily to industrial land supply and demand.
23	<i>Construction</i>	525	785	880	725	260	95	-155	
31-33	<i>Manufacturing</i>	3,370	3,105	2,800	2,580	-265	-305	-220	
41	<i>Wholesale trade</i>	535	580	535	965	45	-45	430	
48-49	<i>Transportation and warehousing</i>	640	685	590	550	45	-95	-40	
56	<i>Waste management and remediation services</i>	168	153	198	205	-15	45	8	
Sub-total		6,013	6,048	5,833	5,170	35	-215	-663	
Population Related Employment									
44-45	<i>Retail trade</i>	1,695	1,935	1,855	1,820	240	-80	-35	Categories which relate primarily to population growth within the municipality.
51	<i>Information and cultural industries</i>	90	170	115	110	80	-55	-5	
52	<i>Finance and insurance</i>	270	320	370	345	50	50	-25	
53	<i>Real estate and rental and leasing</i>	150	105	180	140	-45	75	-40	
54	<i>Professional, scientific and technical services</i>	395	410	485	495	15	75	10	
55	<i>Management of companies and enterprises</i>	0	15	0	15	15	-15	15	
56	<i>Administrative and support</i>	168	153	198	205	-15	45	8	
71	<i>Arts, entertainment and recreation</i>	190	285	280	215	95	-5	-65	
72	<i>Accommodation and food services</i>	965	1,000	885	1,020	35	-115	135	
81	<i>Other services (except public administration)</i>	745	665	645	690	-80	-20	45	
Sub-total		4,668	5,058	5,013	5,055	390	-45	43	
Institutional									
61	<i>Educational services</i>	1,030	870	1,000	835	-160	130	-165	
62	<i>Health care and social assistance</i>	1,125	1,700	1,620	1,680	575	-80	60	
91	<i>Public administration</i>	350	375	575	460	25	200	-115	
Sub-total		2,505	2,945	3,195	2,975	440	250	-220	
Total Employment		15,005	15,765	15,525	14,880	760	-240	-645	
Population		43,728	45,212	44,875	45,605	1,484	-337	730	
Employment to Population Ratio									
Industrial and Other Employment		0.14	0.13	0.13	0.11	0.00	0.00	-0.02	
Population Related Employment		0.11	0.11	0.11	0.11	0.01	0.00	0.00	
Institutional Employment		0.06	0.07	0.07	0.07	0.01	0.01	-0.01	
Primary Industry Employment		0.04	0.04	0.03	0.04	0.00	0.00	0.00	
Total		0.34	0.35	0.35	0.33	0.01	0.00	-0.02	

Source: Data from 2001-2016 Statistics Canada Place of Work.

Note: 2001-2016 employment figures are classified by North American Industry Classification System (NAICS) Code.



Appendix B

Level of Service



Appendix B – Level of Service Haldimand County

SUMMARY OF SERVICE STANDARDS AS PER DEVELOPMENT CHARGES ACT, 1997, AS AMENDED							
Service Category	Sub-Component	10 Year Average Service Standard					Maximum Ceiling LOS
		Cost (per capita)	Quantity (per capita)		Quality (per capita)		
Services Related to a Highway	Services Related to a Highway	\$11,862.40	0.0276	km of roadways	429,797	per lane km	159,347,619
Public Works	Public Works - Facilities	\$600.29	1.8550	ft² of building area	324	per sq.ft.	8,063,696
	Public Works - Vehicles	\$402.81	0.0056	No. of vehicles and equipment	71,930	per vehicle	5,410,947
Fire	Fire Facilities	\$612.58	1.5017	ft² of building area	408	per sq.ft.	8,228,787
	Fire Vehicles	\$360.96	0.0011	No. of vehicles	328,145	per vehicle	4,848,776
	Fire Small Equipment and Gear	\$89.35	89.3434	Value of equipment	1	per Firefighter	1,200,239
Parking	Parking Facilities	\$54.38	4.9157	ft² of parking area	11	per sq.ft.	346,727
Parks	Parkland Development	\$724.68	0.0138	Acres of Parkland	52,513	per acre	4,620,560
	Parkland Amenities	\$708.32	0.0037	No. of parkland amenities	191,438	per amenity	4,516,248
	Parkland Amenities - Buildings	\$54.52	0.1983	ft² of building area	275	per sq.ft.	347,620
	Parkland Trails	\$62.74	0.5331	Linear Metres of Paths and Trails	118	per lin m.	400,030
	Parks Vehicles and Equipment	\$46.16	0.0025	No. of vehicles and equipment	18,464	per vehicle	294,316
Recreation	Indoor Recreation Facilities	\$3,643.58	7.7105	sq.ft. of building area	473	per sq.ft.	23,231,466
Library	Library Facilities	\$402.04	0.8619	ft² of building area	466	per sq.ft.	2,563,407
	Library Collection Materials	\$121.95	4.0652	No. of library collection items	30	per collection item	777,553
Cemeteries	Cemeteries	\$123.05	0.0009	No. of Developed Cemetery Hectares	136,722	per hectare	784,567
Ambulance	Ambulance Facilities	\$117.27	0.2755	ft² of building area	426	per sq.ft.	747,714
	Ambulance Vehicles and Equipment	\$50.93	0.0032	No. of vehicles and equipment	15,916	per vehicle	324,730
Waste Diversion	Waste Diversion - Facilities - Stations/Depots	\$46.21	0.3036	sq.ft. of building area	152	per sq.ft.	294,635
	Waste Diversion - Vehicles & Equipment	\$33.62	0.0010	No. of vehicles and equipment	33,620	per vehicle	214,361



**Haldimand County
Service Standard Calculation Sheet**

Service: Services Related to a Highway
Unit Measure: km of roadways

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/km)
Earth	56	56	56	56	56	56	56	56	56	56	\$110,000
Gravel	195	195	195	181	177	177	173	170	166	166	\$220,000
Surface Treated (Low Class Bituminous)	573	573	585	599	612	644	651	677	695	695	\$350,000
Hot Mix (High Class Bituminous) - Rural	331	331	337	339	339	340	340	346	346	346	\$590,000
Hot Mix (High Class Bituminous) - Urban	34	34	35	39	42	45	47	52	57	57	\$1,620,000
Total	1,188	1,188	1,208	1,214	1,226	1,262	1,268	1,303	1,320	1,320	

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.0259	0.0264	0.0269	0.0270	0.0271	0.0279	0.0279	0.0286	0.0289	0.0289

10 Year Average	2009-2018
Quantity Standard	0.0276
Quality Standard	\$429,797
Service Standard	\$11,862

D.C. Amount (before deductions)	20 Year
Forecast Population	13,433
\$ per Capita	\$11,862
Eligible Amount	\$159,347,619



**Haldimand County
Service Standard Calculation Sheet**

Service: Public Works - Fleet
Unit Measure: No. of vehicles and equipment

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
Water & Wastewater											
Pick-ups 3a, 3b, 3d	11	11	11	11	11	11	11	11	12	12	\$35,000
Ton 4j Cube Van	1	1	1	1	1	1	1	1	1	1	\$175,000
Flusher 4e - Single Axle	1	1	1	1	1	1	1	1	1	1	\$525,000
Conventional Cab - Dual Wheel - 4a	2	2	2	2	2	2	2	2	2	2	\$70,000
Trailers 7a - covered trailer	2	2	2	2	2	2	2	2	2	2	\$4,500
Trailers 7b- Utility tandem axle	1	1	1	1	1	1	1	1	1	1	\$7,000
Trailer 7c - Low Bed Float Trailer	1	1	1	1	1	1	1	1	1	1	\$20,000
Tractor 13a	1	1	1	1	1	1	1	1	1	1	\$25,000
Compressors 18g	3	3	3	3	2	2	2	2	2	2	\$18,000
Generators 18c	7	7	7	7	7	6	6	6	5	5	\$3,000
Rodders 16h	4	4	4	4	4	4	4	4	4	4	\$4,000
Cement Saw 19a, Cement Saw with Cart 19b	8	8	8	8	8	7	7	7	7	7	\$2,500
Chain Saw 19c	2	2	2	2	3	3	2	2	2	2	\$850
Power Washer 6n	2	2	2	2	2	2	2	2	2	2	\$6,000
Plate Tamper 16c	4	4	4	4	4	4	4	4	4	4	\$5,000
Water Sampling Station	14	14	14	14	14	15	15	19	20	20	\$5,100
Pump (21a)	14	14	14	14	14	16	11	11	11	11	\$2,300
String Trimmers	4	4	4	4	4	4	4	4	4	4	\$600
Roads											
Pick-ups (3a), (3c), (3d), (3e), (3i), (3j)	18	18	18	18	18	18	18	18	18	18	\$38,000
Single Dump Trucks (5b)	8	8	8	8	8	8	8	8	8	9	\$240,000
Tandem Dump Trucks (6c)	16	16	16	16	16	16	16	16	17	17	\$285,000
One Ton Trucks (4a), (4d), (4g)	7	7	7	7	7	7	7	7	7	7	\$75,000
Truck w/ Plow (4h)	2	2	2	2	2	2	2	2	2	2	\$75,000
Loader - Skid Steer (10a)	1	1	1	1	1	1	1	1	1	1	\$85,000
Loaders (10b)	4	4	4	4	4	4	4	4	4	4	\$230,000
Loader/Backhoe (12b)	4	4	4	4	4	4	4	4	4	4	\$165,000
Graders (9a)	7	7	7	7	7	7	7	7	6	6	\$300,000
Trailers (7a), (7b)	7	7	7	7	7	7	7	7	7	7	\$7,000
Trailers - (7f) Sign Road closed	-	-	-	-	-	-	-	4	8	8	\$4,500
Tractor/Mower (13b)	1	1	1	1	1	1	1	1	1	1	\$45,000
Tractor/Mower (13g)	1	1	1	1	1	1	1	1	1	1	\$190,000
Mower (15a)	2	2	2	2	2	2	2	2	2	2	\$37,500
Sweeper/Vac (14b)	2	2	2	2	2	2	2	2	2	2	\$375,000



**Haldimand County
Service Standard Calculation Sheet**

Service: Public Works - Fleet
Unit Measure: No. of vehicles and equipment

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
Brush Chipper (16d)	2	2	2	2	2	2	2	2	2	2	\$55,000
Compressors (18f)	4	4	4	4	4	4	4	4	4	4	\$4,500
Generator (18c)	5	5	5	5	5	5	5	5	5	5	\$3,000
Water Tank & Pump (16l)	4	4	4	4	4	4	4	4	4	4	\$22,000
Side Walk Grinder (16j)	2	2	2	2	2	2	2	2	2	2	\$6,000
Power Washer - shop (16g)	4	4	4	4	4	4	4	4	4	4	\$8,000
Cement Saw & Cart (19b)	4	4	4	4	4	4	4	4	4	4	\$2,500
Chainsaw (19c)	15	15	15	15	15	15	15	15	15	15	\$850
Polesaw (19d)	4	4	4	4	4	4	4	4	4	4	\$1,000
Auger (16b)	1	1	1	1	1	1	1	1	-	-	\$3,000
Frost Pick	1	1	1	1	1	1	1	1	-	-	\$7,100
Gravel Shoulder Reclaimer (16o)	2	2	2	2	2	2	2	2	2	2	\$11,800
Hot Box & Plate Compactor (20a)	2	2	2	2	2	2	2	2	2	2	\$50,000
Jumping Jack and Plate Tamper (16c)	4	4	4	4	4	4	4	4	4	4	\$5,000
Leaf Blower (16f)	7	7	7	7	7	7	7	7	7	7	\$750
Power Washer (16k) - Trailer Mounted	2	2	2	2	2	2	2	2	2	2	\$18,000
Float Trailer (7d)	2	2	2	2	2	2	2	2	2	2	\$40,000
Pump (21a), (21b)	8	8	8	8	8	8	8	8	8	8	\$2,300
String Trimmer (19e)	7	7	7	7	7	7	7	7	7	7	\$600
Large Roller (8b)								1	1	1	\$70,000
Winter Control Contracts											
<u>Mattice</u>											
Dump Tandem w/Plow/Wing/Sand	1	1	1	1	1	1	1	1	1	1	\$285,000
<u>Haldimand Commercial</u>											
Dump w/Plow/Wing/Sand/4th axle (lift axle) with slide in spreader	8	8	8	8	8	8	8	8	8	8	\$315,000
<u>Contractor</u>											
Dump Tandem w/Plow/Wing/Sand	2	2	2	2	2	2	2	2	2	2	\$285,000
Total	253	253	253	253	253	254	248	257	260	261	

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.0055	0.0056	0.0056	0.0056	0.0056	0.0056	0.0055	0.0056	0.0057	0.0057

10 Year Average	2009-2018
Quantity Standard	0.0056
Quality Standard	\$71,930
Service Standard	\$403

D.C. Amount (before deductions)	20 Year
Forecast Population	13,433
\$ per Capita	\$403
Eligible Amount	\$5,410,947



**Haldimand County
Service Standard Calculation Sheet**

Service: Public Works - Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bld'g Value (\$/sq.ft.)	Value/ft ² with land, site works, etc.
Dunnville												
Public Works Garage - Shop/Office - Dunnville	7,980	7,980	7,980	7,980	7,980	7,980	7,980	7,980	7,980	7,980	\$375	\$475
Salt Dome - Dunnville	6,907	6,907	6,907	6,907	6,907	6,907	6,907	6,907	6,907	6,907	\$150	\$150
Sand Dome (2) - Dunnville	5,163	5,163	5,163	5,163	5,163	5,163	5,163	5,163	5,163	5,163	\$150	\$150
Storage Shed #1 - Dunnville	247	247	247	247	247	247	247	247	247	247	\$150	\$150
Storage Shed #2 - Dunnville	240	240	240	240	240	240	240	240	240	240	\$150	\$150
Storage Shed #3 - Dunnville	360	360	360	360	360	360	360	360	360	360	\$150	\$150
Kohler												
2 Bay Garage - Kohler	2,123	2,123	2,123	2,123	2,123	2,123	2,123	2,123	2,123	2,123	\$150	\$150
Storage Shed - Kohler	96	96	96	96	96	96	96	96	96	96	\$150	\$150
Equipment Storage Depot - Works Building - Kohler	10,600	10,600	10,600	10,600	10,600	10,600	10,600	10,600	10,600	10,600	\$375	\$475
Storage Shed - Kohler	900	900	900	900	900	900	900	900	900	900	\$150	\$150
Oneida												
Public Works Building - Oneida	8,262	8,262	8,262	8,262	8,262	8,262	8,262	8,262	8,262	8,262	\$375	\$475
Salt Shed - Oneida	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	\$150	\$150
Storage Shed - Oneida	205	205	205	205	205	205	205	205	205	205	\$150	\$150
Walpole												
Public Works Building - Nanticoke (Walpole)	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	\$375	\$475
Sand/Salt Domes - Walpole	4,072	4,072	4,072	4,072	4,072	4,072	4,072	4,072	4,072	4,072	\$150	\$150
Sand/Salt Domes - Walpole	5,983	5,983	5,983	5,983	5,983	5,983	5,983	5,983	5,983	5,983	\$150	\$150
Traffic Building - Walpole	210	210	210	210	210	210	210	210	210	210	\$150	\$150
Jarvis												
Equipment Storage - Jarvis Quonset	3,320	3,320	3,320	3,320	3,320	3,320	3,320	3,320	3,320	3,320	\$150	\$150
Cayuga												
Roads Building - Cayuga	12,108	12,108	12,108	12,108	12,108	12,108	12,108	12,108	12,108	12,108	\$375	\$475
Salt Dome (large) - Cayuga	5,281	5,281	5,281	5,281	5,281	5,281	5,281	5,281	5,281	5,281	\$150	\$150
Sand Dome (small) - Cayuga	2,443	2,443	2,443	2,443	2,443	2,443	2,443	2,443	2,443	2,443	\$150	\$150
Equipment Shed - Cayuga	150	150	150	150	150	150	150	150	150	150	\$150	\$150
Total	84,150	84,150	84,150	84,150	84,150	84,150	84,150	84,150	84,150	84,150		

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	1.8319	1.8723	1.8752	1.8691	1.8630	1.8570	1.8511	1.8451	1.8435	1.8418

10 Year Average	2009-2018
Quantity Standard	1.8550
Quality Standard	\$324
Service Standard	\$600

D.C. Amount (before deductions)	20 Year
Forecast Population	13,433
\$ per Capita	\$600
Eligible Amount	\$8,063,696



**Haldimand County
Service Standard Calculation Sheet**

Service: Fire Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bld'g Value (\$/sq.ft.)	Value/ft ² with land, site works, etc.
Fire Hall, Caledonia (4 bays)	6,090	6,090	6,090	6,090	6,090	6,090	6,090	6,090	6,090	6,090	\$375	\$400
Fire Hall, Hagersville (4 bays) (Excluding Hall)	7,312	7,312	7,312	7,312	7,312	7,312	7,312	-	-	-	\$233	\$247
Fire Hall, Hagersville (4 bays)	-	-	-	-	-	-	7,500	7,500	7,500	7,500	\$375	\$434
Fire Hall, Jarvis (3 bays)	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	\$375	\$478
Fire Hall, Cayuga (3 Bays & meeting room) Storage	2,050	2,050	2,050	2,050	2,050	4,224	4,224	4,224	4,224	4,224	\$375	\$447
Fire Hall, Cayuga (4 Bays & meeting room)	-	-	-	-	-	-	7,500	7,500	7,500	7,500	\$375	\$446
Fire Hall, Canfield (2 double bays)	2,475	2,475	2,475	2,475	5,200	5,250	5,250	5,250	5,250	5,250	\$375	\$453
Fire Hall, Canboro	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	\$375	\$459
Fire Hall, Lowbanks (2 bays)	4,260	4,260	4,260	4,260	4,260	4,260	4,260	4,260	4,260	4,260	\$375	\$455
Fire Hall, Moulton	3,700	3,700	3,700	3,700	-	-	-	-	-	-	\$254	\$407
Fire Hall, Dunville (3 bays)	6,324	6,324	6,324	6,324	6,324	6,324	6,324	6,324	6,324	6,324	\$375	\$462
Fire Hall, Byng	2,300	2,300	2,300	2,300	2,300	2,300	2,300	-	-	-	\$254	\$339
Fire Hall, South Haldimand (1 bay) Storage	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$375	\$471
Fire Hall, South Haldimand (2 bays)	-	-	-	-	-	-	3,940	3,940	3,940	3,940	\$375	\$434
Fire Hall, Fisherville (2 bays)	3,717	3,717	3,717	3,717	3,717	3,717	3,717	3,717	3,717	3,717	\$375	\$443
Fire Hall, Selkirk (3 bays)	5,265	5,265	5,265	5,265	5,265	5,265	5,265	5,265	5,265	5,265	\$375	\$461
Communications Building	736	736	736	736	736	736	736	736	736	736	\$150	\$177
Cayuga Fire Administration Offices	-	-	-	-	-	-	2,957	2,957	2,957	2,957	\$375	\$434
Storage												
Selkirk Storage Building	-	-	-	-	-	-	-	-	-	1,600	\$150	\$150
Canborough Storage Shed	288	288	288	288	288	288	288	288	288	288	\$150	\$150
Jarvis Storage Building	-	-	-	-	-	-	1,000	1,000	1,000	1,000	\$150	\$150
Canfield Storage Building	-	-	-	-	-	-	1,000	1,000	1,000	1,000	\$150	\$150
Dunville 3 Bay Garage/Storage	1,227	1,227	1,227	1,227	1,227	1,227	1,227	1,227	1,227	1,227	\$150	\$150
South Haldimand Storage Shed	131	131	131	131	131	131	131	131	131	131	\$150	\$150
Fisherville Storage Shed	216	216	216	216	216	216	216	216	216	216	\$150	\$150
Canborough Quonset Hut	-	2,376	2,376	2,376	2,376	2,376	2,376	2,376	2,376	-	\$150	\$150
Total	58,891	61,267	61,267	61,267	60,292	62,516	86,413	76,801	76,801	76,025		

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	1.2820	1.3632	1.3653	1.3608	1.3348	1.3796	1.9009	1.6839	1.6825	1.6640

10 Year Average	2009-2018
Quantity Standard	1.5017
Quality Standard	\$408
Service Standard	\$613

D.C. Amount (before deductions)	20 Year
Forecast Population	13,433
\$ per Capita	\$613
Eligible Amount	\$8,228,787



**Haldimand County
Service Standard Calculation Sheet**

Service: Fire Vehicles
Unit Measure: No. of vehicles

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
Pumpers- Urban	9	7	7	7	6	3	3	3	3	3	\$580,000
Pumpers-Rural	10	9	9	8	4	4	4	4	4	4	\$580,000
Pumpers-Rural- Secondary	-	-	-	-	-	1	1	1	1	1	\$580,000
Pumper/Rescue Combined Unit	-	3	4	4	6	7	7	7	7	7	\$580,000
Tankers	12	12	12	12	11	11	11	11	11	11	\$135,000
Rescue Van-Light	6	4	4	3	3	2	2	2	2	2	\$70,000
Rescue Van-Heavy	6	6	6	6	6	6	6	6	6	6	\$300,000
Aerials	1	1	2	2	2	2	2	2	2	2	\$1,400,000
Boats/Trailers	4	4	4	4	4	4	4	4	4	4	\$37,750
Administration Vehicle	3	3	3	3	3	-	-	-	-	-	\$50,000
Administration Vehicle	1	1	1	1	1	-	-	-	-	-	\$50,000
ERU Response Unit	-	-	-	-	-	5	5	5	5	5	\$50,000
Fire Support Unit	-	-	-	-	-	-	-	-	2	2	\$175,000
Utility Trailer	1	1	1	1	1	1	1	1	1	1	\$4,500
Fire Prevention Trailer	1	1	1	1	1	1	1	1	1	1	\$100,000
ATVs/ Trailer	-	-	-	-	-	-	-	1	1	1	\$22,500
Total	54	52	54	52	48	47	47	48	50	50	

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.0012	0.0012	0.0012	0.0012	0.0011	0.0010	0.0010	0.0011	0.0011	0.0011

10 Year Average	2009-2018
Quantity Standard	0.0011
Quality Standard	\$328,145
Service Standard	\$361

D.C. Amount (before deductions)	20 Year
Forecast Population	13,433
\$ per Capita	\$361
Eligible Amount	\$4,848,776



**Haldimand County
Service Standard Calculation Sheet**

Service: Fire Small Equipment and Gear
Unit Measure: Value of equipment

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Communications Equipment (including towers starting 2015)	43,810	58,807	58,807	253,575	257,125	319,253	453,448	483,146	681,141	715,841
Air Bags	21,566	21,566	21,566	34,261	34,261	34,261	46,462	46,462	46,462	46,462
Bunker Gear	227,659	267,478	267,478	356,567	399,911	406,907	413,237	450,778	452,675	453,220
Pumps	342,455	327,225	327,225	315,695	320,115	334,588	334,588	370,236	364,289	364,289
Generator	52,288	56,104	56,104	60,965	61,819	58,302	63,453	63,508	67,717	77,717
Rams and Attachment/Extension Kits	70,782	70,782	70,782	70,782	71,773	70,782	70,782	70,782	70,782	91,644
Fire Fighting Equipment/Tools	688,257	653,480	653,480	688,257	697,893	720,024	743,540	765,270	827,922	827,922
Gas Detection	6,033	12,508	12,508	23,058	23,381	37,763	42,352	46,656	51,225	56,225
SCBA	384,425	384,846	384,846	572,028	580,036	689,443	748,441	788,296	955,654	971,677
Defibrillators	63,256	60,816	60,816	67,444	67,444	67,444	67,444	65,655	112,558	112,558
Saw	33,807	29,541	29,541	33,750	34,223	40,341	45,780	48,241	52,649	58,649
Cutter	75,407	75,407	75,407	91,088	92,363	111,012	118,843	118,843	122,705	155,569
Spreader	83,535	61,255	61,255	83,535	84,705	92,689	92,689	92,689	92,689	102,263
Thermal Camera	96,149	77,214	77,214	96,149	96,149	96,149	96,149	96,149	146,862	179,623
Air Fill Station	256,301	256,301	256,301	204,976	204,976	204,976	204,976	204,976	204,976	204,976
Nozzle and Appliances	20,235	39,835	39,835	77,641	78,728	116,507	144,236	169,048	187,957	207,957
Hoses/Auto Extraction Equipment	335,622	459,004	471,805	612,739	621,318	647,905	686,911	869,670	1,041,751	1,057,699
Bunker Gear Washers/Dryers	-	-	-	-	-	-	17,082	26,546	71,628	108,687
Total	2,801,589	2,912,169	2,924,970	3,642,511	3,726,218	4,048,346	4,390,413	4,776,951	5,551,642	5,792,978

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	60.99	64.80	65.18	80.91	82.50	89.34	96.58	104.74	121.62	126.79

10 Year Average	2009-2018
Quantity Standard	89.3434
Quality Standard	\$1
Service Standard	\$89

D.C. Amount (before deductions)	20 Year
Forecast Population	13,433
\$ per Capita	\$89
Eligible Amount	\$1,200,239



**Haldimand County
Service Standard Calculation Sheet**

Service: Parking Facilities
Unit Measure: sq.ft. of parking area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/sq.ft.)
Hagersville Municipal Parking Lot	6,896	6,896	6,896	6,896	6,896	6,896	6,896	6,896	6,896	6,896	\$19
Dunnville Grigg Municipal Parking Lot	29,451	29,451	29,451	29,451	29,451	29,451	29,451	29,451	29,451	29,451	\$19
Dunnville Main Street Municipal Parking Lot	38,518	38,518	38,518	38,518	38,518	38,518	38,518	38,518	38,518	38,518	\$19
Grandview Lodge Front Parking Lot	39,289	39,289	39,289	39,289	39,289	39,289	39,289	39,289	39,289	39,289	\$19
Caledonia Municipal Parking Lot	30,343	30,343	30,343	30,343	30,343	30,343	30,343	30,343	30,343	30,343	\$19
Hagersville Admin Office/Market Canopy Parking Lot	40,366	40,366	40,366	40,366	40,366	40,366	40,366	40,366	40,366	40,366	\$19
Jarvis Wesley Church parking Lot	6,369	6,369	6,369	6,369	6,369	6,369	6,369	6,369	6,369	6,369	\$19
Grand Chow Main	18,214	18,214	18,214	18,214	18,214	18,214	18,214	18,214	18,214	18,214	\$19
Dunnville 110 Lock Street	7,683	7,683	7,683	7,683	7,683	7,683	7,683	7,683	7,683	7,683	\$19
Cayuga King Street	3,983	3,983	3,983	3,983	3,983	3,983	3,983	3,983	3,983	3,983	\$19
Dunnville Bridge St, Area 1	1,269	1,269	1,269	1,269	1,269	1,269	1,269	1,269	1,269	1,269	\$19
Dunnville Bridge St, Area 2	614	614	614	614	614	614	614	614	614	614	\$19
Total	222,995	222,995	222,995	222,995	222,995	222,995	222,995	222,995	222,995	222,995	

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	4.8544	4.9616	4.9691	4.9530	4.9370	4.9211	4.9053	4.8894	4.8851	4.8808

10 Year Average	2009-2018
Quantity Standard	4.9157
Quality Standard	\$11
Service Standard	\$54

D.C. Amount (before deductions)	10 Year
Forecast Population	6,376
\$ per Capita	\$54
Eligible Amount	\$346,727



**Haldimand County
Service Standard Calculation Sheet**

Service: Parkland Development
Unit Measure: Acres of Parkland

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Acre)
Neighbourhood Parks											
Gardiner Avenue Park - Dunnville	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	\$28,100
Burke Estates - Caledonia	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	\$28,100
Haller Heights - Caledonia	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	\$28,100
Paisley Square Caledonia	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	\$28,100
Williamson Woods Caledonia	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	\$28,100
Scottacres Caledonia	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	\$28,100
Thistlemoor - Caledonia	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	\$28,100
Tot Lot (Twin Heights) - Caledonia	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$28,100
Highland Heights - Caledonia	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	\$28,100
West End Park - Hagersville	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	\$28,100
Edinburgh Square- Caledonia	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	\$28,100
Central Park- Dunnville	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	\$28,100
Garfield Disher Park- Dunnville	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	\$28,100
Centennial Park- Dunnville	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	\$28,100
Seneca Park	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	\$28,100
Canfield Ball Park	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	\$28,100
Decewsville Park	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	\$28,100
Winfield Park - Dunnville	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	\$28,100
Cayuga Kinsmen Ball Park	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	\$28,100
Kinsmen Riverfront Park- Cayuga (Bob Baigent)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	\$28,100
York Park	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	\$28,100
Thompson Park - Caledonia	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	\$28,100
Dumfries Park Three Docks	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	\$28,100
Village Green- Cayuga	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	\$28,100
South Side Dam Park- Caledonia	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	\$28,100
Dunrobin Park- Caledonia	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	\$28,100
Patterson Park Caledonia	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	\$28,100
Ravine Park - Townsend	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	\$28,100
Esplanade Park- Dunnville	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	\$28,100
Rail Park - Dunnville	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	\$28,100
Pt. Maitland - East Boat Launch Dunnville	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	\$28,100
Ramsey Park	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	\$28,100
Caithness - Caledonia - Asset 3217	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$28,100
Dunnville Sign West - Asset 3204	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$28,100
Dunnville Sign East - Asset 3187	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	\$28,100



**Haldimand County
Service Standard Calculation Sheet**

Service: Parkland Development
Unit Measure: Acres of Parkland

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Acre)
Community Parks											
Oswego Park- Dunnville	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	\$56,200
Black Creek- Caledonia	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	\$56,200
Lions Park- Hagersville	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	\$56,200
Canboro	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	\$56,200
Ramsey Drive- Caledonia	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	\$56,200
Marshall Woodlot - Dunnville	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	\$56,200
Kinsmen Park- Caledonia	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	\$56,200
McKinnon Park- Caledonia	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	\$56,200
Fisherville Town Park	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	\$56,200
Rainham Community Centre Park	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	\$56,200
Grant Kett Memorial Park- Hagersville	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	\$56,200
Hagersville Lions Park- Hagersville	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	\$56,200
Forest Park - Townsend	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	\$56,200
Elmvale Park- Townsend	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	\$56,200
Dunnville Soccer Complex	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	\$56,200
Oneida Ball Park	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	\$56,200
Kinsmen Park - Cayuga	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	\$56,200
Lafortune Park Caledonia	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	\$56,200
Townsend Central (corner Nan Ckr Pkwy & Twns)	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	\$56,200
Springvale (incl. Pavilion/booth/ rink land)	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	\$56,200
Selkirk (incl. pavilion/booth/ rink land)	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	\$56,200
Jarvis Lions Park (includes pavilion/tennis crts land)	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	\$56,200
Nanticoke Community Park	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	\$56,200
Broecheler Park- Cayuga	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	\$56,200
McClung Soccer Park - Caledonia	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	\$56,200
Kinsmen Park Dunnville - Park #47	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	\$56,200
Total	623.9	623.9	623.9	623.9	623.9	623.9	623.9	623.9	623.9	623.9	

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.0136	0.0139	0.0139	0.0139	0.0138	0.0138	0.0137	0.0137	0.0137	0.0137

10 Year Average	2009-2018
Quantity Standard	0.0138
Quality Standard	\$52,513
Service Standard	\$725

D.C. Amount (before deductions)	10 Year
Forecast Population	6,376
\$ per Capita	\$725
Eligible Amount	\$4,620,560



**Haldimand County
Service Standard Calculation Sheet**

Service: Parkland Amenities
Unit Measure: No. of parkland amenities

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Soccer Fields											
Intermediate Soccer											
Lions Park	1	1	1	1	1	1	1	1	1	1	\$31,500
Dunnville Soccer Park (1 field lit)	6	6	6	6	8	9	9	9	9	9	\$47,200
McKinnon Park - Caledonia (Unlit)	3	3	3	3	2	2	2	2	2	2	\$124,800
Broecheler Fields - Cayuga (1 field lit)	4	4	4	4	4	4	4	4	4	4	\$78,800
Mcclung Soccer Park	9	9	9	9	9	9	9	9	9	9	\$31,500
Mini Soccer											
Dunnville Soccer Park	2	2	2	2	2	2	2	2	2	2	\$18,200
Broecheler	8	8	8	8	8	8	8	8	8	8	\$18,200
Mcclung Soccer Park	4	4	4	4	4	4	4	4	4	4	\$18,200
Practice/Scrub											
Oneida	1	1	1	1	1	1	1	-	-	-	\$145,000
Selkirk Athletic Field (diamond #2)	1	1	1	1	1	1	1	1	1	1	\$145,000
Canfield	1	1	1	1	1	1	1	1	1	1	\$145,000
Jarvis	1	1	1	1	1	1	1	1	1	1	\$145,000
Springvale Athletic Field (diamond #2)	1	1	1	1	1	1	1	1	1	1	\$145,000
Lions Park - Hagersville	1	1	1	1	1	1	1	1	1	1	\$145,000
Fisherville Park	1	1	1	1	1	1	1	1	1	1	\$145,000
Oswego Park	-	-	-	-	-	1	1	1	1	1	\$145,000
Ball Diamonds											
Unlit											
Canboro Park	1	1	1	1	1	1	1	1	1	1	\$284,000
Oswego Park	1	1	1	1	1	-	-	-	-	-	\$284,000
Kinsmen Park Dunnville (1 Diamond)	1	1	1	1	1	1	1	1	1	1	\$284,000
Kinsmen Park Dunnville (Tyke Diamond)	-		-	-	-	-	-	-	-	1	\$284,000
Grant Kett Park - Hagersville (1 Diamond)	1	1	1	1	1	1	1	1	1	1	\$284,000
Edinburgh Square - Caledonia	1	1	1	1	1	1	1	1	1	1	\$284,000
Fisherville Park Kinsmen (T-Ball)	1	1	1	1	1	1	1	1	1	1	\$284,000
Oneida Park - Fred Prince	1	1	1	1	1	1	1	-	-	-	\$284,000
Rainham Centre	1	1	1	1	1	1	1	1	1	1	\$284,000
Springvale Athletic Field (diamond #1)	1	1	1	1	1	1	1	1	1	1	\$284,000
Springvale Athletic Field (diamond #2)	1	1	1	1	1	-	-	-	-	-	\$284,000
Kinsmen Park - Caledonia	1	1	1	1	1	1	1	1	1	1	\$284,000
Kinsmen Park - Cayuga	1	1	1	1	1	1	-	-	-	-	\$284,000



**Haldimand County
Service Standard Calculation Sheet**

Service: Parkland Amenities
Unit Measure: No. of parkland amenities

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Lit											
Lions Park - Dunnville (1 diamond)	1	1	1	1	1	1	1	1	1	1	\$414,000
Kinsmen Park - Dunnville (1 diamond)	1	1	1	1	1	1	1	1	1	1	\$414,000
Grant Kett Park - Hagersville (2 diamonds)	2	2	2	2	2	2	2	2	2	2	\$414,000
McKinnon Park - Caledonia (1 diamond)	1	1	1	1	1	1	1	1	1	1	\$414,000
Fisherville Park (2 diamonds)	3	3	3	3	2	2	2	2	2	2	\$414,000
Oneida Park - Fred Prince	1	1	1	1	1	1	1	-	-	-	\$414,000
Jarvis Lions Athletic Field (diamond #1)	1	1	1	1	1	1	1	1	1	1	\$414,000
Jarvis Lions Athletic Field (diamond #2)	1	1	1	1	1	1	1	1	1	1	\$414,000
Selkirk Athletic Field (1 diamond)	1	1	1	1	1	1	1	1	1	1	\$414,000
Nanticoke Athletic Field (1 diamond)	1	1	1	1	1	1	1	1	1	1	\$414,000
Alice & Albert Schram Park (Previously named Ramsey Park - Dunnville) (1 diamond)	-	-	1	1	1	1	1	1	1	1	\$414,000
Kinsmen Park - Cayuga (1 diamond)	-	-	-	-	-	-	1	1	1	1	\$414,000
Tennis Courts											
Lions Park (Lit) - Hagersville	2	2	2	2	2	2	2	2	2	2	\$24,900
Kinsmen Park - Caledonia (Lit)	2	2	2	2	2	2	2	2	2	2	\$24,900
Kinsmen Park - Cayuga (Lit)	2	2	2	2	2	2	2	2	2	2	\$24,900
Lions Park (Lit) - Jarvis	3	3	3	3	3	3	3	3	3	3	\$32,633
Forest Park Dr (Lit) - Townsend	2	2	2	2	3	3	3	3	3	3	\$32,633
Dunnville (Unlit)	3	3	3	3	3	3	3	3	3	3	\$63,500
Outdoor Pools											
Dunnville Lions Park	1	1	1	1	1	1	1	1	1	1	\$2,501,100
Dunnville Central Park - wading pool	1	1	1	1	1	1	1	1	1	1	\$133,300
Caledonia (Pool plus Diving Pool)	1	1	1	1	2	2	2	2	2	2	\$3,389,600
Hagersville	1	1	1	1	1	1	1	1	1	1	\$2,501,100
Caledonia - wading pool/now splash pad in 2013	1	1	1	1	1	1	1	1	1	1	\$809,500
Hagersville - wading pool	1	1	1	1	1	1	1	1	-	-	\$133,300
Hagersville - Splash Pad	-	-	-	-	-	-	-	-	1	1	\$562,100
Playgrounds											



**Haldimand County
Service Standard Calculation Sheet**

Service: Parkland Amenities
Unit Measure: No. of parkland amenities

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Bob Baigent Memorial Park-Cayuga	1	1	1	1	1	1	1	1	1	1	\$125,000
Burke Estates Park - Caledonia	1	1	1	1	1	1	1	1	1	1	\$125,000
Canfield	1	1	1	1	1	1	1	1	1	1	\$125,000
Central Park - Dunnville	1	1	1	1	1	1	1	1	1	1	\$150,000
Dunrobin Park - Caledonia	1	1	1	1	1	1	1	1	1	1	\$125,000
Esplanade Park - Dunnville	1	1	1	1	1	1	1	1	1	1	\$125,000
Forest Park - Townsend	1	1	1	1	1	1	1	1	1	1	\$125,000
Grant Kett Park - Hagersville	1	1	1	1	1	1	1	1	1	1	\$125,000
Highland Heights - Caledonia	1	1	1	1	1	1	1	1	1	1	\$125,000
Kinsmen Park - Dunnville	1	1	1	1	1	1	1	1	1	1	\$150,000
Kinsmen Park - Caledonia	1	1	1	1	1	1	1	1	1	1	\$150,000
Kinsmen Ball Park - Cayuga	1	1	1	1	1	1	1	1	1	1	\$150,000
Lions Park - Dunnville	1	1	1	1	1	1	1	1	1	1	\$150,000
Lions Park - Fisherville	1	1	1	1	1	1	1	1	1	1	\$150,000
Lions Park - Jarvis	1	1	1	1	1	1	1	1	1	1	\$150,000
Lions Park - Hagersville	1	1	1	1	1	1	1	1	1	1	\$150,000
McKinnon Park - Caledonia	1	1	1	1	1	1	1	1	1	1	\$150,000
Nanticoke Athletic Field	1	1	1	1	1	1	1	1	1	1	\$150,000
Oswego Park - Dunnville	1	1	1	1	1	1	1	1	1	1	\$125,000
Scott Acres Park - Caledonia	1	1	1	1	1	1	1	1	1	1	\$125,000
Selkirk Athletic Field	1	1	1	1	1	1	1	1	1	1	\$150,000
Springvale Athletic Field	1	1	1	1	1	1	1	1	1	1	\$150,000
Thistle Moor - Caledonia	1	1	1	1	1	1	1	1	1	1	\$125,000
West End - Hagersville	1	1	1	1	1	1	1	1	1	1	\$125,000
Williamson Woods - Caledonia	1	1	1	1	1	1	1	1	1	1	\$125,000
York Park	1	1	1	1	1	1	1	1	1	1	\$150,000
Special Facilities											
Boat Ramps/ Docks											
Esplanade - Ramp	1	1	1	1	1	1	1	1	1	1	\$250,000
Esplanade - Dock	-	-	-	-	-	1	1	1	1	1	\$27,500
Pt. Maitland East - Ramp	1	1	1	1	1	1	1	1	1	1	\$250,000
Pt. Maitland East - Dock	-	-	-	-	-	1	1	1	1	1	\$5,200
Wingfield Park - Ramp	1	1	1	1	1	1	1	1	1	1	\$250,000
Wingfield Park - Dock	-	-	-	-	-	1	1	1	1	1	\$12,600
Garfield Disher Park - Dunnville - Ramp	1	1	1	1	1	1	1	1	1	1	\$250,000
Bob Baigent Memorial Park - Dock	1	1	1	1	1	1	1	1	1	1	\$30,200
Bob Baigent Memorial Park - Ramp	-	-	-	-	-	1	1	1	1	1	\$250,000
LaFortune Park - Ramp	1	1	1	1	1	1	1	1	1	1	\$250,000



**Haldimand County
Service Standard Calculation Sheet**

Service: Parkland Amenities
Unit Measure: No. of parkland amenities

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Picnic Pavilions											
Centennial Park Pavilion - Dunnville	1	1	1	1	1	1	1	1	1	1	\$27,700
Jarvis Lions Park	1	1	1	1	1	1	1	1	1	1	\$112,700
Kinsmen Park - Caledonia	1	1	1	1	1	1	1	1	1	1	\$32,600
McKinnon Park - Caledonia	1	1	1	1	1	1	1	1	1	1	\$29,100
Grant Kett Park - Hagersville	1	1	1	1	1	1	1	1	1	1	\$54,800
Bob Baigent Memorial Park - Cayuga	1	1	1	1	1	1	1	1	1	1	\$58,100
Nanticoke Park	1	1	1	1	1	1	1	1	1	1	\$38,300
Selkirk Park	1	1	1	1	1	1	1	1	1	1	\$256,800
Springvale Park	1	1	1	1	1	1	1	1	1	1	\$70,000
Oneida Ball Park - Fred Prince	1	1	1	1	1	1	1	1	1	1	\$124,300
Lions Park - Fisherville	1	1	1	1	1	1	1	1	1	1	\$124,300
Lafortune Park #1	1	1	1	1	1	1	1	1	1	1	\$48,900
Lafortune Park #2	1	1	1	1	1	1	1	1	1	1	\$25,300
Broecheler Park	1	1	1	1	1	1	1	1	1	1	\$39,100
Caledonia Soccer	1	1	1	1	1	1	1	1	1	1	\$38,900
Cayuga Village Green	1	1	1	1	1	1	1	1	1	1	\$13,300
Dunnville Garfield Disher Pavilion	1	1	1	1	1	1	1	1	1	1	\$21,700
Dunnville Lions Park	1	1	1	1	1	1	1	1	1	1	\$38,900
Dunnville Soccer Pavilion	1	1	1	1	1	1	1	1	1	1	\$39,100
Moulton Fire Hall Pavilion	1	1	1	1	1	1	1	1	1	1	\$19,600
Townsend Lions Club	1	1	1	1	1	1	1	1	1	1	\$132,900
Storage Facilities											
Storage Building Lions Park Jarvis	1	1	1	1	1	1	1	1	1	1	\$46,300
Storage Building Hwy 6 Lions Prk Jarvis	1	1	1	1	1	1	1	1	1	1	\$129,600
Parks Storage Garage Townsend	1	1	1	1	1	1	1	1	1	1	\$115,000
Caledonia Kinsmen Park, Washrooms	1	1	1	1	1	1	1	1	1	1	\$53,500
Caledonia Lafortune - Washrooms	1	1	1	1	1	1	1	1	1	1	\$77,200
Cayuga Kinsmen Park, Concession Booth	1	1	1	1	1	1	1	1	1	1	\$135,800
Dunnville Kinsmen Park Washrooms / Pavilion	1	1	1	1	1	1	1	1	1	1	\$88,400
Dunnville Lions Park Washrooms/ Meeting Rooms	1	1	1	1	1	1	1	1	1	1	\$397,300
Fisherville Lions Park Booth / Washrooms	1	1	1	1	1	1	1	1	1	1	\$104,400
Hagersville Kett Park, Booth / Washrooms	1	1	1	1	1	1	1	1	1	1	\$46,200
Hagersville Lions Memorial Park, Picnic Shelter / Washrooms	1	1	1	1	1	1	1	1	1	1	\$88,100
Nanticoke Concession Booth	1	1	1	1	1	1	1	1	1	1	\$76,400
Oneida Concession Booth / Washrooms	1	1	1	1	1	1	1	1	1	1	\$32,400
Selkirk Community Park, Concession Booth	1	1	1	1	1	1	1	1	1	1	\$31,800
Selkirk Community Park, Washrooms	1	1	1	1	1	1	1	1	1	1	\$27,200
Springvale Park, Concession Booth/Washrooms	1	1	1	1	1	1	1	1	1	1	\$101,100
Townsend Lions Club, Washrooms/Lime Storage	1	1	1	1	1	1	1	1	1	1	\$35,000



**Haldimand County
Service Standard Calculation Sheet**

Service: Parkland Amenities
Unit Measure: No. of parkland amenities

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Other Facilities											
Caledonia Kinsmen Park - Gazebo	-	-	-	-	1	1	1	1	1	1	\$242,800
Central Park Band Shell - Dunnville	1	1	1	1	1	1	1	1	1	1	\$200,000
Lawn Bowling Pitch	1	1	1	1	1	1	1	1	1	1	\$139,400
Fisherville Town Park	1	1	1	1	1	1	1	1	1	1	\$32,700
Selkirk Athletic Field	1	1	1	1	1	1	1	1	1	1	\$32,700
Thistlemoor Park - Caledonia	1	1	1	1	1	1	1	1	1	1	\$32,700
Fisherville Multi-purpose Outdoor Facility	-	-	-	1	1	1	1	1	1	1	\$652,410
Total	164	164	165	166	169	173	173	170	170	171	

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004

10 Year Average	2009-2018
Quantity Standard	0.0037
Quality Standard	\$191,438
Service Standard	\$708

D.C. Amount (before deductions)	10 Year
Forecast Population	6,376
\$ per Capita	\$708
Eligible Amount	\$4,516,248



**Haldimand County
Service Standard Calculation Sheet**

Service: Parkland Amenities - Buildings
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bld'g Value (\$/sq. ft.)	Value/ft² with land, site works, etc.
Workshop & Garage - Riverside	2,360	2,360	2,360	2,360	2,360	2,360	2,360	2,360	2,360	2,360	\$200	\$302
Lafortune Maintenance Shoppe & Storage	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	\$200	\$245
Caledonia Cemetery Storage/Workshop	780	780	780	780	780	780	780	780	780	780	\$150	\$276
Cayuga Workshop - Demolished	3,257	3,257	3,257	3,257	3,257	-	-	-	-	-	\$200	\$326
Cayuga Workshop - 55 Thornburn St	-	-	-	-	-	3,003	3,003	3,003	3,003	3,003	\$200	\$230
Total	9,124	9,124	9,124	9,124	9,124	8,870	8,870	8,870	8,870	8,870		

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.1986	0.2030	0.2033	0.2027	0.2020	0.1957	0.1951	0.1945	0.1943	0.1941

10 Year Average	2009-2018
Quantity Standard	0.1983
Quality Standard	275
Service Standard	\$55

D.C. Amount (before deductions)	10 Year
Forecast Population	6,376
\$ per Capita	\$55
Eligible Amount	\$347,620



**Haldimand County
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	2019 Value (\$/ Linear Metre)
Paths											
Rail Park Pathway - grass area/stone p.	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	\$64
Bob Baigent Park	500	500	500	500	500	500	500	500	500	500	\$64
Burke Estates Park	500	500	500	500	500	500	500	500	500	500	\$64
Central Park - Dunnville Part # 1	100	100	100	100	100	100	100	100	100	100	\$64
Central Park - Dunnville Part # 2	100	100	100	100	100	100	100	100	100	100	\$64
Dunrobin Park	100	100	100	100	100	100	100	100	100	100	\$64
Edinburgh Square Museum	100	100	100	100	100	100	100	100	100	100	\$64
Esplanade Park (Port Maitland Park)	500	500	500	500	500	725	725	725	725	725	\$64
Forest Park - Townsend	500	500	500	500	500	500	500	500	500	500	\$64
Lions Park - Dunnville	500	500	500	500	500	500	500	500	500	500	\$64
Lions Park - Hagersville	500	500	500	500	500	500	500	500	500	500	\$64
Paisley Square Park	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$64
Seneca Park	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	\$64
south side dam park	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$64
Williamson Woods Park	100	100	100	100	100	100	100	100	100	100	\$64
Jarvis Meadows	-	-	-	-	438	438	438	438	438	438	\$119
Chippewa Trail (Orkney Bridge to Haldibrook)	-	-	-	-	2,700	2,700	2,700	2,700	2,700	2,700	\$80
Blue Heron Way Trail	-	-	-	-	-	-	1,100	1,100	1,100	1,100	\$64
Terra Nova SWM Pond Trail	-	-	-	-	-	-	-	734	734	734	\$40
Terra Nova Pedestrian and Bicycle Stairway and Path	-	-	-	-	-	-	-	308	308	308	\$40
Gypsum Mine Tract	-	-	-	-	-	-	-	-	-	12,200	\$51
Cayuga Grand Vista (incl. bridge)	-	-	-	-	-	-	-	-	-	3,474	\$420
Cenotaph Pathway - Jarvis	-	-	-	-	-	-	-	28	28	28	\$280
Summerhaven Bridge and Trail	-	-	-	-	-	-	600	600	600	600	\$62
Path - Lit											
Kinsmen Park Lit Trail Walkway (const.1970's)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$340
Thistlemoor Park Lit Trail Pathway (const. 1999)	500	500	500	500	500	500	500	500	500	500	\$340
Patterson Walkway (const. 1998 paved)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$340
Townsend Central Park	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$340
Cayuga - Munsee to Thorburn	-	-	220	220	220	220	220	220	220	220	\$420
Wingfield Park Lit Pathway	-	-	-	-	-	-	-	-	690	690	\$340
Lions Park - Jarvis lit Pathway	-	-	-	-	-	-	-	-	1,085	1,085	\$340
Dunnville Centennial Park Pathway	-	-	-	-	-	-	-	-	571	571	\$340
Total	19,000	19,000	19,220	19,220	22,358	22,583	24,283	25,353	27,699	43,373	

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.41	0.42	0.43	0.43	0.50	0.50	0.53	0.56	0.61	0.95

10 Year Average	2009-2018
Quantity Standard	0.5331
Quality Standard	\$118
Service Standard	\$63

D.C. Amount (before deductions)	10 Year
Forecast Population	6,376
\$ per Capita	\$63
Eligible Amount	\$400,030



**Haldimand County
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
Pick-ups (3a, 3b)	4	4	4	4	4	4	4	4	4	4	\$35,000
Pick-ups (3f)	1	1	1	1	1	1	1	1	1	1	\$45,000
Pick-ups (3g)	2	2	2	2	2	2	2	2	2	2	\$52,000
Trailer (7b)	4	4	4	4	4	4	4	5	5	5	\$7,000
Crew Cab Pickup (3e)	-	-	-	-	-	-	-	1	1	1	\$35,000
Pick up (3c)	-	-	-	-	-	-	-	-	-	1	\$38,000
Ton (4a,4h)	2	2	2	2	2	2	2	2	2	2	\$75,000
Side Loading Packer (4i)	1	1	1	1	1	1	1	1	1	1	\$175,000
Ice Resurfacer (22a, 22b)	5	5	5	5	5	5	5	5	5	5	\$100,000
Tractors (15a)	8	8	8	8	8	8	6	6	6	6	\$37,500
Tractors (13b)	4	4	4	4	4	4	4	4	4	4	\$45,000
Tractors (13c)	-	-	-	-	-	-	-	-	-	1	\$45,000
Mowers (15c)	8	8	8	8	8	8	8	8	8	8	\$16,000
Mowers (15d)	2	2	2	2	2	2	2	2	2	2	\$85,000
Mower W/ Attachment (15e)	1	1	1	1	1	-	-	-	-	-	\$45,000
Rollers, Snow Blower, Mower, and Lawn attachment (16c)	4	4	4	4	4	5	5	5	5	5	\$5,000
Push Mower (15b)	4	4	4	4	4	4	4	4	4	4	\$550
Ball Diamond Groomers (16a)	2	2	2	2	2	2	2	2	2	2	\$9,000
Scissor Lift (17a)	1	1	1	1	1	1	1	1	1	1	\$11,000
Hedge Trimmers and Rakes (16e)	4	4	4	4	4	4	4	4	4	4	\$550
Lawn Attachments (16b) Brush hog, blade, gravel recycler, and rotary mower	3	3	3	3	4	4	4	4	4	4	\$3,000
Level-Ice Laser Level	1	1	1	1	1	1	1	1	1	1	\$25,400
Cement Saw (19a)	1	1	1	1	1	1	1	1	1	1	\$1,900
Chainsaw (19c)	4	4	4	4	4	4	4	4	4	4	\$850
Generator (18c)	2	2	2	2	2	2	2	2	2	2	\$3,000
Ice Edger (22d), (22e)	5	5	5	5	5	5	5	5	5	5	\$5,000
Ice Groomer - curling	1	1	1	1	1	1	1	1	1	1	\$5,600
Pole Saw (19d)	2	2	2	2	2	2	2	3	3	3	\$1,000
Power Sweeper	2	2	2	2	2	2	2	2	2	2	\$2,500
Power Washer (16m)	2	2	2	2	2	2	2	2	2	2	\$1,300
Pump (21a)	3	3	3	3	3	3	3	3	3	3	\$2,300
Steam Cleaner w/ cart	2	2	2	2	2	2	2	2	2	2	\$1,600
Leaf Blower (16f)	4	4	4	4	4	4	4	4	4	5	\$750
Rototiller (16i)	2	2	2	2	2	2	2	2	2	2	\$2,000
String Trimmer (19e)	21	21	21	21	21	21	21	21	21	21	\$600
Total	112	112	112	112	113	111	113	114	114	117	

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.0024	0.0025	0.0025	0.0025	0.0025	0.0024	0.0025	0.0025	0.0025	0.0026

10 Year Average	2009-2018
Quantity Standard	0.0025
Quality Standard	\$18,464
Service Standard	\$46

D.C. Amount (before deductions)	10 Year
Forecast Population	6,376
\$ per Capita	\$46
Eligible Amount	\$294,316



**Haldimand County
Service Standard Calculation Sheet**

Service: Indoor Recreation Facilities
Unit Measure: sq.ft. of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bld'g Value (\$/sq.ft.)	Value/ft ² with land, site works, etc.
Dunnville Memorial Arena & Rec Centre	32,874	32,874	68,221	68,221	68,221	68,221	68,221	68,221	68,221	68,221	\$375	\$486
Canborough Community Centre	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	\$375	\$436
Cayuga Arena & Metcalfe Hall	23,875	23,875	55,154	55,154	55,154	55,154	55,154	55,154	55,154	55,154	\$375	\$486
Hagersville Arena	31,500	31,500	31,500	31,500	31,500	31,500	35,206	35,206	35,206	35,206	\$375	\$487
Cayuga Kinsmen Community Centre	6,493	6,493	6,493	6,493	6,493	6,493	6,493	6,493	6,493	6,493	\$375	\$422
Caledonia Lions Hall	6,930	6,930	6,930	6,930	6,930	6,930	6,930	10,204	10,204	10,204	\$375	\$416
Fisherville Lions Community Centre	11,015	11,015	11,015	11,015	11,015	11,015	11,015	11,015	11,015	11,015	\$375	\$409
Jarvis Community Centre hall/kitchen/common space	8,583	8,583	8,583	8,583	8,583	8,583	8,583	8,583	8,583	8,583	\$375	\$442
Jarvis Community Centre lawnbowling clubhouse/mtg room	1,175	1,175	1,175	1,175	1,175	1,175	1,175	1,175	1,175	1,175	\$150	\$171
Selkirk Centennial Community Centre	15,988	15,988	15,988	15,988	15,988	15,988	15,988	15,988	15,988	15,988	\$375	\$423
Nanticoke Community Hall	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	\$375	\$445
Cheapside Community Hall	2,308	2,308	2,308	2,308	2,308	2,308	2,308	2,308	2,308	2,308	\$375	\$452
Caledonia Lawn Bowling Club House - asset 587	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	\$150	\$276
Haldimand County Caledonia Centre	108,629	108,629	108,629	108,629	108,629	108,629	108,629	108,629	108,629	108,629	\$375	\$496
Cayuga Senior Citizens Centre - asset 576	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	\$375	\$455
Lowbanks Community Centre - asset 582	2,040	2,040	2,040	2,040	2,040	2,040	2,040	2,040	2,040	2,040	\$375	\$507
Canfield Community Centre - asset 725	4,038	4,038	4,038	4,038	4,038	4,038	4,038	4,038	4,038	4,038	\$375	\$448
Cayuga Lions Scout Hall - asset 726	2,200	2,200	2,200	2,200	2,200	-	-	-	-	-	\$266	\$317
Hagersville Community Centre - asset 727	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	\$375	\$451
Haldimand Agricultural Community Centre - asset 728	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	\$375	\$440
Rainham Center Community Centre - asset 729	2,856	2,856	2,856	2,856	2,856	2,856	2,856	2,856	2,856	2,856	\$375	\$455
Seneca Centennial (Scout) Hall - asset 730	1,364	1,364	1,364	1,364	1,364	1,364	1,364	1,364	1,364	1,364	\$375	\$510
South Cayuga Community Centre - asset 731	3,188	3,188	3,188	3,188	3,188	3,188	3,188	3,188	3,188	-	\$266	\$329
Oneida Shippery Music Hall - asset 733	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	\$375	\$567
Total	295,420	295,420	362,046	362,046	362,046	359,846	363,552	366,826	366,826	363,638		

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	6.4310	6.5731	8.0677	8.0415	8.0155	7.9412	7.9972	8.0430	8.0360	7.9592

10 Year Average	
Quantity Standard	7.7105
Quality Standard	\$473
Service Standard	\$3,644

D.C. Amount (before deductions)	
Forecast Population	6,376
\$ per Capita	\$3,644
Eligible Amount	\$23,231,466



**Haldimand County
Service Standard Calculation Sheet**

Service: Library Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bld'g Value (\$/sq.ft.)	Value/ft ² with land, site works, etc.
Dunnville	9,800	9,800	9,800	9,800	9,800	9,800	9,800	9,800	13,300	13,300	\$375	\$457
Caledonia	10,800	10,800	10,800	10,800	10,800	10,800	10,800	10,800	10,800	10,800	\$375	\$484
Hagersville	5,095	5,095	5,095	5,095	5,095	5,095	5,095	5,095	5,095	5,095	\$375	\$458
Cayuga	2,410	2,410	2,410	2,410	2,410	2,410	2,724	2,724	2,724	2,724	\$375	\$474
Selkirk (in Community Centre)	3,176	3,176	3,176	3,176	3,176	3,176	3,176	3,176	3,176	3,176	\$375	\$464
Jarvis	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	\$375	\$458
Total	38,281	38,281	38,281	38,281	38,281	38,281	38,595	38,595	42,095	42,095		

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.8333	0.8517	0.8530	0.8503	0.8475	0.8448	0.8490	0.8462	0.9222	0.9214

10 Year Average	2009-2018
Quantity Standard	0.8619
Quality Standard	\$466
Service Standard	\$402

D.C. Amount (before deductions)	10 Year
Forecast Population	6,376
\$ per Capita	\$402
Eligible Amount	\$2,563,407



**Haldimand County
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Library Materials											
Library Materials - Combined	181,580	184,021	182,455	187,674	187,906	186,637	186,279	179,793	183,851	183,851	\$30
Total	181,580	184,021	182,455	187,674	187,906	186,637	186,279	179,793	183,851	183,851	

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	3.95	4.09	4.07	4.17	4.16	4.12	4.10	3.94	4.03	4.02

10 Year Average	2009-2018
Quantity Standard	4.0652
Quality Standard	\$30
Service Standard	\$122

D.C. Amount (before deductions)	10 Year
Forecast Population	6,376
\$ per Capita	\$122
Eligible Amount	\$777,553



**Haldimand County
Service Standard Calculation Sheet**

Service: Ambulance Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bld'g Value (\$/sq. ft.)	Value/ft ² with land, site works, etc.
Dunnville Base - 117 Forest	3,850	3,850	3,850	3,850	3,850	3,850	3,850	3,850	3,850	3,850	\$375	\$423
Hagersville Base (leased from hospital)	2,648	2,648	2,648	2,648	2,648	2,648	-	-	-	-	\$375	\$421
Caledonia	2,925	2,925	2,925	2,925	2,925	2,925	2,925	2,925	2,925	2,925	\$375	\$436
Kohler	2,448	2,448	2,448	2,448	2,448	2,448	-	-	-	-	\$375	\$422
Cayuga (new build)	-	-	-	-	-	-	3,677	3,677	3,677	3,677	\$375	\$424
Hagersville Base (new build)	-	-	-	-	-	-	3,000	3,000	3,000	3,000	\$375	\$421
Total	11,871	11,871	11,871	11,871	11,871	11,871	13,452	13,452	13,452	13,452		

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.2584	0.2641	0.2645	0.2637	0.2628	0.2620	0.2959	0.2949	0.2947	0.2944

10 Year Average	2009-2018
Quantity Standard	0.2755
Quality Standard	\$426
Service Standard	\$117

D.C. Amount (before deductions)	10 Year
Forecast Population	6,376
\$ per Capita	\$117
Eligible Amount	\$747,714



**Haldimand County
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
Equipment											
Stretcher - Manual	9	9	9	9	9	9	9	9	5	2	\$7,000
Stretcher - Scoop	20	20	20	20	20	20	20	20	20	20	\$1,220
Stretcher - Power	-	-	-	-	-	-	-	-	4	7	\$25,000
Defibrillator - Public Access	29	34	34	34	34	34	35	35	35	38	\$8,500
Defibrillator - Paramedic	19	19	19	19	19	22	22	15	19	10	\$31,000
Stair Chair - Track	7	7	7	7	7	7	7	7	7	7	\$3,400
Stair Chair - Manual	8	8	8	8	8	8	8	8	8	8	\$1,000
Portable Suction Unit	11	11	11	11	11	11	11	11	11	11	\$800
Generator	2	2	2	2	2	2	2	2	2	2	\$3,000
Gas Detection Equipment	-	7	7	7	7	7	7	7	7	10	\$350
Dryer	2	2	2	2	2	2	2	2	2	2	\$1,400
Washing Machine	2	2	2	2	2	2	2	2	2	2	\$1,400
Television	4	4	4	4	4	4	4	4	4	4	\$1,300
Airway Management Trainer	-	1	1	1	1	1	1	1	1	1	\$2,500
Fit Tester	-	-	-	-	-	-	-	1	1	1	\$20,500
PPE Helmets	-	-	-	-	-	-	-	-	68	68	\$370
Vehicles											
First Response Units	-	-	-	-	-	1	2	2	2	2	\$50,000
Ambulances	7	7	7	7	7	7	7	7	7	7	\$175,000
Total	120	133	133	133	133	137	140	133	205	202	

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.0026	0.0030	0.0030	0.0030	0.0029	0.0030	0.0031	0.0029	0.0045	0.0044

10 Year Average	2009-2018
Quantity Standard	0.0032
Quality Standard	\$15,916
Service Standard	\$51

D.C. Amount (before deductions)	10 Year
Forecast Population	6,376
\$ per Capita	\$51
Eligible Amount	\$324,730



**Haldimand County
Service Standard Calculation Sheet**

Service: Cemeteries
Unit Measure: No. of Developed Cemetery Hectares

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Hectare)
Anger & River Rd.	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	\$133,300
McCloy/Ballsville	0.810	0.810	0.810	0.810	0.810	0.810	0.810	0.810	0.810	0.810	\$133,300
Bethel	0.190	0.190	0.190	0.190	0.190	0.190	0.190	0.190	0.190	0.190	\$133,300
Bretzler	0.400	0.405	0.405	0.405	0.405	0.405	0.405	0.405	0.405	0.405	\$133,300
Briggs	0.490	0.490	0.490	0.490	0.490	0.490	0.490	0.490	0.490	0.490	\$133,300
C. Bell Farm	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	\$133,300
Caledonia	3.480	3.480	3.480	3.480	4.980	4.980	4.980	4.980	4.980	4.980	\$133,300
Caledonia Methodist	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	\$133,300
Canboro	0.486	0.486	0.486	0.486	0.486	0.486	0.486	0.486	0.486	0.486	\$133,300
Canfield	0.809	0.809	0.809	0.809	0.809	0.809	0.809	0.809	0.809	0.809	\$133,300
Riverside Cemetery - Cayuga	2.023	2.023	2.023	2.023	2.023	2.023	2.023	2.023	2.023	2.023	\$133,300
Cheapside Baptist Church	0.405	0.405	0.405	0.405	0.405	0.405	0.405	0.405	0.405	0.405	\$133,300
Rockport/Chrysler	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	\$133,300
Davis Family	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	\$133,300
Decewsville	0.235	0.235	0.235	0.235	0.235	0.235	0.235	0.235	0.235	0.235	\$133,300
Decew-Young	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	\$133,300
Diltz Road	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	\$133,300
Ebenezer	0.020	0.020	0.020	0.020	0.016	0.016	0.016	0.016	0.016	0.016	\$133,300
Fawcett Family	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	\$133,300
George Upper	0.150	0.150	0.150	0.150	0.154	0.154	0.154	0.154	0.154	0.154	\$133,300
Hagersville Union	4.217	4.217	4.217	4.217	4.217	4.217	4.217	4.217	4.217	4.217	\$133,300
Highbanks	0.579	0.579	0.579	0.579	0.579	0.579	0.579	0.579	0.579	0.579	\$133,300
Inman Road	0.295	0.295	0.295	0.295	0.295	0.295	0.295	0.295	0.295	0.295	\$133,300
Kirk	0.280	0.280	0.280	0.280	0.280	0.280	0.280	0.280	0.280	0.280	\$133,300
Long Pioneer	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.065	\$133,300
Lowbanks	0.526	0.526	0.526	0.526	0.526	0.526	0.526	0.526	0.526	0.526	\$133,300
McGaw	0.178	0.178	0.178	0.178	0.178	0.178	0.178	0.178	0.178	0.178	\$133,300
McCollum	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	\$133,300
Melick	2.023	2.023	2.023	2.023	2.023	2.023	2.023	2.023	2.023	2.023	\$133,300
Moote Road	0.113	0.113	0.113	0.113	0.113	0.113	0.113	0.113	0.113	0.113	\$133,300
Mount Carmel	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	\$133,300
Mount Healy	0.210	0.210	0.210	0.210	0.210	0.210	0.210	0.210	0.210	0.210	\$133,300
Old Anglican (Circularville)	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	\$133,300
Port Mailland & Non-Sectarian	0.898	0.898	0.898	0.898	0.898	0.898	0.898	0.898	0.898	0.898	\$133,300
Providence	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	\$133,300
Rainham Centre	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	\$133,300
Reformed Mennonite	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	\$133,300
Riverside Dunnville	4.370	4.370	4.370	4.370	4.370	4.370	4.370	4.370	4.370	4.370	\$133,300
South Cayuga	1.619	1.619	1.619	1.619	1.619	1.619	1.619	1.619	1.619	1.619	\$133,300
Steen/Upper (Town Hall)	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	\$133,300
Woodlawn	13.031	13.031	13.031	13.031	13.031	13.031	13.031	13.031	13.031	13.031	\$133,300
Young Tract Burial Ground	0.405	0.405	0.405	0.405	0.405	0.405	0.405	0.405	0.405	0.405	\$133,300
Zore	0.405	0.405	0.405	0.405	0.405	0.405	0.405	0.405	0.405	0.405	\$133,300
Total	40.974	40.979	40.979	40.979	42.479	42.479	42.479	42.479	42.479	42.479	

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009

10 Year Average	2009-2018
Quantity Standard	0.0009
Quality Standard	\$136,722
Service Standard	\$123

D.C. Amount (before deductions)	10 Year
Forecast Population	6,376
\$ per Capita	\$123
Eligible Amount	\$784,567



**Haldimand County
Service Standard Calculation Sheet**

Service: Waste Diversion - Facilities - Stations/Depots
Unit Measure: sq.ft. of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bld'g Value (\$/sq.ft.)	Value/ft ² with land, site works, etc.
MRF - Simcoe	16,575	16,575	-	-	-	-	-	-	-	-	\$67	\$88
CRTS - Scale House - 40% - Included	120	120	120	120	120	-	-	-	-	-	\$87	\$100
CWMF- Diversion Area - 100%	-	-	-	-	-	-	13,450	13,450	13,450	13,450	\$42	\$89
CWMF - Scale House - 40% Included	-	-	-	-	-	-	450	450	450	450	\$1,533	\$1,655
CWMF - Garage/Workshop - 40% Included	-	-	-	-	-	-	525	525	525	525	\$482	\$551
CWMF - Transfer Station - 40% Included	-	-	-	-	-	-	6,863	6,863	6,863	6,863	\$235	\$292
CWMF - Leaf and Yard Area - 100%	-	-	-	-	-	-	4,850	4,850	4,850	4,850	\$13	\$59
Total Eligible Portion of Facilities	16,695	16,695	120	120	120	-	26,138	26,138	26,138	26,138		

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.3634	0.3715	0.0027	0.0027	0.0027	-	0.5750	0.5731	0.5726	0.5721

10 Year Average	2009-2018
Quantity Standard	0.3036
Quality Standard	\$152
Service Standard	\$46

D.C. Amount (before deductions)	10 Year
Forecast Population	6,376
\$ per Capita	\$46
Eligible Amount	\$294,635



**Haldimand County
Service Standard Calculation Sheet**

Service: Waste Diversion - Vehicles & Equipment
Unit Measure: No. of vehicles and equipment

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
Transstors - CRTS - 100%	-	1.00	1.00	1.00	1.00	-	-	-	-	-	\$359,000
Recyclable Material Trailer	-	1.00	1.00	1.00	1.00	1.00	1.00	-	-	-	\$216,800
Recyclable Material Trailer	-	1.00	1.00	1.00	1.00	1.00	1.00	-	-	-	\$216,800
Recyclable Material Trailer	-	1.00	1.00	1.00	1.00	1.00	1.00	-	-	-	\$216,800
New CWMF - Weigh Scales - 40% - Inbound	-	-	-	-	-	-	0.40	0.40	0.40	0.40	\$169,800
New CWMF - Weigh Scales - 40% - Outbound	-	-	-	-	-	-	0.40	0.40	0.40	0.40	\$169,800
Old - Weigh Scales - 40%	0.40	0.40	0.40	0.40	0.40	0.40	-	-	-	-	\$25,670
Curbside Carts (42 Purchased in 2006, 10 year Life)	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	-	-	\$112
MRF Bunker System (2005 Expense, 10 year life)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	-	-	-	\$807,600
Fleet Equipment - 40% Diversion											
Utility Trailer Class 7b - Unit 17-0739	-	-	-	-	-	-	-	-	-	0.40	\$7,000
Backhoe Loader - Class 12b - Unit 99-0469	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$165,000
Full Size Pickup 3b - Unit 15-0337	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$35,000
ATV (23a)	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$18,000
String Trimmer (19e)	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$600
Chainsaw (19c)	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$850
Compressor - Shop (18f)	-	-	-	-	-	-	-	-	0.40	0.40	\$4,500
Generator - Portable (18c)	-	-	-	-	-	-	-	-	0.40	0.40	\$3,000
Power Washer - Portable (16n)	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$6,000
Modern Contract - 100% Recycling											
Freightliner, 108SD, Single Axle, Sidwloader	-	-	-	-	-	-	6.00	6.00	6.00	6.00	\$200,000
Mack CU713 Heavy Spec Split Rearpack	-	-	-	-	-	-	1.00	1.00	1.00	1.00	\$60,000
Barnes Contract - 100% Recycling											
International 5900	-	-	-	-	-	-	3.00	3.00	3.00	3.00	\$50,000
Mac, Walking Floor	-	-	-	-	-	-	3.00	3.00	3.00	3.00	\$45,000
Total Eligible Portion of Facilities	45.30	49.30	49.30	49.30	49.30	48.30	58.70	58.20	17.00	17.40	

Population	45,937	44,944	44,876	45,022	45,168	45,314	45,460	45,608	45,648	45,688
Per Capita Standard	0.0010	0.0011	0.0011	0.0011	0.0011	0.0011	0.0013	0.0013	0.0004	0.0004

10 Year Average	2009-2018
Quantity Standard	0.0010
Quality Standard	\$33,620
Service Standard	\$34

D.C. Amount (before deductions)	10 Year
Forecast Population	6,376
\$ per Capita	\$34
Eligible Amount	\$214,361



Appendix C

Long-Term Capital and Operating Cost Examination



Appendix C: Long-Term Capital and Operating Cost Examination

County of Haldimand Annual Capital and Operating Cost Impact

As a requirement of the D.C.A. 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 saving 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 County's approved 2017 Financial Information Return (F.I.R.).

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 life cycle 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. The following factors were utilized to calculate the annual replacement cost of the capital projects (annual contribution = factor X capital asset cost) and are based on an annual growth rate of 2% (net of inflation) over the average useful life of the asset:



Assets	Lifecycle Cost Factors	
	Average Useful Life	Factor
Water and Wastewater Mains and Storage	100	0.003203
Cemeteries	60	0.008768
Buildings, Facilities, and Parking	50	0.011823
Roads	50	0.011823
Parkland	50	0.011823
Other Water and Wastewater Services	50	0.011823
Waste Diversion Services	40	0.016556
Fire Vehicles	25	0.031220
Machinery and Equipment	20	0.041157
Ambulance Vehicles and Equipment	8	0.116510
Library Materials	7	0.134512

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 County 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
Haldimand County
Operating and Capital Expenditure Impacts for Future Capital Expenditures

SERVICE	GROSS COST LESS BENEFIT TO EXISTING	ANNUAL LIFECYCLE EXPENDITURES	ANNUAL OPERATING EXPENDITURES	TOTAL ANNUAL EXPENDITURES
1. Stormwater Drainage and Control Services				
1.1 Channels, drainage and ponds	772,229	-	111,132	111,132
2. Wastewater Services				
2.1 Wastewater Services	62,502,474	1,736,026	1,830,826	3,566,852
3. Water Services				
3.1 Water Services	17,333,092	395,655	2,803,261	3,198,916
4. Services Related to a Highway				
4.1 Services Related to a Highway	13,284,274	363,885	8,222,314	8,586,199
4.2 Public Works	1,603,445	80,418	992,454	1,072,872
5. Fire Protection Services				
5.1 Fire facilities	3,108,893	85,685	822,812	908,497
5.2 Fire vehicles	1,440,000	74,155	381,116	455,271
5.3 Small equipment and gear	100,000	10,583	26,466	37,049
6. Parking Services				
6.1 Parking Services	346,000	11,010	729	11,739
7. Indoor & Outdoor Recreation Services				
7.1 Parkland development, amenities & trails	6,885,322	254,462	323,246	577,708
7.2 Parks vehicles and equipment	-	-	-	-
7.3 Recreation facilities	19,874,736	445,520	933,061	1,378,581
8. Library Services				
8.1 Library facilities	3,325,708	201,398	245,763	447,161
9. Administration				
9.1 Studies	842,763	-	-	-
10. Cemeteries				
10.1 Cemeteries	282,019	12,592	54,160	66,752
11. Ambulance				
11.1 Ambulance facilities	656,212	16,125	662,327	678,452
11.2 Vehicles	225,000	30,714	227,097	257,811
12. Waste Diversion				
12.1 Waste diversion facilities, vehicles, equipment and other	500,000	18,280	258,108	276,388
Total	133,082,167	3,736,508	17,894,871	21,631,379



Appendix D

D.C. Reserve Fund Policy



Appendix D: D.C. Reserve Fund Policy

D.1 Legislative Requirements

The Development Charges Act, 1997 (D.C.A.) requires development charge collections (and associated interest) to be placed in separate reserve funds. Sections 33 through 36 of the Act provide the following regarding reserve fund establishment and use:

- a municipality shall establish a reserve fund for each service to which the D.C. by-law relates; s.7(1), however, allows services to be grouped into categories of services for reserve fund (and credit) purposes, although only 100% eligible and 90% eligible services may be combined (minimum of two reserve funds);
- the municipality shall pay each development charge it collects into a reserve fund or funds to which the charge relates;
- the money in a reserve fund shall be spent only for the “capital costs” determined through the legislated calculation process (as per s.5(1) 2-8);
- money may be borrowed from the fund but must be paid back with interest (O.Reg. 82/98, s.11(1) defines this as Bank of Canada rate either on the day the by-law comes into force or, if specified in the by-law, the first business day of each quarter); and
- D.C. reserve funds may not be consolidated with other municipal reserve funds for investment purposes and may only be as an interim financing source for capital undertakings for which development charges may be spent (s.37).

Annually, the Treasurer of the municipality is required to provide Council with a financial statement related to the D.C. by-law(s) and reserve funds. This statement must be made available to the public and may be requested to be forwarded to the Minister of Municipal Affairs and Housing. The D.C.A. does not prescribe how the statement is to be made available to the public. We would recommend that a resolution of Council make the statement available on the municipality’s website or upon request.

Subsection 43(2) and O.Reg. 82/98 prescribes the information that must be included in the Treasurer’s statement, as follows:

- opening balance;
- closing balance;



- description of each service and/or service category for which the reserve fund was established (including a list of services within a service category);
- transactions for the year (e.g. collections, draws) including each assets capital costs to be funded from the D.C. reserve fund and the manner for funding the capital costs not funded under the D.C. by-law (i.e. non-D.C. recoverable cost share and post-period D.C. recoverable cost share);
- for projects financed by development charges, the amount spent on the project from the D.C. reserve fund and the amount and source of any other monies spent on the project.
- amounts borrowed, purpose of the borrowing and interest accrued during previous year;
- amount and source of money used by the municipality to repay municipal obligations to the D.C. reserve fund;
- list of credits by service or service category (outstanding at beginning of the year, given in the year and outstanding at the end of the year by holder);
- for credits granted under s.14 of the old D.C.A., a schedule identifying the value of credits recognized by the municipality, the service to which it applies and the source of funding used to finance the credit; and
- a statement as to compliance with s.s. 59(1) of the D.C.A., whereby the municipality shall not impose, directly or indirectly, a charge related to a development or a requirement to construct a service related to development, except as permitted by the D.C.A. or another Act.

Based upon the above, Figure 1, and Attachments 1 and 2, set out the format for which annual reporting to Council should be provided.

D.2 D.C. Reserve Fund Application

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).”

This provision clearly establishes that reserve funds collected for a specific service are only to be used for that service, or to be used as a source of interim financing of capital undertakings for which a development charge may be spent.



Table D-1
Haldimand County
Annual Treasurer's Statement of Development Charge Reserve Funds

Description	Services to which the Development Charge Relates													Total
	Non-Discounted Services							Discounted Services						
	Services Related to a Highway	Water Services	Wastewater Services	Stormwater Drainage and Control Services	Fire Protection Services	Public Works	Parking Services	Indoor & Outdoor Recreation Services	Library Services	Administration	Cemeteries	Ambulance	Waste Diversion	
Opening Balance, January 1, _____														0
Plus:														
Development Charge Collections														0
Accrued Interest														0
Repayment of Monies Borrowed from Fund and Associated Interest ¹														0
Sub-Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less:														
Amount Transferred to Capital (or Other) Funds ²														0
Amounts Refunded														0
Amounts Loaned to Other D.C. Service Category for Interim Financing														0
Credits ³														0
Sub-Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closing Balance, December 31, _____	0	0	0	0	0	0	0	0	0	0	0	0	0	0

¹ Source of funds used to repay the D.C. reserve fund

² See Attachment 1 for details

³ See Attachment 2 for details

The Municipality is compliant with s.s. 59.1 (1) of the *Development Charges Act*, whereby charges are not directly or indirectly imposed on development nor has a requirement to construct a service related to development been imposed, except as permitted by the *Development Charges Act* or another Act.



**Attachment 1
Haldimand County**

Amount Transferred to Capital (or Other) Funds - Capital Fund Transactions

Capital Fund Transactions	Gross Capital Cost	D.C. Recoverable Cost Share					Non-D.C. Recoverable Cost Share				
		D.C. Forecast Period			Post D.C. Forecast Period		Other Reserve/Reserve Fund Draws	Tax Supported Operating Fund Contributions	Rate Supported Operating Fund Contributions	Debt Financing	Grants, Subsidies Other Contributions
		D.C. Reserve Fund Draw	D.C. Debt Financing	Grants, Subsidies Other Contributions	Post-Period Benefit/Capacity Interim Financing	Grants, Subsidies Other Contributions					
Services Related to a Highway											
Capital Cost A											
Capital Cost B											
Capital Cost C											
Sub-Total - Services Related to Highways	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Services											
Capital Cost D											
Capital Cost E											
Capital Cost F											
Sub-Total - Water	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Wastewater Services											
Capital Cost G											
Capital Cost H											
Capital Cost I											
Sub-Total - Wastewater	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Amount Transferred to Operating (or Other) Funds - Operating Fund Transactions

Operating Fund Transactions	Annual Debt Repayment Amount	D.C. Reserve Fund Draw		Post D.C. Forecast Period			Non-D.C. Recoverable Cost Share		
		Principal	Interest	Principal	Interest	Source	Principal	Interest	Source
Services Related to a Highway									
Capital Cost J									
Capital Cost K									
Capital Cost L									
Sub-Total - Services Related to Highways	\$0	\$0	\$0	\$0	\$0		\$0	\$0	
Water Services									
Capital Cost M									
Capital Cost N									
Capital Cost O									
Sub-Total - Water	\$0	\$0	\$0	\$0	\$0		\$0	\$0	
Wastewater Services									
Capital Cost P									
Capital Cost Q									
Capital Cost R									
Sub-Total - Wastewater	\$0	\$0	\$0	\$0	\$0		\$0	\$0	



Attachment 2
Haldimand County
Statement of Credit Holder Transactions

Credit Holder	Applicable D.C. Reserve Fund	Credit Balance Outstanding Beginning of Year _____	Additional Credits Granted During Year	Credits Used by Holder During Year	Credit Balance Outstanding End of Year _____
Credit Holder A					
Credit Holder B					
Credit Holder C					
Credit Holder D					
Credit Holder E					
Credit Holder F					



Appendix E

Local Service Policy



Appendix E: Local Service Policy

This Appendix sets out the Municipality's General Policy Guidelines on Development Charges (D.C.) and local service funding for Services Related to a Highway, Stormwater Management, Parkland Development, and Underground Linear Services. The guidelines outline, in general terms, the nature of engineered infrastructure that is included in the study as a development charge project, versus infrastructure that is considered as a local service, to be emplaced separately by benefitting landowners, pursuant to a development agreement (e.g. pre-servicing, subdivision, site plan).

The following policy guidelines are general principles by which staff will be guided in considering development applications. The guidelines are summarized in a schematic as attached Figure E-1. However, each application will be considered, in the context of these policy guidelines as subsection 59(2) of the Development Charges Act, 1997.

A. Services Related to a Highway

A highway and services related to a highway are intended for the transportation of people and goods via many different modes including, but not limited to passenger automobiles, commercial vehicles, transit vehicles, bicycles and pedestrians. The highway shall consist of all land and associated infrastructure built to support (or service) this movement of people and goods regardless of the mode of transportation employed, thereby achieving a complete street. A complete street is the concept whereby a highway is planned, designed, operated and maintained to enable pedestrians, cyclists, public transit users and motorists to safely and comfortably be moved, thereby allowing for the efficient movement of persons and goods. The County has 3 classifications of roads – Arterial, Collector and Local – which are defined in the County Official Plan and area Master Servicing Plans.

The associated infrastructure to achieve this concept shall include, but is not limited to: road pavement structure and curbs; grade separation/bridge structures (for any vehicles, railways and/or pedestrians); grading, drainage and retaining wall features; culvert structures; storm water drainage systems; utilities; traffic control systems; signage; gateway features; street furniture; active transportation facilities (e.g. pedestrian crossovers, cross-walks, sidewalks, bike lanes, multi-use trails which interconnect the transportation network, etc.); transit lanes & lay-bys; roadway illumination systems; boulevard and median surfaces (e.g. sod & topsoil, paving, etc.);



street trees and landscaping; parking lanes & lay-bys; (excluding on-street parking in the downtown) and driveway entrances; noise attenuation systems; railings and safety barriers.

1) Local and Collector Roads (including land)

- a) Collector Roads Internal to Development, inclusive of all land and associated infrastructure – direct developer responsibility under s.59 of the D.C.A. as a local service.
- b) Collector Roads External to Development, inclusive of all land and associated infrastructure – if needed to support a specific development or required to link with the area to which the plan relates, direct developer responsibility under s.59 of the D.C.A.; otherwise, included in D.C. calculation to the extent permitted under s.5(1) of the D.C.A.
- c) All local and collector roads are considered to be the developer's responsibility.

2) Arterial Roads

- a) New, widened, extended or upgraded arterial roads, inclusive of all associated infrastructure: Included as part of road costing funded through D.C.A., s.5(1); unless a requirement of specific development;
- b) Land acquisition for arterial roads on existing rights-of-way to achieve a complete street: dedication under the Planning Act provisions (s. 41, 51 and s. 53) through development lands; in area with limited development: included in D.C.s.
- c) Land acquisition for arterial roads on new rights-of-way to achieve a complete street: dedication, where possible, under the Planning Act provisions (s. 51 and s. 53) through development lands up to the ROW specified in the Official Plan: included in D.C.s.
- d) Land acquisition beyond normal dedication requirements to achieve transportation corridors as services related to highways including grade separation infrastructure for the movement of pedestrians, cyclists, public transit and/or railway vehicles: included in D.C.s.

3) Traffic Control Systems, Signals and Intersection Improvements



- a) On new arterial roads and arterial road improvements unrelated to a specific development: included as part of road costing funded through D.C.'s.; if it is a requirement of specific development, would be developer's responsibility;
- b) On non-arterial roads (collector or local), or for any private site entrances or entrances to specific development: direct developer responsibility under s.59 of D.C.A.: recovered as a local service.
- c) On arterial or collector road intersections with provincial highways: direct developer responsibility under s.59 of D.C.A. (as a local service).
- d) Intersection improvements, new or modified signalization, signal timing & optimization plans, area traffic studies for highways attributed to growth and unrelated to a specific development: included in D.C. calculation as permitted under s.5(1) of the D.C.A.

4) Streetlights

- a) Streetlights on new arterial roads and arterial road improvements: considered part of the complete street and included as part of the road costing funded through D.C.'s, may be direct developer responsibility through local service provisions (s.59 of D.C.A.).
- b) Streetlights on non-arterial roads internal to development: considered part of the complete street and included as a direct developer responsibility under s. 59 of the D.C.A. (as a local service).
- c) Streetlights on non-arterial roads external to development, needed to support a specific development or required to link with the area to which the plan relates: considered part of the complete street and included as a direct developer responsibility under s. 59 of the D.C.A. (as a local service).

5) Transportation Related Pedestrian and Cycling Facilities

- a) Pedestrian crossovers, sidewalks, multi-use trails, cycle tracks, and bike lanes, inclusive of all required infrastructure, located within arterial roads and provincial highway corridors: considered part of the complete street and included in D.C.'s,



or, , may be direct developer responsibility through local service provisions (s.59 of D.C.A.).

- b) Sidewalks, multi-use trails, cycle tracks, and bike lanes, inclusive of all required infrastructure, located within or linking to non-arterial road corridors internal to development: considered part of the complete street and is a direct developer responsibility through local service provisions (s.59 of D.C.A.).
- c) Other sidewalks, multi-use trails, cycle tracks, and bike lanes, inclusive of all required infrastructure, located within non-arterial road corridors external to development and needed to support a specific development or required to link with the area to which the plan relates: direct developer responsibility under s.59 of D.C.A. (as a local service).

6) Noise Abatement Measures

- a) Noise abatement measures external and internal to development where it is related to, or a requirement of a specific development: direct developer responsibility under s.59 of D.C.A. (as a local service).
- b) Noise abatement measures on new arterial roads and arterial road improvements abutting an existing community and unrelated to a specific development: included as part of road costing funded through D.C.'s.

B. PARKLAND DEVELOPMENT

1) RECREATIONAL TRAILS

- a) Recreational trails (Multi-use trails) that do not form part of the municipality's active transportation network, and their associated infrastructure (landscaping, bridges, trail surface, etc.), is included in area municipal parkland D.C.'s.

2) PARKLAND

- a) Parkland Development for Community Parks and Neighbourhood Parks: direct developer responsibility to provide at base condition, as follows:
 - Clearing and grubbing. Tree removals as per the subdivision's tree preservation and removals plan.



- Topsoil Stripping, screening, and stockpiling.
- Rough grading (pre-grading) to allow for positive drainage of the Park, with minimum slopes based on the County's requirement/standard. If necessary, this may include some minor drainage tile work and grading as per the overall subdivision grading design complete with any required swales or catch basins. Runoff from the development property shall not drain into the park unless approved by the Manager, Environmental Operations, Public Works Operations.
- Spreading of topsoil to the County's required depth (import topsoil if existing on-site is insufficient to reach required depth).
- Seeding of site with Municipality-approved seed mix. Maintenance of seed until acceptance by Municipality.
- Parks shall be free of any contaminated soil or subsoil.
- Parks shall not be mined for fill.
- Parks shall be conveyed free and clear of all encumbrances.
- 100% of County approved perimeter fencing to the Municipal standards to separate the development lands from the Municipal lands or lands to be dedicated to the Municipality, unless the perimeter fencing is on land that will be dedicated to the Municipality to fulfil the requirement of parkland dedication under the Planning Act, in which case the cost shall be shared 50/50.
- When Park parcels cannot be developed in a timely manner, they shall be graded to ensure positive drainage and seeded to minimize erosion and dust. These shall be maintained by the developer until construction commences thereon.
- The Park block shall not be used for topsoil or other construction material, equipment storage, or sales pavilions.
- Required heritage features within the Park as set out within the Planning approval conditions.



b) Program facilities, amenities, and furniture, within parkland: are included in D.C.'s.

3) LANDSCAPE BUFFER BLOCKS, FEATURES, CUL-DE-SAC ISLANDS, BERMS, GRADE TRANSITION AREAS, WALKWAY CONNECTIONS TO ADJACENT ARTERIAL ROADS, OPEN SPACE, ETC.

a) The cost of developing all landscape buffer blocks, landscape features, cul-de-sac islands, berms, grade transition areas, walkway connections to adjacent arterial roads, open space and other remnant pieces of land conveyed to the municipality shall be a direct developer responsibility as a local service. Such costs include but are not limited to:

- pre-grading, sodding or seeding, supply and installation of amended topsoil, (to the Municipality's required depth), landscape features, perimeter fencing and amenities and all planting.
- Perimeter fencing to the Municipal standard located on the private property side of the property line adjacent land uses (such as but not limited to arterial roads) as directed by the Municipality.

4) NATURAL HERITAGE SYSTEM (N.H.S.)

N.H.S. includes engineered and in situ stream corridors, natural buffers for woodlots, wetland remnants, etc. as well as subwatersheds within the boundaries of the Municipality.

Direct developer responsibility as a local service provision including but not limited to the following:

- a) Riparian planting and landscaping requirements (as required by the Municipality, Conservation Authority or other authorities having jurisdiction) as a result of creation of, or construction within in the N.H.S. and associated buffers.
- b) Perimeter fencing of the N.H.S. to the Municipal standard located on the private property side of the property line adjacent land uses (residential, industrial, commercial) as required by the Municipality.



- c) All works to be in conformance with the requirements of the local Conservation Authority for stream corridors, natural buffers and subwatersheds areas as directed by the approved studies and reports related to any approved Plan that development occurs in.

Infrastructure Assets Constructed by Developers

- a) All infrastructure assets constructed by Developers must be designed in accordance with the Haldimand County Engineering Design Criteria and Haldimand County Trails Master Plan & Partnership Framework Study as revised
- b) All infrastructure assets shall be conveyed in accordance Haldimand County Engineering Design Criteria and Haldimand County Trails Master Plan & Partnership Framework Study as revised
- c) Any Parks and Open Space infrastructure assets approved to be built by the developer on behalf of the Municipality shall be in accordance with the Haldimand County Engineering Design Criteria and Haldimand County Trails Master Plan & Partnership Framework Study as revised.

C. Underground Services (Stormwater, Water and Sanitary Sewers)

Underground services (linear infrastructure for stormwater, stormwater management facilities, water, and sanitary services) within the road allowance are not included in the cost of road infrastructure and are treated separately. The responsibility for such services as well as stormwater management facilities and pumping stations, which are undertaken as part of new developments or redevelopments, will be determined by the following principles:

Water

The costs of the following items shall be direct developer responsibilities as a local service:

- a) providing all underground services internal to the development;
- b) providing service connections from existing underground services to the development;



- c) providing new underground services or upgrading existing underground services external to the development if the services are required to service the development, If external services are required by two or more developments, the developer for the first development will be responsible for the cost of the external services and the County will include Best Efforts clauses in subsequent development agreements; and
- d) water booster pumping stations, reservoir pumping stations, and transmission mains servicing developments in one basin area.

The costs of the following items shall be paid through development charges:

- a) external underground services involving trunk infrastructure and pipes;
- b) water and reservoir pumping stations not required for the individual development; and
- c) water treatment, storage facilities, re- chlorination/sampling stations and upstream capacity improvements associated with multiple basin areas.

Wastewater

The costs of the following items shall be direct developer responsibilities as a local service:

- a) providing all underground services internal to the development;
- b) providing service connections from existing underground services to the development;
- c) providing new underground services or upgrading existing underground services external to the development if the services are required to service the development, if external services are required by two or more developments, the developer for the first development will be responsible for the cost of the external services and the County will include Best Efforts clauses in subsequent development agreements; and
- d) Sanitary pumping stations, and transmission mains servicing developments in one basin area.



The costs of the following items shall be paid through development charges:

- a) external underground services involving trunk infrastructure and pipes;
- b) sanitary pumping stations not required for the individual development; and
- c) wastewater treatment plants, biosolids, and downstream capacity improvements servicing multiple basin areas shall be included in the D.C.

Stormwater

The costs of the following items shall be direct developer responsibilities as a local service:

- a) providing all underground services internal to the development;
- b) providing service connections from existing underground services to the development;
- c) providing new underground services or upgrading existing underground services external to the development if the services are required to service the development, if external services are required by two or more developments, the developer for the first development will be responsible for the cost of the external services and the County will include Best Efforts clauses in subsequent development agreements;
- d) providing stormwater facilities for quality and/or quantity management, including downstream erosion works, inclusive of land and all associated infrastructure, such as landscaping and perimeter fencing; and
- e) storm sewer systems and drainage works that are required for a specific development, either internal or external to the area to which the plan relates.

The costs of the following items shall be paid through development charges:

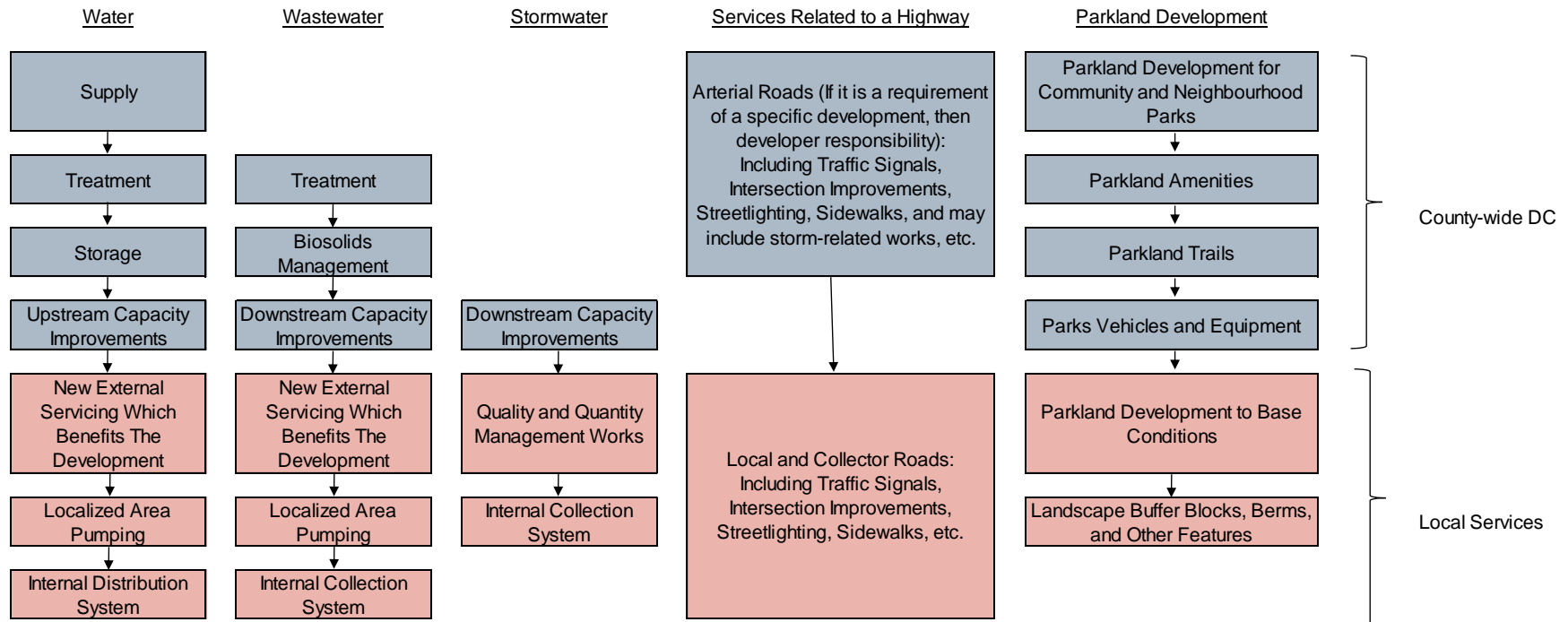
- a) external underground services involving linear infrastructure for stormwater services;



- b) over-sizing cost of stormwater facilities capacity, excluding land, to accommodate runoff from new, widened, extended or upgraded municipal arterial roads that are funded as a development charges project; and
- c) Stormwater monitoring works.



Figure E-1 - Development Charge vs. Local Service Works





Appendix F

Asset Management Plan



Appendix F: Asset Management Plan

The recent changes to the D.C.A. (new section 10(2) (c.2)) require that the Background Study must include an asset management plan related to new infrastructure. Section 10(3) of the D.C.A. provides:

The asset management plan 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.**

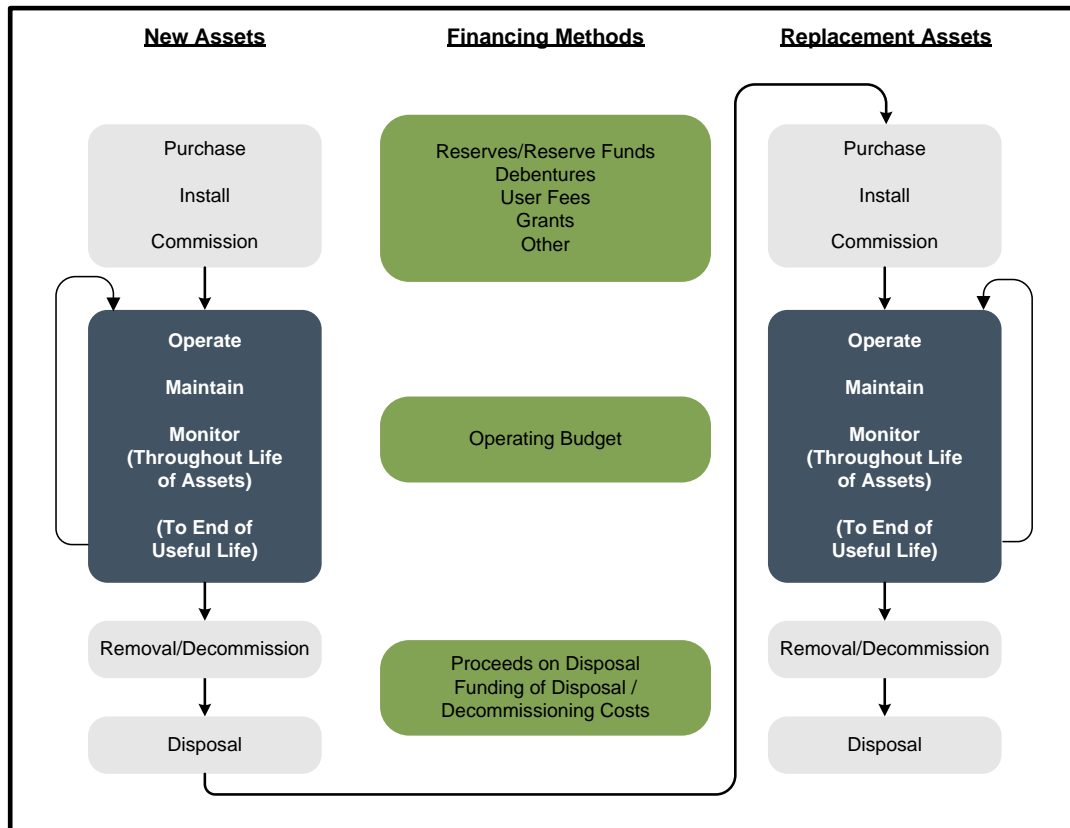
In regard to the above, section 8 of the Regulations was amended to include subsections (2), (3) and (4) which set out for specific detailed requirements for transit (only). For all services except transit, there are no prescribed requirements at this time thus requiring the municipality to define the approach to include within the Background Study.

At a broad level, the Asset Management Plan 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.

It should be noted that with the recent passing of the Infrastructure for Jobs and Prosperity Act (I.J.P.A.) municipalities are now required to complete asset management plans, based on certain criteria, which are to be completed by 2021 for core municipal services and 2023 for all other services. The amendments to the D.C.A. do not require municipalities to complete these asset management plans (required under I.J.P.A.) for



the D.C. background study, rather the D.C.A. requires that the D.C. background study include information to show the assets to be funded by the D.C. are sustainable over their full lifecycle.



In 2012, the Province developed Building Together: Guide for municipal asset management plans which outlines the key elements for an asset management plan (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.

Commensurate with the above, the County prepared an Asset Management Plan in 2013 for its existing hard services assets and in 2017 for the rest of the County's assets. The 2017 Asset Management Plan did incorporate growth in lifecycle costs, however, all assets proposed to be funded in this study were not included in the plan. As a result, the asset management requirement for the D.C. must be undertaken to supplement this information.

In recognition to the schematic above, 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. As well, as all capital costs included in the D.C. eligible capital costs are not included in the County's Asset Management Plans, the present infrastructure gap and associated funding plan have not been considered at this time. Hence 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 municipal 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 \$29.41 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 \$25.54 million. This amount, totalled with the existing operating revenues of \$142.35 million, provide annual revenues of \$167.89 million by the end of the period.

6. In consideration of the above, the capital plan is deemed to be financially sustainable.



County of Haldimand
 Asset Management – Future Expenditures and Associated Revenues
 2019\$

	Sub-Total	2038 (Total)
Expenditures (Annualized)		
Annual Debt Payment on Non-Growth Related Capital ¹		5,249,909
Annual Debt Payment on Post Period Capital ²		2,696,524
Lifecycle:		
Annual Lifecycle - County-Wide Services	\$3,663,944	
Sub-Total - Annual Lifecycle	\$3,663,944	\$3,663,944
Incremental Operating Costs (for D.C. Services)		\$17,894,871
Total Expenditures		\$29,505,248
Revenue (Annualized)		
Total Existing Revenue ³		\$142,349,457
Incremental Tax and Non-Tax Revenue (User Fees, Fines, Licences, etc.)		\$25,539,714
Total Revenues		\$167,889,171

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



Appendix G

Proposed D.C. By-law



THE CORPORATION OF HALDIMAND COUNTY

By-law No1441/14

Being a By-Law to establish Development Charges on Lands within The Corporation of Haldimand County

WHEREAS Section 2(1) of the Development Charges Act, 1997, S.O. 1997, Chapter 27 (hereinafter may be referred to as the “Act”) authorizes municipalities to pass a by-law for the imposition of development charges against land to pay for increased capital costs required because of increased needs for services arising from development of the area to which this by-law applies;

WHEREAS The Corporation of Haldimand County, as required by Section 10 of the Act, has undertaken and completed a development charge background study regarding the anticipated amount, type and location of development; the increase in needs for services; estimated capital costs to provide for such increased needs, including the long-term capital and operating costs for capital infrastructure required for the services;

WHEREAS as required by Section 11 of the Act, this by-law is being enacted within one year of the March 5, 2019 completion of the said development charge background study, titled Haldimand County Development Charge Background Study, March 5, 2019 prepared by Watson & Associates Economists Ltd;

WHEREAS the Council of The Corporation of Haldimand County, at a Council Meeting on May 13, 2019, has adopted the recommendations for development charges policies in Haldimand County;

WHEREAS in advance of passing this by-law the Council of The Corporation of Haldimand County has given notice of and held a public meeting on April 16, 2019, in accordance with Section 12(1)(b) of the Development Charges Act, 1997 regarding its proposals for this development charges by-law;

WHEREAS the Council of The Corporation of Haldimand County has heard all persons who applied to be heard no matter whether in objection to, or in support of, the said by-law;

AND WHEREAS the Council of The Corporation of Haldimand County has adopted the Development Charges Background Study by resolution on May 13, 2019, and thereby



indicates the intent to ensure that the increase in the need for services attributable to the anticipated development will be met, and the intent that the future excess capacity identified in this study shall be paid for by the development charges or similar charges;

NOW THEREFORE the Council of The Corporation of Haldimand County enacts as follows:

Definitions

- 1) In this by-law,
 - a) “Act” means the Development Charges Act, 1997, S.O. 1997, c. 27, as amended, or any successor thereto;
 - b) “agricultural land” means land which is zoned for agricultural or farming uses in the Zoning By-Laws of The Corporation of Haldimand County;
 - c) “apartment unit” means any dwelling unit in an apartment building and will include a garden suite or granny flat;
 - d) “apartment building” means a building consisting of more than one dwelling unit with a private bathroom and kitchen facilities in each unit and which is not a single detached dwelling, a semi-detached dwelling, a farm help house, a multiple unit dwelling, a mobile home, a temporary residential structure, or a special care/special dwelling unit;
 - e) “accessory apartment” means a residential dwelling unit within a single or semi-detached dwelling not exempted within Section 7 of this by-law and in the case of a mixed-use development, a residential dwelling unit which is secondary to the main use of the building. An accessory apartment, as defined, shall be considered an apartment unit;
 - f) “assisted living facility” means a building consisting of more than one dwelling unit which includes a bedroom to accommodate one or more people and provides nursing assistance (but not 24-hour nursing care), laundry, and food/dietary services as well as various common areas for residences, visitors and staff but is not a long-term care/nursing facility.



- g) “bedroom” includes any room which can be used as sleeping quarters but does not include a kitchen, bathroom, living room or dining room;
- h) “benefiting area” means an area defined by a map, plan or legal description in a front-ending agreement as an area that will receive a benefit from the construction of a service;
- i) “capital costs” includes the capital costs defined in Section 5(3) of the Act;
- j) “commercial” means any non-residential development not defined under “institutional” or “industrial”;
- k) “Council” means the Council of The Corporation of Haldimand County;
- l) “County” means the body corporate continued as a Municipality under the name “The Corporation of Haldimand County”;
- m) “development” means the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of increasing the size or usability thereof, and includes redevelopment;
- n) “development charge” or “development charges” means charges imposed with respect to this by-law;
- o) “dwelling unit” means any part of a building or structure used, designed or intended to be used as a domestic establishment in which one or more persons may sleep and are provided with bathroom and kitchen facilities for their exclusive use, and shall exclude suites contained within a motel or hotel;
- p) “farm building” means that part of a bona fide farm operation encompassing barns, silos, and other ancillary development to an agricultural use that will be assessed in the Farmland Realty Tax Class by the Municipal Property Assessment Corporation:
 - i) including (but not limited to):



- a) cultivation of crops, whether on open land or in greenhouses, including (but not limited to) fruit, vegetables, herbs, grains, field crops, cannabis, sod, trees, shrubs, flowers, and ornamental plants; and
- ii) but excluding:
 - a) a residential, commercial, or an industrial use, including (but not limited to) cannabis retail, processing, or production facilities, and retail-related greenhouses;
 - q) “farm help house” means a residential building constructed on a farm and not attached to any other building or structure, with sleeping, cooking, living and sanitary facilities, and used for seasonal, interim or occasional residential uses by farm labourers;
 - r) “garden suite” or “granny flat” means a building containing one (1) dwelling unit where the unit is detached from and ancillary to an existing single detached dwelling or semi-detached dwelling on the lands and such building may be designed to be portable;
 - s) “grade” means the average level of proposed or finished ground adjoining, at all exterior walls, a building containing one or more dwelling units, a non-residential building or structure or a building or structure with both residential and non-residential uses;
 - t) “gross floor area” means the total area of all floors above grade of a building containing one or more dwelling units or non-residential building or structure of a building, or structure with both residential and non-residential uses measured between the outside surfaces of exterior walls, or between the outside surfaces of exterior walls and the center line of party walls dividing the dwelling unit, or non-residential building or structure or other portion of a building;
 - u) “growth-related net capital costs” means the portion of the net capital costs of services that is reasonably attributable to the need of such net capital costs that results, or will result from development, in all or a defined part of the Corporation of Haldimand County;



- v) “hotel” (and “motel”) means a commercial establishment offering lodging to travellers and sometimes to permanent residents, and may include other services such as restaurants, meeting rooms and stores that are available to the general public;
- w) “industrial” means lands, buildings or structures used or designed or intended for use for manufacturing, processing, fabricating or assembly of raw goods, warehousing or bulk storage of goods, and includes office uses and the sale of commodities to the general public where such uses are accessory to an industrial use, but does not include the sale of commodities to the general public through a warehouse club or public storage facilities;
- x) “institutional” means a building used for, or in connection with religious, charitable, cultural, educational, governmental, health or welfare purposes and shall include but not be limited to:
 - a. public and private non-commercial schools, nursery schools, or day care facilities; and
 - b. Long-term care facilities/Nursing homes.And shall exclude facilities containing special care/special dwelling units, including assisted living facilities.
- y) “local board” means a school board, public utility commission, transportation commission, public library board, board of park management, local board of health, board of commissioners of police, planning board, or any other board, commission, committee, or local authority established or exercising any power of authority under any general or special Act with respect to any of the affairs or purposes, including school purposes, of The Corporation of Haldimand County;
- z) “long-term care facility/nursing home” means a building consisting of more than one dwelling unit which includes a bedroom to accommodate one or more people and has full time staff to provide 24-hour nursing and palliative care, laundry and food/dietary services as well as various common areas for residences, visitors and staff.



- aa) “manufactured home” means a manufactured home as referenced within the Ontario Building Code;
- bb) “mixed use development” means a building or structure in which there are or will be both residential and non-residential uses, but does not include a hotel, motel, resort development, guest house, boarding house, nursing home, retirement living multiple unit dwelling or home for the aged;
- cc) “mobile home” means a mobile home as referenced in the Ontario Building Code;
- dd) “multiple unit dwelling” means all dwellings other than single detached dwelling units, semi-detached dwelling units, apartments, and special care/special dwelling units;
- ee) “net capital cost” means the capital cost less capital grants, subsidies and other contributions made to Haldimand County or that the Council of The Corporation of Haldimand County anticipates will be made, including conveyances or payments under Sections 41, 42, 51 and 53 of the Planning Act, as amended; and any successor thereto in respect of the capital cost;
- ff) “non-residential” means a building, other than for residential use, and, without limiting the generality of the foregoing, includes commercial, industrial, institutional and retail buildings;
- gg) “place of worship” means a building or structure that is used for worship and religious practices and purposes, including related administrative, religious teaching, assembly and associated spaces, but does not include portions of such building or structure used for any commercial use, including but not limited to daycare facilities;
- hh) “Residential” means lands, buildings or structures of any kind whatsoever used, designed or intended to be used as living accommodations for one or more individuals, and shall include, but is not limited to;
- i) single detached dwelling unit,
 - ii) semi-detached dwelling unit,
 - iii) an apartment dwelling unit,
 - iv) a multiple dwelling unit,



- v) special care/special dwelling unit,
 - vi) accessory apartment,
 - vii) farm help houses,
 - viii) individual mobile homes,
 - ix) individual manufactured homes,
 - x) temporary residential structures,
 - xi) individual dwelling units in semi-detached dwellings, multiple dwellings, and apartment units,
 - xii) semi-detached dwellings, multiple unit dwellings, apartments, and special care/special dwelling units in buildings or structures which are not exclusively used for residential purposes.
- ii) “retail” means a building used for, or in connection with the offering or sale of goods, wares, merchandise, substances, articles or things directly to the consumer;
- jj) “semi-detached dwelling” means a residential building consisting of two dwelling units attached by a vertical wall or walls;
- kk) “services” means services designated in Schedule “A” of this by-law or designated in front-ending agreement;
- ll) “single detached dwelling” means a residential building containing one dwelling unit and not attached to another building or structure, whether or not the sole single detached dwelling is situated on a single lot, and includes manufactured homes; and
- mm) “special care/special dwelling unit/room” means a residence in an assisted living facility:
- a. Containing two or more dwelling rooms, which rooms have common entrance from street level; and
 - b. where the occupants have the right to use in common with other occupants, halls, stairs, yards, common room and accessory buildings; and
 - c. that is designed to accommodate persons with specific needs, including but not limited to, independent permanent living arrangements; and where support services, such as meal preparation, grocery shopping, laundry,



housing, nursing, respite care and attending services are provided at various levels; but

- d. excludes long-term care facilities/nursing homes.
- nn) “temporary residential structure” means a residential building containing one dwelling unit and not attached to another building or structure and constructed on a lot of record on which another single detached dwelling or semi-detached dwelling is situated.

Scope of By-Law

- 2) This by-law applies to all of the land within The Corporation of Haldimand County.

Development Charges

- 3) The development of land, buildings or structures for residential and non-residential uses have required or will require the provision, enlargement, expansion of the services referenced in Schedule “A” of this by-law.
- 4) The development of land is subject to a development charge where the development requires any one or more of the following:
 - a) the passing of zoning by-law or an amendment thereto under Section 34 of the Planning Act, as amended or any successor thereto;
 - b) the approval of a minor variance under Section 45 of the Planning Act, as amended or any successor thereto;
 - c) a conveyance of land to which a by-law passed under subsection 50(7) of the Planning Act applies, as amended or any successor thereto;
 - d) the approval of a plan of subdivision under Section 51 of the Planning Act, as amended or any successor thereto;
 - e) a consent under Section 53 of the Planning Act, as amended or any successor thereto;
 - f) the approval of a site plan and agreement under Section 41 of the Planning Act;



- g) the approval of a description under Section 50 of the Condominium Act, as amended or any successor thereto; or
- h) the issuing of a permit under the Building Code Act, as amended or any successor thereto, in relation to a building or structure.

Calculation of Development Charges

- 5) The development charge with respect to the development of any land, buildings and structures are to be calculated and collected in accordance with the rates set out in Schedule “B” and Schedule “C”, subject to the other provisions of this by-Law, calculated as follows:
 - a) in the case of residential development, or the residential portion of a mixed-use development, based upon the number and type of dwelling units;
 - b) in the case of non-residential development, or the non-residential portion of a mixed-use development, based upon the gross floor area of such development;
- 6) Subject to the provisions of this by-law, development charges against land are to be calculated and collected in accordance with the rates set out in Schedule “B” and Schedule “C” in respect of the services set out in Schedule “A” of this by-law.
 - a) **Mixed-Use Development**
 - i) Where a development has both residential and non-residential uses, development charges will be assessed against both uses, to the extent of their respective uses of a building or structure, and as though the uses were separate.
 - b) **Redevelopment**
 - i) Development charges payable in a redevelopment shall be calculated by reducing the development charges payable by the maximum number of former residential units or by the maximum non-residential former gross floor area (as the case may be) which had been on the same property within ten (10) years of an action or approval required in Section 4 of this by-law but has since been demolished. Any such reduction shall not produce a refund.



c) Change of Use

- i) Where an existing non-residential building or structure is converted in whole or in part to residential uses, the residential development charge payable for the dwelling units created shall be reduced by an amount equal to the non-residential development charges previously paid for the development being converted, but any such reduction shall not produce a refund. No credit will be provided for services excluded from the non-residential charge.
- ii) Where an existing residential building is converted in whole or in part to non-residential uses, the non-residential development charge payable for the gross floor area so converted shall be reduced by an amount equal to any residential development charges previously paid for the residential building being converted, and if a dwelling unit is only partially converted the reduction shall be in proportion to the extent of the conversion, but any such reduction shall not produce a refund.
- iii) Development charges assessable for the conversion of uses in a mixed-use building or structure shall be determined in accordance with subsections (c) i) and (c) ii) of this by-law, as applicable.

Exemptions from Development Charges

- 7) As provided for in Section 2(3) of the Act and Ontario Regulation 82/98, the following are not subject to development charges under the Act and this by-law if the only effect of an action referred to in Section 4 of this by-law is to:
 - a) permit the enlargement of an existing dwelling unit; or
 - b) permit the creation of up to two additional dwelling units, as prescribed, subject to the prescribed restrictions, in prescribed classes of existing residential buildings. The said prescribed matters from Ontario Regulation 82/98 are attached as Schedule "D" to this by-law.
- 8) As set out in section 4 of the Act, if a development includes the enlargement of the gross floor area of an existing industrial building, the amount of the development charge that is payable in respect of the enlargement is determined as follows:



- a) the exemption for industrial enlargement provided for in this subsection shall apply only to the enlargement of the gross floor area of an existing industrial building; for this subsection, an “existing industrial building” shall have the same meaning as defined in O. Reg. 82/98 under the Act, as amended or successor thereto, and at the time of application for a building permit, shall have fifty (50) per cent or more of its gross floor area occupied by industrial uses;
- b) such enlargement must be attached to, or within, the existing industrial building, but shall not be attached by means only of a tunnel, bridge, passageway, shared below grade connection, foundation, footing, shared connected roof or parking facility;
- (c) both the enlargement and existing industrial building must be constructed on lands owned by the same beneficial owner;
- (d) the enlargement shall be for a use for, or in connection with, an industrial purpose as set out in this by-law on lands owned by the same beneficial owner;
- (e) the enlargement shall be for the exclusive use of an existing occupant whose occupancy equals fifty (50) percent or more of the total gross floor area of the existing structure immediately prior to the issuance of the subject expansion building permit;
- (f) the building permit for the construction of the enlargement is to be issued not less than ten (10) years from the date of occupancy permit issuance for the original building, or occupancy permit issuance for the last building permit for an enlargement on the property;
- (g) for the purposes of the calculation of the applicable development charge, the gross floor area of an existing industrial building shall be calculated as it existed prior to the first enlargement in respect of that building for which an exemption under section 4 of the Act is sought;
- (h) for the purposes of the calculation of the applicable development charge, the enlargement shall be measured to also include all prior enlargements from the existing industrial building as determined in clause 6(c)1;



- (i) if the area of the enlargement as determined in clause 8(h) above is fifty (50) per cent or less than the gross floor area determined in clause 8(g) above, the amount of the development charge in respect of the enlargement is zero (0) dollars; and
- (j) if the area of the enlargement as determined in clause 8(h) above is more than fifty (50) per cent of the gross floor area determined in clause 8(g) above, the amount of the development charge in respect of the enlargement is the amount of the development charge that would otherwise be payable less that portion related to any gross floor area of the enlargement which is required to bring the cumulative amount of enlargements to fifty (50) percent.

9) Notwithstanding any other provision of this by-law, the following types of development are exempted from any development charges under this by-law:

- a) development which is or would be classified under the Assessment Act as exempt from taxation for realty taxes such as a place of worship;
- b) any development undertaken by:
 - i) the County,
 - ii) any board within the meaning of subsection 1(1) of the Education Act, as amended or any successor thereto, or
 - iii) any local board of the Corporation of Haldimand County.
- c) farm building constructed for bona fide farm uses.

Collection of Development Charges

- 10) Subject to the provisions of this section, development charges are payable at the time of the issuance of the first building permit.
 - a) Prepayment or Deferral Agreements
 - i) Council may authorize, in accordance with Section 27 of the Act, an agreement with a person to permit, on such terms as Council may require, the payment of a development charge before or after it is otherwise payable under this by-law.



b) Services in Lieu Agreements

- i) Council may agree, in accordance with Sections 38, 39, 40 and 41 of the Act, to allow a person to perform work that relates to a service to which this development charge by-law relates, in return for a credit towards the development charges payable by the said person, upon terms specified by Council in its agreement with the person. No such credit shall exceed the total development charges payable by the person.

c) Front-Ending Agreements

- i) Council may authorize a front-ending agreement in accordance with the provisions of Part III of the Act, upon such terms as Council may require, in respect of the development of land.

Administration of By-law

- 11) This by-law shall be administered by the Treasurer of The Corporation of Haldimand County.

Indexing

- 12) As authorized in paragraph ten of Section 5(1) of the Act, the development charges provided for in this by-law shall be adjusted annually by the percentage change during the preceding year, as recorded in the Statistics Canada Quarterly, Non-Residential Building Construction Price Index in the Toronto area. This adjustment shall take place as follows:
 - a) the initial adjustment shall be one year from the date of passage of this by-law, and
 - b) thereafter, adjustment shall be made each year on the anniversary of the date of passage of this by-law.
- 13) The Treasurer shall, annually on May 31st, furnish to Council a statement in respect of the separate reserve funds required by the Act for each Service to which this by-law relates, for the prior year, containing the information set out in Section 43 of the Act and Section 12 of Ontario Regulation 82/98.



Schedules

Schedule “A” - List of Services

Schedule “B” - Schedule of Residential Development Charges by Service and Unit Type

Schedule “C” - Schedule of Non-Residential Development Charges by Service and Per Square Foot and Per Square Metre

Schedule “D” - Table from O. Reg. 82/98 referred to in Section 7

Short Title

14) This by-law may be referred to as the “2019 Haldimand County Development Charges By-Law”.

Repeal of Previous By-Law

15) By-Law No. 1441/14 of The Corporation of the Haldimand County, as amended, be hereby repealed.

Date By-Law in Force

16) This by-law shall come into force and effect on the day following the date of its passing and enactment

READ a first and second time this 13th day of May 2019.

READ a third time and finally passed this 13th day of May 2019.

MAYOR

CLERK



Schedule "A"
Haldimand County Components of Service

Municipal-wide Services

- 1.0 Services Related to a Highway
- 2.0 Public Works – Buildings & Fleet
- 3.0 Parking Spaces
- 4.0 Fire Protection Services
- 5.0 Leisure Services
- 6.0 Library Board
- 7.0 General Government
- 8.0 Cemeteries
- 9.0 Ambulance
- 10.0 Waste Diversion Services

Urban Services

- 11.0 Stormwater Drainage and Control Services
- 12.0 Wastewater Services
- 13.0 Water Services



Schedule "B"
Residential Development Charges by Service and Unit Type

Service	RESIDENTIAL				
	Single and Semi-Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	Special Care/Special Dwelling Units
Municipal Wide Services:					
Services Related to a Highway	1,970	1,469	946	1,817	749
Public Works	238	178	114	220	90
Fire Protection Services	690	515	331	637	262
Parking Services	91	68	44	84	35
Indoor & Outdoor Recreation Services	9,386	7,001	4,506	8,659	3,568
Library Services	1,132	844	543	1,044	430
Administration	225	168	108	208	86
Cemeteries	70	52	34	65	27
Ambulance	235	175	113	217	89
Waste Diversion	163	122	78	150	62
Total Municipal Wide Services	14,200	10,592	6,817	13,101	5,398
Urban Services					
Stormwater Drainage and Control Services	121	90	58	112	46
Wastewater Services	4,776	3,562	2,293	4,406	1,816
Water Services	1,966	1,466	944	1,814	747
Total Urban Services	6,863	5,118	3,295	6,332	2,609
GRAND TOTAL RURAL AREA	14,200	10,592	6,817	13,101	5,398
GRAND TOTAL URBAN AREA	21,063	15,710	10,112	19,433	8,007



Schedule "C"
 Non-Residential Development Charges by Service and Per Square Foot and Per
 Square Metre of G.F.A.

Service	NON-RESIDENTIAL	
	(per sq.ft. of Gross Floor Area)	(per sq.m. of Gross Floor Area)
Municipal Wide Services:		
Services Related to a Highway	0.78	8.40
Public Works	0.10	1.08
Fire Protection Services	0.29	3.12
Parking Services	0.04	0.43
Indoor & Outdoor Recreation Services	0.57	6.14
Library Services	0.07	0.75
Administration	0.09	0.97
Cemeteries	0.03	0.32
Ambulance	0.09	0.97
Waste Diversion	0.02	0.22
Total Municipal Wide Services	2.08	22.39
Urban Services		
Stormwater Drainage and Control Services	0.05	0.54
Wastewater Services	1.83	19.70
Water Services	0.76	8.18
Total Urban Services	2.64	28.42
GRAND TOTAL RURAL AREA	2.08	22.39
GRAND TOTAL URBAN AREA	4.72	50.81



Schedule "D"
TABLE FROM O.REG. 82/98 REFERRED TO IN SECTION 7

Name of Class of Residential Building	Description of Class of Residential Building	Maximum Number of Additional Dwelling Units	Restrictions
Single Detached Dwellings	Residential buildings, each of which contains a single dwelling unit, that are not attached to other buildings	Two	The total gross floor area of the additional dwelling unit or units must be less than or equal to the gross floor area of the dwelling unit already in the building.
Semi-Detached Dwellings or Row Dwellings	Residential buildings, each of which contains a single dwelling unit, that have one other parts, attached to other buildings	One	The gross floor area of the additional dwelling unit must be less than or equal to the gross floor area of the dwelling unit already in the building.
Other residential buildings	A residential building not in another class of residential building described in this table	One	The gross floor area of the additional dwelling unit must be less than or equal to the gross floor area of the smallest dwelling unit already in the building.



Addendum #1 to the March 5, 2019 Development Charges Background Study

County of Haldimand

April 8, 2019

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



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3. Process for the Adoption of the Development Charges By-law	2



List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
D.C.	Development Charges
D.C.A.	Development Charges Act



Addendum Report to
the March 5, 2019
Development
Charges Background
Study



1. Background

Commensurate with the provisions of the Development Charges Act, 1997, as amended (D.C.A.), the County has undertaken a Development Charges (D.C.) Background Study and released the study in accordance with the D.C.A. The following provides a summary of the key dates in the development charge by-law process:

January 15, 2019 – Council Workshop

March 5, 2019 – Release of the D.C. Background Study and draft by-law

March 21, 2019 – Stakeholder meeting

April 8, 2019 – Addendum to March 21st report released

April 16, 2019 – Scheduled date of Public Meeting

May 13, 2019 – Passage of Development Charges By-law

The purpose of this addendum report is correct headings in Table 2-1 and refine wording in the Local Service Policy.

2. Discussion

This section of the addendum report provides an explanation for the above-noted refinements. It is noted that the refinements have not impacted the calculated development charges.

2.1 Correction to Table 2-1

Table 2-1 presented a summary of the existing development charges for the County. The column headings were incorrectly provided relative to the actual charges being imposed. The existing column labeling vs. the corrected labeling is presented below:

As Presented in March 5, 2019 Report:

Service	Residential				Non-Residential	
	Single & Semi Detached	Multiples	Apartments with >= 2 Bedrooms	Apartments with < 2 Bedrooms	per sq.ft.	per sq.m

Modified:

Service	Residential			Non-Residential		
	Single & Semi Detached	Apartments with >= 2 Bedrooms	Apartments with < 2 Bedrooms	Multiples	per sq.ft.	per sq.m



2.2 Local Service Policy Refinements

With respect to the refinements to the Local Service Policy, wording has been revised under section C, Wastewater. Item b on page E-10 initially read; “sanitary pumping stations not required for the individual development”. Through discussions at the Stakeholder meeting, it was determined that this wording should be revised to read as follows: “sanitary pumping stations servicing multiple basin areas”.

2.3 Changes to the Background Report

Based upon the above, the following revisions are made to the pages within the background study (new pages are appended to this report):

- Page 2-1 – Correction to the headings in Table 2-1
- Page E-10 – Revisions to the Local Service Policy

3. Process for the Adoption of the Development Charges By-law

Sections 1 & 2 provide for a summary of the revisions to the County’s D.C. Background Study. If Council is satisfied with the above changes to the Background Study and based on the public submissions made at the public meeting, this addendum report #1 will be considered for approval by Council.



Amended Pages



2. Current County of Haldimand Policy

2.1 Schedule of Charges

On May 20, 2014, the County of Haldimand passed By-law 1441-14 under the D.C.A. This by-law imposes D.C.s for residential and non-residential uses and expires on May 20, 2019. The table below provides the rates currently in effect, as at May 20, 2018.

Table 2-1
County of Haldimand
Current D.C. Rates

Service	Residential				Non-Residential	
	Single & Semi Detached	Apartments with >= 2 Bedrooms	Apartments with < 2 Bedrooms	Multiples	per sq.ft.	per sq.m
Municipal Wide Services:						
Roads and Related	1,455	995	687	1,262	0.63	6.79
Public Works - Buildings & Fleet	217	148	102	189	0.09	0.94
Parking Services	83	57	40	72	0.04	0.47
Fire Protection Services	976	668	460	847	0.41	4.45
Leisure Services	4,294	2,935	2,024	3,722	0.40	4.33
Library Board	714	488	336	619	0.07	0.70
General Government	211	144	100	182	0.10	1.05
Cemeteries	122	83	57	105	0.05	0.59
Ambulance	126	87	59	110	0.05	0.59
Waste Diversion	-	-	-	-	-	-
Total Municipal Wide Services	8,200	5,605	3,865	7,110	1.85	19.91
Urban Services						
Stormwater Drainage and Control Services	284	194	134	247	0.10	1.08
Wastewater Services	1,947	1,331	918	1,688	0.60	6.46
Water Services	1,694	1,158	799	1,469	0.52	5.60
Total Urban Services	3,926	2,683	1,851	3,404	1.22	13.13
Grand Total Urban Area	12,125	8,289	5,716	10,514	3.07	33.05

2.2 Services Covered

The following services are covered under By-law 1441-14:

- Roads & Related;
- Public Works;
- Parking Spaces;
- Fire Protection;
- Leisure Services (Indoor and Outdoor Recreation Services);
- Library Board;
- General Government;
- Cemeteries;
- Ambulance;



The costs of the following items shall be paid through development charges:

- a) external underground services involving trunk infrastructure and pipes;
- b) sanitary pumping stations servicing multiple basin areas; and
- c) wastewater treatment plants, biosolids, and downstream capacity improvements servicing multiple basin areas shall be included in the D.C.

Stormwater

The costs of the following items shall be direct developer responsibilities as a local service:

- a) providing all underground services internal to the development;
- b) providing service connections from existing underground services to the development;
- c) providing new underground services or upgrading existing underground services external to the development if the services are required to service the development, if external services are required by two or more developments, the developer for the first development will be responsible for the cost of the external services and the County will include Best Efforts clauses in subsequent development agreements;
- d) providing stormwater facilities for quality and/or quantity management, including downstream erosion works, inclusive of land and all associated infrastructure, such as landscaping and perimeter fencing; and
- e) storm sewer systems and drainage works that are required for a specific development, either internal or external to the area to which the plan relates.

The costs of the following items shall be paid through development charges:

- a) external underground services involving linear infrastructure for stormwater services;



 **Watson
& Associates**
ECONOMISTS LTD.

Addendum #2 to the March 5, 2019 Development Charges Background Study

County of Haldimand

May 2, 2019

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List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
D.C.	Development Charges
D.C.A.	Development Charges Act



Addendum Report
#2 to the March 5,
2019 Development
Charges Background
Study



1. Background

Commensurate with the provisions of the Development Charges Act, 1997, as amended (D.C.A.), the County has undertaken a Development Charges (D.C.) Background Study and released the study in accordance with the D.C.A. The following provides a summary of the key dates in the development charge by-law process:

January 15, 2019 – Council Workshop

March 5, 2019 – Release of the D.C. Background Study and draft by-law

March 21, 2019 – Stakeholder meeting

April 8, 2019 – Addendum #1 to March 5th report released

April 16, 2019 – Scheduled date of Public Meeting

May 2, 2019 - Addendum #2 to March 5th report released

May 13, 2019 – Passage of Development Charges By-law

The purpose of this addendum report is to include an additional wastewater project, reduce the capital costs for recreation facilities, and refine wording in the Local Service Policy.

2. Discussion

This section of the addendum report provides an explanation for the above-noted refinements. It is noted that the refinements have reduced the overall calculated residential development charges and rural area non-residential charges.

2.1 Local Service Policy Refinements

With respect to the refinements to the Local Service Policy, wording has been revised to provide that water and wastewater works that service primarily industrial lands will be included in the D.C. and not be considered a local service. The revised Local Service Policy is provided in the amended pages attached.

2.2 Inclusion of Additional Wastewater Project

Subsequent to the stakeholder meeting and the Public Meeting of Council, staff, through discussions with the development community, and subsequent to revising the Local



Service Policy, have identified a wastewater project for inclusion in the D.C. background study that was previously considered a local service. The project, North Caledonia Pump Station and Forcemain, will be built in North Caledonia and service up to 146.5 hectares of land. The project includes the construction of a new pumping station and forcemain, along with an upgrade to the existing sewers connecting the Domtar forcemain outlet to the Nairn pumping station. The following provides the breakdown of the capital costs and calculations for inclusion in the D.C.:

Project:	North Caledonia Pump Station and Forcemain
Timing:	2030 to 2038
Estimated Gross Capital Cost:	\$8,300,000
Post-period Benefit Deduction:	\$821,500
Net Capital Costs:	\$7,478,500
Benefit to Existing Deduction:	\$85,000
Total D.C Eligible Cost:	\$7,393,500

This amount has been added to the wastewater capital project costs and included in the D.C. calculations. It is anticipated that staff will enter into a Front-end Financing Agreement with a developer of the benefitting lands and will pay back the developer over time.

2.3 Reduction in Capital Costs for Recreation Facility

As a result of discussions with stakeholders and the public at the stakeholder meeting and the Public Meeting of Council, staff have identified a reduction to the provision for additional recreation facility space. This provision is now reduced from \$14,000,000 to \$7,500,000. After the 10% deduction, the total D.C. eligible amount included in the D.C. calculations for this project reduced from \$12,600,000 to \$6,750,000.

2.4 Overall Changes in the D.C. Calculation

Based on the changes noted above, the calculated residential development charge (single/semi-detached unit) has decreased from \$21,063 to \$19,981 in the urban areas of the County and from \$14,200 to \$11,964 in all other areas. In regard to the non-



residential charges, the calculated development charge (per sq.ft.) has increased from \$4.72 to \$5.04 in the urban areas and decreased from \$2.08 to \$1.96 in all other areas.

The above changes have been incorporated into the calculations. The summary below outlines the current charges vs. the charges as calculated in the March 5, 2019 D.C. report and the charges calculated in this addendum report.

Residential (Single Detached) Comparison

Service	Current	Calculated March 5, 2019 Report	Calculated May 2, 2019 Addendum Report
Municipal Wide Services:			
Services Related to a Highway	1,455	1,970	1,970
Public Works - Building & Fleet	217	238	238
Parking Services	83	91	91
Fire Protection Services	976	690	690
Indoor & Outdoor Recreation Services	4,294	9,386	7,150
Library Services	714	1,132	1,132
Administration	211	225	225
Cemeteries	122	70	70
Ambulance	126	235	235
Waste Diversion	-	163	163
Total Municipal Wide Services	8,200	14,200	11,964
Area Specific Services:			
Stormwater Drainage and Control Services	284	121	121
Wastewater Services	1,947	4,776	5,930
Water Services	1,694	1,966	1,966
Total Area Specific Services	3,926	6,863	8,017
Grand Total - Urban Area	12,125	21,063	19,981



Non-Residential (per sq.ft.) Comparison

Service	Current	Calculated March 5, 2019 Report	Calculated May 2, 2019 Addendum Report
Municipal Wide Services:			
Services Related to a Highway	0.63	0.78	0.78
Public Works - Building & Fleet	0.09	0.10	0.10
Parking Services	0.04	0.04	0.04
Fire Protection Services	0.41	0.29	0.29
Indoor & Outdoor Recreation Services	0.40	0.57	0.44
Library Services	0.07	0.07	0.07
Administration	0.10	0.09	0.09
Cemeteries	0.05	0.03	0.03
Ambulance	0.05	0.09	0.10
Waste Diversion	-	0.02	0.02
Total Municipal Wide Services	1.85	2.08	1.96
Area Specific Services:			
Stormwater Drainage and Control Services	0.10	0.05	0.05
Wastewater Services	0.60	1.83	2.27
Water Services	0.52	0.76	0.76
Total Area Specific Services	1.22	2.64	3.08
Grand Total - Urban Area	3.07	4.72	5.04

Note: D.C. by-law will include charges on a per sq.m basis as well



2.5 Changes to the Background Report

Based upon the above, the following revisions are made to the pages within the background study (new pages are appended to this report):

Page Reference	Description of Revisions
ES (iii)	Updates to the calculated charges and the table summarizing the costs to be incurred over the life of the by-law.
ES (iii) & (iv)	Updates to the summary of costs to be incurred over the life of the by-law.
ES (v)	Revised Table ES-1, Schedule of Development Charges
1-3	Revised Figure 1-1 to include the release of addendum report #1 and #2.
5-5	Revised figures to align with reduced capital costs for the provision for additional recreation facility space.
5-7	Updated capital project listing for indoor recreation facilities.
5-32	Revised figures to align with additional wastewater project in North Caledonia.
5-33	Updated capital project listing for wastewater services.
6-2	Updated Table 6-1 to reflect the changes to the capital project listings.
6-4	Updated Table 6-3 to reflect the changes to the capital project listings.
6-5	Updated Table 6-4 to reflect the changes to the capital project listings.
6-6	Updated Table 6-5 to reflect the changes to the capital project listings.
C-4	Updated operating and capital expenditure impacts for future capital expenditures table to reflect revised capital project listings.
E-9 & E-10	Revised wording for Local Service Policy to reflect that water and wastewater projects servicing primarily industrial lands will be included in the D.C. (Note: All Appendix E pages are attached due to changes in page numbering)
F-4	Revised wording to reflect the changes to the capital expenditures.
F-5	Updated asset management summary table.
G-17	Updated Schedule B to by-law to reflect re-calculated residential development charges.
G-18	Updated Schedule C to by-law to reflect re-calculated non-residential development charges.



3. Process for the Adoption of the Development Charges By-law

Sections 1 & 2 provide for a summary of the revisions to the County's D.C. Background Study. If Council is satisfied with the above changes to the Background Study and based on the public submissions made at the public meeting, this addendum report #2 will be considered for approval by Council.



Amended Pages



process and anticipates passing a new by-law in advance of the expiry date. The mandatory public meeting has been set for April 16, 2019 with adoption of the by-law on May 13, 2019.

6. The County's D.C.s currently in effect are \$12,125 for single detached dwelling units for full services. Non-residential charges are \$3.07 per square foot for full services. This report has undertaken a recalculation of the charge based on future identified needs (presented in Schedule ES-1 for residential and non-residential). Charges have been provided on a County-wide basis for all non water/wastewater/stormwater services and on an urban-area basis for all water, wastewater, and stormwater services. The corresponding single detached unit charge is \$19,981. The non-residential charge is \$5.04 per square foot of building area (\$54.25 per sq.m). These rates are submitted to Council for its consideration.
7. The D.C.A. requires a summary be provided of the gross capital costs and the net costs to be recovered over the life of the by-law. This calculation is provided by service and is presented in Table 6-5. A summary of these costs is provided below:

Total gross expenditures planned over the next five years	\$ 104,292,398
Less:	
Benefit to existing development	\$ 29,881,971
Post planning period benefit	\$ 21,677,664
Amount already funded from reserve fund	\$ 9,408
Mandatory 10% deduction for certain services	\$ 1,342,395
Grants, subsidies and other contributions	\$ -
Net Costs to be recovered from development charges	\$ 51,380,960

Hence, \$53.91 million (or an annual amount of \$10.58 million) will need to be contributed from taxes and rates, or other sources. Of this amount, \$21.68 million will be included in subsequent D.C. study updates to reflect the portion of capital that benefits growth anticipated to occur outside of the D.C. forecast periods.

Based on the above table, the County plans to spend \$104.29 million over the next five years, of which \$51.38 million (49%) is recoverable from D.C.s. Of this net amount, \$41.47 million is recoverable from residential development and



\$9.91 million from non-residential development. It is noted also that any exemptions or reductions in the charges would reduce this recovery further.

8. Considerations by Council – The background study represents the service needs arising from residential and non-residential growth over the forecast periods.

The following services are calculated based on an urban 20-year forecast:

- Stormwater Drainage and Control Services;
- Wastewater Services; and
- Water Services.

The following services are calculated based on a 20-year forecast:

- Services Related to a Highway;
- Public Works Facilities, Fleet & Equipment; and
- Fire Protection Services.

All other services are calculated based on a 10-year forecast. These include:

- Parking;
- Indoor and Outdoor Recreation Services;
- Library Services;
- Administration (studies);
- Waste Diversion;
- Cemeteries; and
- Ambulance.

Council will consider the findings and recommendations provided in the report and, in conjunction with public input, approve such policies and rates it deems appropriate. These directions will refine the draft D.C. by-law which is appended in Appendix G. These decisions may include:

- adopting the charges and policies recommended herein;
- considering additional exemptions to the by-law; and
- considering reductions in the charge by class of development (obtained by removing certain services on which the charge is based and/or by a general reduction in the charge).



Table ES-1
Haldimand County
Schedule of Development Charges

Service	RESIDENTIAL					NON-RESIDENTIAL	
	Single and Semi-Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	Special Care/Special Dwelling Units	(per sq.ft. of Gross Floor Area)	(per sq.m. of Gross Floor Area)
Municipal Wide Services:							
Services Related to a Highway	1,970	1,469	946	1,817	749	0.78	8.40
Public Works	238	178	114	220	90	0.10	1.08
Fire Protection Services	690	515	331	637	262	0.29	3.12
Parking Services	91	68	44	84	35	0.04	0.43
Indoor & Outdoor Recreation Services	7,150	5,333	3,432	6,596	2,718	0.44	4.74
Library Services	1,132	844	543	1,044	430	0.07	0.75
Administration	225	168	108	208	86	0.09	0.97
Cemeteries	70	52	34	65	27	0.03	0.32
Ambulance	235	175	113	217	89	0.10	1.08
Waste Diversion	163	122	78	150	62	0.02	0.22
Total Municipal Wide Services	11,964	8,924	5,743	11,038	4,548	1.96	21.10
Urban Services							
Stormwater Drainage and Control Services	121	90	58	112	46	0.05	0.54
Wastewater Services	5,930	4,423	2,847	5,471	2,254	2.27	24.43
Water Services	1,966	1,466	944	1,814	747	0.76	8.18
Total Urban Services	8,017	5,979	3,849	7,397	3,047	3.08	33.15
GRAND TOTAL RURAL AREA	11,964	8,924	5,743	11,038	4,548	1.96	21.10
GRAND TOTAL URBAN AREA	19,981	14,903	9,592	18,435	7,595	5.04	54.25



Figure 1-1
Schedule of Key D.C. Process Dates for the County of Haldimand

1. Data collection, staff review, D.C. calculations, and policy work	September to December 2018
2. Council Workshop	January 15, 2019
3. Stakeholder meeting	March 21, 2019
4. Background study and proposed by-law available to public	March 5, 2019
5. Public meeting advertisement placed in newspaper(s)	No later than March 26, 2019
6. Release of Addendum Report #1	April 8, 2019
7. Public meeting of Council	April 16, 2019
8. Release of Addendum Report #2	May 2, 2019
9. Council considers adoption of background study and passage of by-law	May 13, 2019
10. Newspaper notice given of by-law passage	By 20 days after passage
11. Last day for by-law appeal	40 days after passage
12. County makes pamphlet available (where by-law not appealed)	By 60 days after in force date



The County has provided for the need to collect for several outstanding debt payment obligations. These growth-related principal and discounted interest payments relate to the Haldimand County Caledonia Centre, Dunnville arena, and Cayuga arena. Additionally, the County has included a provision for additional recreation facility space in the amount of \$7.5 million. The County is undertaking a review of the appropriate type of facility space to construct; however, no decision has been made at this time. The total gross capital cost of these projects is \$13,374,736. As the debt payments included reflect only the growth-related portions of the debt and the additional facility space is a provision, no benefit to existing or 10% mandatory deductions have been applied. The net growth capital cost after the mandatory 10% deduction for the provision for additional facility space is \$12,624,736. This amount has been included in the D.C. calculations.

While indoor and outdoor recreation service usage is predominately residential-based, there is some use of facility space and outdoor recreation space by non-residential users. To acknowledge this use, the growth-related capital costs have been allocated 95% residential and 5% non-residential.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Indoor Recreation Facilities

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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
	2019-2028											95%	5%
	Arenas												
1	HCCC Growth-Related Debt Charges (Principal)	2019-2028	749,890	-		749,890	-		749,890		749,890	712,396	37,495
2	HCCC Growth-Related Debt Charges (Interest Discounted)	2019-2028	38,786	-		38,786	-		38,786		38,786	36,847	1,939
3	Dunville Arena Growth-Related Debt Charges (Principal)	2019-2033	1,728,900	-		1,728,900	-		1,728,900		1,728,900	1,642,455	86,445
4	Dunville Arena Growth-Related Debt Charges (Interest Discounted)	2019-2033	286,153	-		286,153	-		286,153		286,153	271,846	14,308
5	Cayuga Arena Growth-Related Debt Charges (Principal)	2019-2033	2,634,900	-		2,634,900	-		2,634,900		2,634,900	2,503,155	131,745
6	Cayuga Arena Growth-Related Debt Charges (Interest Discounted)	2019-2033	436,107	-		436,107	-		436,107		436,107	414,302	21,805
7	Provision for Additional Recreation Facility Space	2019-2028	7,500,000			7,500,000	-		7,500,000	750,000	6,750,000	6,412,500	337,500
	Total		13,374,736	-	-	13,374,736	-	-	13,374,736	750,000	12,624,736	11,993,499	631,237



5.4.3 Wastewater Services

A number of wastewater projects have been identified for inclusion in the D.C. background study including technical reviews and studies, sewer manhole repairs and rehabilitations, growth-related debt payments, a forcemain twinning, and a number of plant-related capital improvements.

An upgrade project at the Caledonia wastewater treatment plant in the amount of \$45 million has been identified to service growth. This project will add an additional 7,000 cu.m per day and is anticipated to service new units only. The additional capacity equates to approximately 20,000 people. As the urban 20-year forecast provides for approximately 8,500 people, approximately 58% of the total cost of the project will benefit growth outside of the forecast. This results in a \$26.12 million deduction being applied for post-period benefit. The net growth-related capital cost associated with this project is \$18,915,204. This amount has been included in the D.C. calculations.

The total gross capital cost of all identified projects is \$91,407,384, including the recovery of the reserve fund deficit of \$4,559,148. A total post period benefit amount of \$32,726,796 has been deducted from the calculations. A further deduction of \$20,689,910 has been applied for the amount of the capital works that benefits existing development. The resulting net growth-related capital cost included in the D.C. calculations is \$37,990,678.

The growth-related costs have been allocated between residential and non-residential development based the anticipated growth over the 20-year urban forecast period. This results in a 76% allocation to residential and a 24% allocation to non-residential.



Infrastructure Costs Included in the Development Charges Calculation

Haldimand County
Service: Wastewater Services

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	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	Non-Residential Share
										76%	24%
2019-2038											
Technical Reviews and Studies											
1	Inflow & Infiltration Program Support	2019-2028	290,000	-	-	290,000	246,500	-	43,500	33,060	10,440
2	SCADA Master Plan Optimization	2021	35,000	-	-	35,000	26,600	-	8,400	6,384	2,016
3	SCADA Master Plan Optimization	2026	35,000	-	-	35,000	26,600	-	8,400	6,384	2,016
4	Janvis - Master Servicing Plan Update	2023	15,000	-	-	15,000	-	-	15,000	11,400	3,600
5	Cayuga - Master Servicing Plan Update	2022	25,000	-	-	25,000	-	-	25,000	19,000	6,000
6	Cayuga - Master Servicing Plan Update	2027	25,000	-	-	25,000	-	-	25,000	19,000	6,000
7	Caledonia - Master Servicing Plan Update	2023	50,000	-	-	50,000	-	-	50,000	38,000	12,000
8	Hagersville - Master Servicing Plan Update	2020	25,000	-	-	25,000	-	-	25,000	19,000	6,000
9	Hagersville - Master Servicing Plan Update	2025	25,000	-	-	25,000	-	-	25,000	19,000	6,000
10	Dunnville - Master Servicing Plan Update	2021	30,000	-	-	30,000	-	-	30,000	22,800	7,200
11	Dunnville - Master Servicing Plan Update	2026	30,000	-	-	30,000	-	-	30,000	22,800	7,200
Replacement & Upgrade Projects											
12	Sewer Manhole Repairs (I&I)	2019-2027	375,000	-	-	375,000	318,750	-	56,250	42,750	13,500
13	Sanitary Sewer Rehabilitations (I&I)	2020-2028	1,000,000	-	-	1,000,000	850,000	-	150,000	114,000	36,000
14	Janvis - Walpole St - Sewer Pipe Upsize (Peel to Talbot)	2019	97,000	-	-	97,000	58,200	-	38,800	29,488	9,312
Wastewater Plants											
15	Caledonia Water Pollution Control Plant - Balloon Payment Re-issuance Growth-related Principal	2019-2023	982,800	-	-	982,800	-	-	982,800	746,928	235,872
16	Caledonia Water Pollution Control Plant - Balloon Payment Re-issuance Growth-related Discounted Interest	2019-2023	50,834	-	-	50,834	-	-	50,834	38,634	12,200
17	Hagersville Wastewater Treatment Plant - Debt Charges - Growth-related Principal	2019-2020	702,350	-	-	702,350	-	-	702,350	533,786	168,564
18	Hagersville Wastewater Treatment Plant - Growth-related Discounted Interest	2019-2020	23,195	-	-	23,195	-	-	23,195	17,628	5,567
19	Janvis Lagoon Upgrades Growth Related Debt Charges (Principal)	2019-2027	111,248	-	-	111,248	-	-	111,248	84,548	26,699
20	Janvis Lagoon Upgrades Growth Related Debt Charges (Interest)	2019-2027	2,480	-	-	2,480	-	-	2,480	1,885	595
21	Caledonia WWTP Upgrades Growth Related Debt Charges (Principal)	2019-2027	570,021	-	-	570,021	-	-	570,021	433,216	136,805
22	Caledonia WWTP Upgrades Growth Related Debt Charges (Interest)	2019-2027	12,708	-	-	12,708	-	-	12,708	9,658	3,050
23	Plant Capital Improvements	2024-2028	13,852,500	-	-	13,852,500	13,644,500	-	208,000	158,080	49,920
24	Plant Optimization Program Support	2019-2020	90,000	-	-	90,000	76,500	-	13,500	10,260	3,240
25	SCADA Maintenance	2019-2028	200,000	-	-	200,000	152,000	-	48,000	36,480	11,520
26	SCADA Technical Support	2019-2028	400,000	-	-	400,000	304,000	-	96,000	72,960	23,040
27	Pump Station Repairs/Replacement	2021-2022	700,000	-	-	700,000	630,000	-	70,000	53,200	16,800
Sewer Operations Administration											
28	Effluent Water Quality & Impact Assessments	2019-2028	350,000	-	-	350,000	-	-	350,000	266,000	84,000
Caledonia Sewer											
29	Sludge Storage Tank Retrofit	2020	175,000	-	-	175,000	87,500	-	87,500	66,500	21,000
30	WWTP Wet Well Expansion	2019-2020	1,447,600	-	-	1,447,600	-	-	1,447,600	1,100,176	347,424
31	Caledonia Wastewater Treatment Plant	2019-2027	45,036,200	26,120,996	-	18,915,204	-	-	18,915,204	14,375,555	4,539,649
32	WWTP PLC Upgrade/Replacements	2028	115,000	-	-	115,000	87,400	-	27,600	20,976	6,624
33	North Caledonia Pump Station and Force-main	2030-2038	8,300,000	821,500	-	7,478,500	85,000	-	7,393,500	5,619,060	1,774,440
Jarvis Sewer											
34	Additional Wastewater Treatment Capacity	2019	6,356,400	5,784,300	-	572,100	-	-	572,100	434,796	137,304
Hagersville Sewer											
35	Grit Removal System	2021	1,016,700	-	-	1,016,700	700,000	-	316,700	240,692	76,008
36	Digester Covers and Insulation	2021	450,000	-	-	450,000	360,000	-	90,000	68,400	21,600
37	Remotes - Control Equipment Replacement (SCADA)	2020-2022	112,000	-	-	112,000	85,120	-	26,880	20,429	6,451
38	WWTP PLC Upgrade/Replacements	2027-2028	290,000	-	-	290,000	220,400	-	69,600	52,896	16,704
Cayuga Sewer											
39	Cayuga-Ouse St Force Main Twinning	2019-2020	337,700	-	-	337,700	226,300	-	111,400	84,664	26,736
40	Ouse St. PS Replacements	2019-2020	1,441,500	-	-	1,441,500	1,095,540	-	345,960	262,930	83,030
41	Remotes - Control Equipment Replacement (SCADA)	2019-2020	70,000	-	-	70,000	63,000	-	7,000	5,320	1,680
42	WWTP PLC Upgrade/Replacements	2024	160,000	-	-	160,000	121,600	-	38,400	29,184	9,216
43	McKay St. Pump Station Upgrades and Pump Replacements	2019	190,000	-	-	190,000	171,000	-	19,000	14,440	4,560
Dunnville Sewer											
	Remotes - Control Equipment Replacement (SCADA)	2021	140,000	-	-	140,000	106,400	-	33,600	25,536	8,064
44	Digester Cover and Insulation	2023	475,000	-	-	475,000	380,000	-	95,000	72,200	22,800
45	John St. Pump Station Upgrades	2019-2020	630,000	-	-	630,000	567,000	-	63,000	47,880	15,120
Townsend Sewer											
	Reserve Fund Adjustment		4,559,148	-	-	4,559,148	-	-	4,559,148	3,464,953	1,094,196
Total			91,407,384	32,726,796	-	58,680,588	20,689,910	-	37,990,678	28,872,915	9,117,763



Table 6-1
Haldimand County
Development Charge Calculation
Urban Services
2019 to 2038

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
1. <u>Stormwater Drainage and Control Services</u>				
1.1 Channels, drainage and ponds	586,894	185,335	121	0.05
	586,894	185,335	121	0.05
2. <u>Wastewater Services</u>				
2.1 Wastewater Services	28,872,915	9,117,763	5,930	2.27
	28,872,915	9,117,763	5,930	2.27
3. <u>Water Services</u>				
3.1 Water Services	9,569,732	3,022,021	1,966	0.76
	9,569,732	3,022,021	1,966	0.76
TOTAL	\$39,029,541	\$12,325,118	\$8,017	\$3.08
D.C.-Eligible Capital Cost	\$39,029,541	\$12,325,118		
Buildout Gross Population/GFA Growth (sq.ft.)	14,137	3,995,700		
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$2,761	\$3.08		
By Residential Unit Type				
	P.P.U.			
Single and Semi-Detached Dwelling	2.904	\$8,017		
Apartments - 2 Bedrooms +	2.166	\$5,980		
Apartments - Bachelor and 1 Bedroom	1.394	\$3,849		
Other Multiples	2.679	\$7,396		
Special Care/Special Dwelling Units	1.104	\$3,048		



Table 6-3
Haldimand County
Development Charge Calculation
County-wide Services
2019 to 2028

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
6. <u>Parking Services</u>				
6.1 Parking Services	227,322	84,078	91	0.04
	227,322	84,078	91	0.04
7. <u>Indoor & Outdoor Recreation Services</u>				
7.1 Parkland development, amenities & trails	5,781,417	304,285	2,325	0.14
7.2 Parks vehicles and equipment	-	-	-	-
7.3 Recreation facilities	11,993,499	631,237	4,825	0.30
	17,774,916	935,522	7,150	0.44
8. <u>Library Services</u>				
8.1 Library facilities	2,814,950	148,155	1,132	0.07
	2,814,950	148,155	1,132	0.07
9. <u>Administration</u>				
9.1 Studies	558,368	206,520	225	0.09
10. <u>Cemeteries</u>				
10.1 Cemeteries	174,119	64,400	70	0.03
	174,119	64,400	70	0.03
11. <u>Ambulance</u>				
11.1 Ambulance facilities	438,286	162,106	176	0.07
11.2 Vehicles	147,825	54,675	59	0.03
	586,111	216,781	235	0.10
12. <u>Waste Diversion</u>				
12.1 Waste diversion facilities, vehicles, equipment and other	405,000	45,000	163	0.02
	405,000	45,000	163	0.02
TOTAL	\$22,540,786	\$1,700,456	\$9,066	\$0.79
D.C.-Eligible Capital Cost	\$22,540,786	\$1,700,456		
10-Year Gross Population/GFA Growth (sq.ft.)	7,220		2,185,900	
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$3,121.99	\$0.78		
By Residential Unit Type				
	P.P.U.			
Single and Semi-Detached Dwelling	2.904	\$9,066		
Apartments - 2 Bedrooms +	2.166	\$6,762		
Apartments - Bachelor and 1 Bedroom	1.394	\$4,352		
Other Multiples	2.679	\$8,364		
Special Care/Special Dwelling Units	1.104	\$3,447		



Table 6-4
Haldimand County
Development Charge Calculation
Total All Services

	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
Urban-wide Services Build out	39,029,541	12,325,118	8,017	3.08
County-wide Services 20 Year	14,847,825	4,688,787	2,898	1.17
County-wide Services 10 Year	22,540,786	1,700,456	9,066	0.79
TOTAL	76,418,152	18,714,361	19,981	5.04



Table 6-5
Haldimand County
Gross Expenditure and Sources of Revenue Summary for Costs to be Incurred over the Life of the By-law

Service	Total Gross Cost	Sources of Financing						
		Tax Base or Other Non-D.C. Source				Post D.C. Period Benefit	D.C. Reserve Fund	
		Other Deductions	Benefit to Existing	Other Funding	Legislated Reduction		Residential	Non-Residential
1. Stormwater Drainage and Control Services 1.1 Channels, drainage and ponds	105,000	0	0	0	0	0	79,800	25,200
2. Wastewater Services 2.1 Wastewater Services	42,347,889	0	5,539,271	0	0	20,295,964	12,549,616	3,963,037
3. Water Services 3.1 Water Services	14,659,867	0	8,009,248	0	0	1,381,700	4,004,378	1,264,541
4. Services Related to a Highway 4.1 Services Related to a Highway 4.2 Public Works	21,264,910 780,000	0 0	10,182,550 250,000	0 0	0 0	0 0	8,422,594 402,800	2,659,766 127,200
5. Fire Protection Services 5.1 Fire facilities 5.2 Fire vehicles 5.3 Small equipment and gear	4,189,128 1,440,000 25,000	0 0 0	2,473,800 0 0	0 0 0	0 0 0	0 0 0	1,303,649 1,094,400 19,000	411,679 345,600 6,000
6. Parking Services 6.1 Parking Services	173,000	0	0	0	17,300	0	113,661	42,039
7. Indoor & Outdoor Recreation Services 7.1 Parkland development, amenities & trails 7.2 Parks vehicles and equipment 7.3 Recreation facilities	4,965,000 0 5,839,691	0 0 0	0 0 0	0 0 0	496,500 0 375,000	0 0 0	4,245,075 0 5,191,457	223,425 0 273,235
8. Library Services 8.1 Library facilities	5,315,444	9,408	2,119,052	0	274,400	0	2,766,955	145,629
9. Administration 9.1 Studies	755,000	0	231,250	0	52,375	0	344,104	127,271
10. Cemeteries 10.1 Cemeteries	235,000	0	0	0	23,500	0	154,395	57,105
11. Ambulance 11.1 Ambulance facilities 11.2 Vehicles	1,722,469 225,000	0 0	1,076,800 0	0 0	55,820 22,500	0 0	430,590 147,825	159,259 54,675
12. Waste Diversion 12.1 Waste diversion facilities, vehicles, equipment and other	250,000	0	0	0	25,000	0	202,500	22,500
Total Expenditures & Revenues	\$104,292,398	\$9,408	\$29,881,971	\$0	\$1,342,395	\$21,677,664	\$41,472,799	\$9,908,161



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

SERVICE	GROSS COST LESS BENEFIT TO EXISTING	ANNUAL LIFECYCLE EXPENDITURES	ANNUAL OPERATING EXPENDITURES	TOTAL ANNUAL EXPENDITURES
1. Stormwater Drainage and Control Services				
1.1 Channels, drainage and ponds	772,229	-	111,132	111,132
2. Wastewater Services				
2.1 Wastewater Services	70,717,474	1,919,754	1,830,826	3,750,580
3. Water Services				
3.1 Water Services	17,333,092	395,655	2,803,261	3,198,916
4. Services Related to a Highway				
4.1 Services Related to a Highway	13,284,274	363,885	8,222,314	8,586,199
4.2 Public Works	1,603,445	80,418	992,454	1,072,872
5. Fire Protection Services				
5.1 Fire facilities	3,108,893	85,685	822,812	908,497
5.2 Fire vehicles	1,440,000	74,155	381,116	455,271
5.3 Small equipment and gear	100,000	10,583	26,466	37,049
6. Parking Services				
6.1 Parking Services	346,000	11,010	729	11,739
7. Indoor & Outdoor Recreation Services				
7.1 Parkland development, amenities & trails	6,885,322	254,462	426,952	681,414
7.2 Parks vehicles and equipment	-	-	-	-
7.3 Recreation facilities	13,374,736	238,670	829,354	1,068,024
8. Library Services				
8.1 Library facilities	3,325,708	201,398	245,763	447,161
9. Administration				
9.1 Studies	842,763	-	-	-
10. Cemeteries				
10.1 Cemeteries	282,019	12,592	54,160	66,752
11. Ambulance				
11.1 Ambulance facilities	656,212	16,125	662,327	678,452
11.2 Vehicles	225,000	30,714	227,097	257,811
12. Waste Diversion				
12.1 Waste diversion facilities, vehicles, equipment and other	500,000	18,280	258,108	276,388
Total	134,797,167	3,713,386	17,894,871	21,608,257



Appendix E

Local Service Policy



Appendix E: Local Service Policy

This Appendix sets out the Municipality's General Policy Guidelines on Development Charges (D.C.) and local service funding for Services Related to a Highway, Stormwater Management, Parkland Development, and Underground Linear Services. The guidelines outline, in general terms, the nature of engineered infrastructure that is included in the study as a development charge project, versus infrastructure that is considered as a local service, to be emplaced separately by benefitting landowners, pursuant to a development agreement (e.g. pre-servicing, subdivision, site plan).

The following policy guidelines are general principles by which staff will be guided in considering development applications. The guidelines are summarized in a schematic as attached Figure E-1. However, each application will be considered, in the context of these policy guidelines as subsection 59(2) of the Development Charges Act, 1997.

A. Services Related to a Highway

A highway and services related to a highway are intended for the transportation of people and goods via many different modes including, but not limited to passenger automobiles, commercial vehicles, transit vehicles, bicycles and pedestrians. The highway shall consist of all land and associated infrastructure built to support (or service) this movement of people and goods regardless of the mode of transportation employed, thereby achieving a complete street. A complete street is the concept whereby a highway is planned, designed, operated and maintained to enable pedestrians, cyclists, public transit users and motorists to safely and comfortably be moved, thereby allowing for the efficient movement of persons and goods. The County has 3 classifications of roads – Arterial, Collector and Local – which are defined in the County Official Plan and area Master Servicing Plans.

The associated infrastructure to achieve this concept shall include, but is not limited to: road pavement structure and curbs; grade separation/bridge structures (for any vehicles, railways and/or pedestrians); grading, drainage and retaining wall features; culvert structures; storm water drainage systems; utilities; traffic control systems; signage; gateway features; street furniture; active transportation facilities (e.g. pedestrian crossovers, cross-walks, sidewalks, bike lanes, multi-use trails which interconnect the transportation network, etc.); transit lanes & lay-bys; roadway illumination systems; boulevard and median surfaces (e.g. sod & topsoil, paving, etc.);



street trees and landscaping; parking lanes & lay-bys; (excluding on-street parking in the downtown) and driveway entrances; noise attenuation systems; railings and safety barriers.

1) Local and Collector Roads (including land)

- a) Collector Roads Internal to Development, inclusive of all land and associated infrastructure – direct developer responsibility under s.59 of the D.C.A. as a local service.
- b) Collector Roads External to Development, inclusive of all land and associated infrastructure – if needed to support a specific development or required to link with the area to which the plan relates, direct developer responsibility under s.59 of the D.C.A.; otherwise, included in D.C. calculation to the extent permitted under s.5(1) of the D.C.A.
- c) All local and collector roads are considered to be the developer's responsibility.

2) Arterial Roads

- a) New, widened, extended or upgraded arterial roads, inclusive of all associated infrastructure: Included as part of road costing funded through D.C.A., s.5(1); unless a requirement of specific development;
- b) Land acquisition for arterial roads on existing rights-of-way to achieve a complete street: dedication under the Planning Act provisions (s. 41, 51 and s. 53) through development lands; in area with limited development: included in D.C.s.
- c) Land acquisition for arterial roads on new rights-of-way to achieve a complete street: dedication, where possible, under the Planning Act provisions (s. 51 and s. 53) through development lands up to the ROW specified in the Official Plan: included in D.C.s.
- d) Land acquisition beyond normal dedication requirements to achieve transportation corridors as services related to highways including grade separation infrastructure for the movement of pedestrians, cyclists, public transit and/or railway vehicles: included in D.C.s.

3) Traffic Control Systems, Signals and Intersection Improvements



- a) On new arterial roads and arterial road improvements unrelated to a specific development: included as part of road costing funded through D.C.'s.; if it is a requirement of specific development, would be developer's responsibility;
- b) On non-arterial roads (collector or local), or for any private site entrances or entrances to specific development: direct developer responsibility under s.59 of D.C.A.: recovered as a local service.
- c) On arterial or collector road intersections with provincial highways: direct developer responsibility under s.59 of D.C.A. (as a local service).
- d) Intersection improvements, new or modified signalization, signal timing & optimization plans, area traffic studies for highways attributed to growth and unrelated to a specific development: included in D.C. calculation as permitted under s.5(1) of the D.C.A.

4) Streetlights

- a) Streetlights on new arterial roads and arterial road improvements: considered part of the complete street and included as part of the road costing funded through D.C.'s, may be direct developer responsibility through local service provisions (s.59 of D.C.A.).
- b) Streetlights on non-arterial roads internal to development: considered part of the complete street and included as a direct developer responsibility under s. 59 of the D.C.A. (as a local service).
- c) Streetlights on non-arterial roads external to development, needed to support a specific development or required to link with the area to which the plan relates: considered part of the complete street and included as a direct developer responsibility under s. 59 of the D.C.A. (as a local service).

5) Transportation Related Pedestrian and Cycling Facilities

- a) Pedestrian crossovers, sidewalks, multi-use trails, cycle tracks, and bike lanes, inclusive of all required infrastructure, located within arterial roads and provincial highway corridors: considered part of the complete street and included in D.C.'s,



or, , may be direct developer responsibility through local service provisions (s.59 of D.C.A.).

- b) Sidewalks, multi-use trails, cycle tracks, and bike lanes, inclusive of all required infrastructure, located within or linking to non-arterial road corridors internal to development: considered part of the complete street and is a direct developer responsibility through local service provisions (s.59 of D.C.A.).
- c) Other sidewalks, multi-use trails, cycle tracks, and bike lanes, inclusive of all required infrastructure, located within non-arterial road corridors external to development and needed to support a specific development or required to link with the area to which the plan relates: direct developer responsibility under s.59 of D.C.A. (as a local service).

6) Noise Abatement Measures

- a) Noise abatement measures external and internal to development where it is related to, or a requirement of a specific development: direct developer responsibility under s.59 of D.C.A. (as a local service).
- b) Noise abatement measures on new arterial roads and arterial road improvements abutting an existing community and unrelated to a specific development: included as part of road costing funded through D.C.'s.

B. PARKLAND DEVELOPMENT

1) RECREATIONAL TRAILS

- a) Recreational trails (Multi-use trails) that do not form part of the municipality's active transportation network, and their associated infrastructure (landscaping, bridges, trail surface, etc.), is included in area municipal parkland D.C.'s.

2) PARKLAND

- a) Parkland Development for Community Parks and Neighbourhood Parks: direct developer responsibility to provide at base condition, as follows:
 - Clearing and grubbing. Tree removals as per the subdivision's tree preservation and removals plan.



- Topsoil Stripping, screening, and stockpiling.
- Rough grading (pre-grading) to allow for positive drainage of the Park, with minimum slopes based on the County's requirement/standard. If necessary, this may include some minor drainage tile work and grading as per the overall subdivision grading design complete with any required swales or catch basins. Runoff from the development property shall not drain into the park unless approved by the Manager, Environmental Operations, Public Works Operations.
- Spreading of topsoil to the County's required depth (import topsoil if existing on-site is insufficient to reach required depth).
- Seeding of site with Municipality-approved seed mix. Maintenance of seed until acceptance by Municipality.
- Parks shall be free of any contaminated soil or subsoil.
- Parks shall not be mined for fill.
- Parks shall be conveyed free and clear of all encumbrances.
- 100% of County approved perimeter fencing to the Municipal standards to separate the development lands from the Municipal lands or lands to be dedicated to the Municipality, unless the perimeter fencing is on land that will be dedicated to the Municipality to fulfil the requirement of parkland dedication under the Planning Act, in which case the cost shall be shared 50/50.
- When Park parcels cannot be developed in a timely manner, they shall be graded to ensure positive drainage and seeded to minimize erosion and dust. These shall be maintained by the developer until construction commences thereon.
- The Park block shall not be used for topsoil or other construction material, equipment storage, or sales pavilions.
- Required heritage features within the Park as set out within the Planning approval conditions.



b) Program facilities, amenities, and furniture, within parkland: are included in D.C.'s.

3) LANDSCAPE BUFFER BLOCKS, FEATURES, CUL-DE-SAC ISLANDS, BERMS, GRADE TRANSITION AREAS, WALKWAY CONNECTIONS TO ADJACENT ARTERIAL ROADS, OPEN SPACE, ETC.

a) The cost of developing all landscape buffer blocks, landscape features, cul-de-sac islands, berms, grade transition areas, walkway connections to adjacent arterial roads, open space and other remnant pieces of land conveyed to the municipality shall be a direct developer responsibility as a local service. Such costs include but are not limited to:

- pre-grading, sodding or seeding, supply and installation of amended topsoil, (to the Municipality's required depth), landscape features, perimeter fencing and amenities and all planting.
- Perimeter fencing to the Municipal standard located on the private property side of the property line adjacent land uses (such as but not limited to arterial roads) as directed by the Municipality.

4) NATURAL HERITAGE SYSTEM (N.H.S.)

N.H.S. includes engineered and in situ stream corridors, natural buffers for woodlots, wetland remnants, etc. as well as subwatersheds within the boundaries of the Municipality.

Direct developer responsibility as a local service provision including but not limited to the following:

- a) Riparian planting and landscaping requirements (as required by the Municipality, Conservation Authority or other authorities having jurisdiction) as a result of creation of, or construction within in the N.H.S. and associated buffers.
- b) Perimeter fencing of the N.H.S. to the Municipal standard located on the private property side of the property line adjacent land uses (residential, industrial, commercial) as required by the Municipality.



- c) All works to be in conformance with the requirements of the local Conservation Authority for stream corridors, natural buffers and subwatersheds areas as directed by the approved studies and reports related to any approved Plan that development occurs in.

Infrastructure Assets Constructed by Developers

- a) All infrastructure assets constructed by Developers must be designed in accordance with the Haldimand County Engineering Design Criteria and Haldimand County Trails Master Plan & Partnership Framework Study as revised
- b) All infrastructure assets shall be conveyed in accordance Haldimand County Engineering Design Criteria and Haldimand County Trails Master Plan & Partnership Framework Study as revised
- c) Any Parks and Open Space infrastructure assets approved to be built by the developer on behalf of the Municipality shall be in accordance with the Haldimand County Engineering Design Criteria and Haldimand County Trails Master Plan & Partnership Framework Study as revised.

C. Underground Services (Stormwater, Water and Sanitary Sewers)

Underground services (linear infrastructure for stormwater, stormwater management facilities, water, and sanitary services) within the road allowance are not included in the cost of road infrastructure and are treated separately. The responsibility for such services as well as stormwater management facilities and pumping stations, which are undertaken as part of new developments or redevelopments, will be determined by the following principles:

Water

The costs of the following items shall be direct developer responsibilities as a local service:

- a) providing all underground services internal to the development;
- b) providing service connections from existing underground services to the development;



- c) providing new underground services or upgrading existing underground services external to the development if the services are required to service the development, If external services are required by two or more developments, the developer for the first development will be responsible for the cost of the external services and the County will include Best Efforts clauses in subsequent development agreements; and
- d) water booster pumping stations, reservoir pumping stations, and transmission mains servicing developments in one basin area unless the project services primarily industrial lands within the basin area.

The costs of the following items shall be paid through development charges:

- a) external underground services involving trunk infrastructure and pipes;
- b) water and reservoir pumping stations servicing multiple basin areas; and
- c) water treatment, storage facilities, re- chlorination/sampling stations and upstream capacity improvements associated with multiple basin areas.
- d) water treatment, storage facilities, re- chlorination/sampling stations and upstream capacity improvements associated with one or more basin areas servicing primarily industrial lands shall be included in the D.C.

Wastewater

The costs of the following items shall be direct developer responsibilities as a local service:

- a) providing all underground services internal to the development;
- b) providing service connections from existing underground services to the development;
- c) providing new underground services or upgrading existing underground services external to the development if the services are required to service the development, if external services are required by two or more developments, the developer for the first development will be responsible for the cost of the external



services and the County will include Best Efforts clauses in subsequent development agreements; and

- d) Sanitary pumping stations, and transmission mains servicing developments in one basin area unless the project services primarily industrial lands within the basin area.

The costs of the following items shall be paid through development charges:

- a) external underground services involving trunk infrastructure and pipes;
- b) sanitary pumping stations servicing multiple basin areas; and
- c) wastewater treatment plants, biosolids, and downstream capacity improvements servicing multiple basin areas shall be included in the D.C.
- d) wastewater treatment plants, biosolids, sanitary pumping stations, and downstream capacity improvements servicing one or more basin areas servicing primarily industrial lands shall be included in the D.C.

Stormwater

The costs of the following items shall be direct developer responsibilities as a local service:

- a) providing all underground services internal to the development;
- b) providing service connections from existing underground services to the development;
- c) providing new underground services or upgrading existing underground services external to the development if the services are required to service the development, if external services are required by two or more developments, the developer for the first development will be responsible for the cost of the external services and the County will include Best Efforts clauses in subsequent development agreements;
- d) providing stormwater facilities for quality and/or quantity management, including downstream erosion works, inclusive of land and all associated infrastructure, such as landscaping and perimeter fencing; and



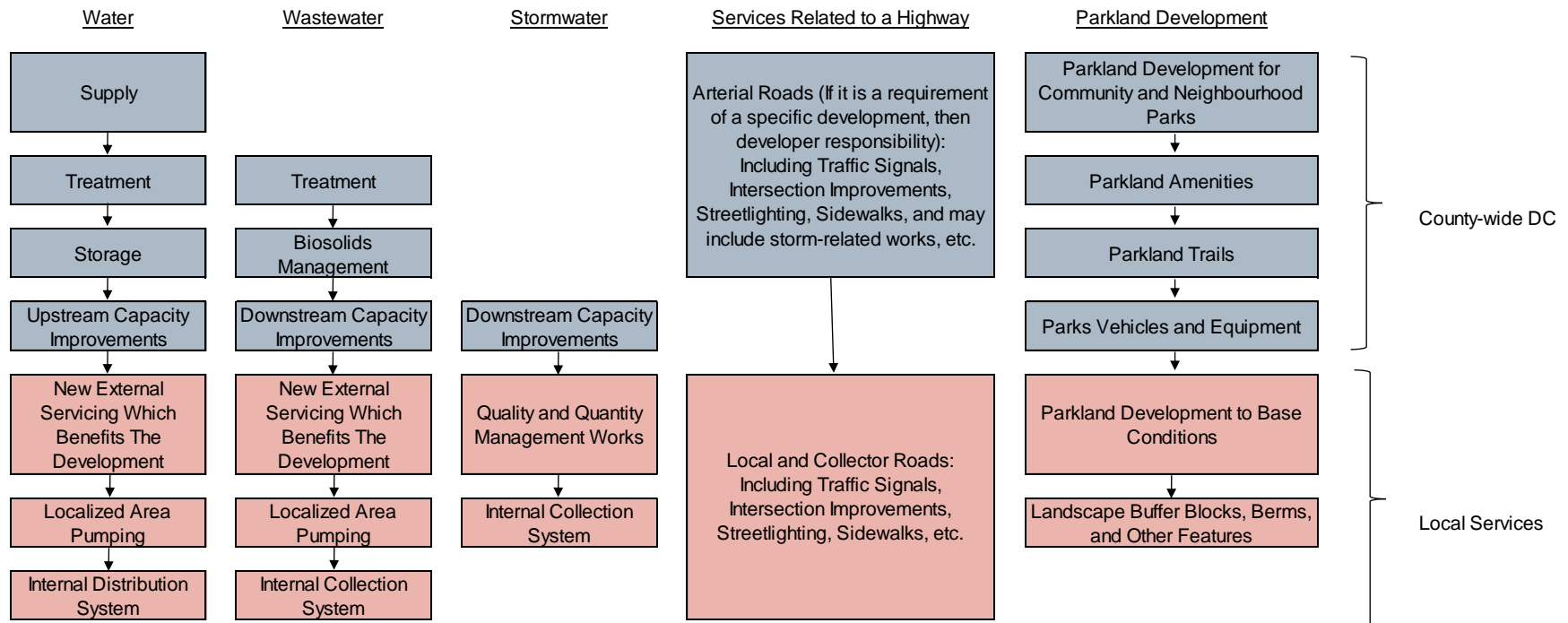
- e) storm sewer systems and drainage works that are required for a specific development, either internal or external to the area to which the plan relates.

The costs of the following items shall be paid through development charges:

- a) external underground services involving linear infrastructure for stormwater services;
- b) over-sizing cost of stormwater facilities capacity, excluding land, to accommodate runoff from new, widened, extended or upgraded municipal arterial roads that are funded as a development charges project; and
- c) Stormwater monitoring works.



Figure E-1 - Development Charge vs. Local Service Works





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.

Commensurate with the above, the County prepared an Asset Management Plan in 2013 for its existing hard services assets and in 2017 for the rest of the County's assets. The 2017 Asset Management Plan did incorporate growth in lifecycle costs, however, all assets proposed to be funded in this study were not included in the plan. As a result, the asset management requirement for the D.C. must be undertaken to supplement this information.

In recognition to the schematic above, 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. As well, as all capital costs included in the D.C. eligible capital costs are not included in the County's Asset Management Plans, the present infrastructure gap and associated funding plan have not been considered at this time. Hence 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 municipal 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 \$29.35 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 \$25.54 million. This amount, totalled with the existing operating revenues of \$142.35 million, provide annual revenues of \$167.89 million by the end of the period.
6. In consideration of the above, the capital plan is deemed to be financially sustainable.

County of Haldimand
 Asset Management – Future Expenditures and Associated Revenues
 2019\$

Asset Management Summary	Sub-Total	2038 (Total)
Expenditures (Annualized)		
Annual Debt Payment on Non-Growth Related Capital ¹		5,040,551
Annual Debt Payment on Post Period Capital ²		2,696,524
Lifecycle:		
Annual Lifecycle - County-Wide Services	\$3,713,386	
Sub-Total - Annual Lifecycle	\$3,713,386	\$3,713,386
Incremental Operating Costs (for D.C. Services)		\$17,894,871
Total Expenditures		\$29,345,332
Revenue (Annualized)		
Total Existing Revenue ³		\$142,349,457
Incremental Tax and Non-Tax Revenue (User Fees, Fines, Licences, etc.)		\$25,539,714
Total Revenues		\$167,889,171

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



Schedule "B"
Residential Development Charges by Service and Unit Type

Service	RESIDENTIAL				
	Single and Semi-Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	Special Care/Special Dwelling Units
Municipal Wide Services:					
Services Related to a Highway	1,970	1,469	946	1,817	749
Public Works	238	178	114	220	90
Fire Protection Services	690	515	331	637	262
Parking Services	91	68	44	84	35
Indoor & Outdoor Recreation Services	7,150	5,333	3,432	6,596	2,718
Library Services	1,132	844	543	1,044	430
Administration	225	168	108	208	86
Cemeteries	70	52	34	65	27
Ambulance	235	175	113	217	89
Waste Diversion	163	122	78	150	62
Total Municipal Wide Services	11,964	8,924	5,743	11,038	4,548
Urban Services					
Stormwater Drainage and Control Services	121	90	58	112	46
Wastewater Services	5,930	4,423	2,847	5,471	2,254
Water Services	1,966	1,466	944	1,814	747
Total Urban Services	8,017	5,979	3,849	7,397	3,047
GRAND TOTAL RURAL AREA	11,964	8,924	5,743	11,038	4,548
GRAND TOTAL URBAN AREA	19,981	14,903	9,592	18,435	7,595



Schedule "C"
 Non-Residential Development Charges by Service and Per Square Foot and Per
 Square Metre of G.F.A.

Service	NON-RESIDENTIAL	
	(per sq.ft. of Gross Floor Area)	(per sq.m. of Gross Floor Area)
Municipal Wide Services:		
Services Related to a Highway	0.78	8.40
Public Works	0.10	1.08
Fire Protection Services	0.29	3.12
Parking Services	0.04	0.43
Indoor & Outdoor Recreation Services	0.44	4.74
Library Services	0.07	0.75
Administration	0.09	0.97
Cemeteries	0.03	0.32
Ambulance	0.10	1.08
Waste Diversion	0.02	0.22
Total Municipal Wide Services	1.96	21.10
Urban Services		
Stormwater Drainage and Control Services	0.05	0.54
Wastewater Services	2.27	24.43
Water Services	0.76	8.18
Total Urban Services	3.08	33.15
GRAND TOTAL RURAL AREA	1.96	21.10
GRAND TOTAL URBAN AREA	5.04	54.25