



2020 Development Charges Background Study

Township of North Dumfries

For Public Circulation and Comment

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

October 14, 2020

Table of Contents

			Page
1.	Intro	duction	
	1.1	Purpose of this Document	
	1.2	Summary of the Process	
	1.3	Changes to the Development Charges Act, 1997: More Homes,	
		More Choice Act (Bill 108) the Plan to Build Ontario Together Act	
		(Bill 138), and the COVID-19 Economic Recovery Act (Bill 197)	1-3
2.	Curre	ent Township of North Dumfries D.C. Policy	2-1
	2.1	By-law Enactment	
	2.2	Services Covered	
	2.3	Timing of D.C. Calculation and Payment	2-1
	2.4	Indexing	
	2.5	Redevelopment Credits	2-2
	2.6	Area to Which the By-law Applies and Exemptions	2-2
3.	Antic	ipated Development in the Township of North Dumfries	3-1
	3.1	Requirement of the Act	
	3.2	Basis of Population, Household and Non-Residential Gross Floor	
		Area Forecast	
	3.3	Summary of Growth Forecast	3-2
4.	The /	Approach to the Calculation of the Charge	4-1
	4.1	Introduction	
	4.2	Services Potentially Involved	4-1
	4.3	Increase in Need for Service	4-2
	4.4	Local Service Policy	
	4.5	Capital Forecast	
	4.6	Treatment of Credits	
	4.7	Classes of Services	
	4.8	Eligible Debt and Committed Excess Capacity	
	4.9	Existing Reserve Funds	4-10

Table of Contents (Cont'd)



Page

	4.10	4.10.1 4.10.2 4.10.3 4.10.4	ons Reduction Required by Level of Service Ceiling Reduction for Uncommitted Excess Capacity Reduction for Benefit to Existing Development Reduction for Anticipated Grants, Subsidies and Other Contributions	4-11 4-11 4-12 4-13
	4.11 4.12	•	al-wide vs. Area Rating on of Development	
5.	5.1	Service Calcula 5.1.1 5.1.2 5.1.3 5.1.4	Charge Eligible Cost Analysis by Service Levels and 11-Year Capital Costs for Township-Wide D.C. tion Fire Protection Services Services Related to a Highway Parks and Recreation Services Growth-Related Studies	5-1 5-1 5-2 5-2 5-3
6.	D.C. C	Calculati	on	6-1
7.	D.C. F 7.1 7.2 7.3	Introduc D.C. By D.C. By 7.3.1 7.3.2 7.3.3	ecommendations and D.C. Policy Rules ction -law Structure -law Rules Payment in any Particular Case Determination of the Amount of the Charge Application to Redevelopment of Land (Demolition and Conversion)	7-1 7-2 7-2 7-2 7-3
	7.4	7.3.4 7.3.5 7.3.6 7.3.7 7.3.8 Other D 7.4.1 7.4.2 7.4.3	Exemptions (full or partial) Phasing in Timing of Collection Indexing D.C. Spatial Applicability C. By-law Provisions Categories of Services/Classes for Reserve Fund and Credit Purposes By-law In-force Date Minimum Interest Rate Paid on Refunds and Charged for Inter-Reserve Fund Borrowing	7-4 7-5 7-6 7-6 7-8 7-8 7-8
		7.4.4	Other Recommendations	
8.	Asset	Manage	ement Plan	8-1
9.	By-lav	v Impler	nentation	9-1

Table of Contents (Cont'd)



Page

9.1	Public (Consultation Process	. 9-1			
	9.1.1	Introduction	. 9-1			
	9.1.2	Public Meeting of Council	. 9-1			
	9.1.3	Other Consultation Activity				
9.2	Anticipa	ated Impact of the Charge on Development	. 9-2			
9.3	Implem	entation Requirements	. 9-3			
	9.3.1	Introduction	. 9-3			
	9.3.2	Notice of Passage	. 9-3			
	9.3.3	By-law Pamphlet	. 9-3			
	9.3.4	Appeals	. 9-4			
	9.3.5	Complaints	. 9-4			
	9.3.6	Credits				
	9.3.7	Front-Ending Agreements				
	9.3.8	Severance and Subdivision Agreement Conditions	. 9-5			
Appendix A	Backg	round Information on Residential and Non-Residential				
Growt	th Fored	cast	A-1			
Appendix B	Histor	ical Level of Service Calculations	B-1			
Appendix C	Cash-l	Flow Calculations	C-1			
Appendix D Long-Term Capital and Operating Cost ExaminationD-1						
Appendix E Local Service PolicyE-1						
Appendix F Proposed Development Charges By-lawF-1						



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.A.I.C.S.	North American Industry Classification System
N.F.P.O.W.	No Fixed Place of Work
O.M.B.	Ontario Municipal Board
O.P.A.	Official Plan Amendment
O.Reg.	Ontario Regulation
P.O.A.	Provincial Offences Act
P.P.U.	Persons per unit
S.D.E.	Single detached equivalent
S.D.U.	Single detached unit
s.s.	Subsection
sq.ft.	square foot
sq.m.	square metres
km	kilometers



Report



Chapter 1 Introduction

Watson & Associates Economists Ltd. H:North Dumfries/2020 DC Update\Report\North Dumfries 2020 D.C. Background Study - Final.docx



1. Introduction

1.1 **Purpose of this Document**

This background study has been prepared pursuant to the requirements of the *Development Charges Act* 1997 (D.C.A.) (s.10), and accordingly, recommends new Development Charges (D.C.s) and policies for the Township of North Dumfries (Township).

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

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

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

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

The chapters in the report are supported by Appendices containing the data required to explain and substantiate the calculation of the charge.



1.2 Summary of the Process

The public meeting required under Section 12 of the D.C.A. has been scheduled for November 9, 2020, at least two weeks after the posting of the D.C. background study and draft D.C. by-law on the Township's website. Its purpose is to present the background study and draft D.C. by-law to the public and to solicit public input on the matter. The public meeting is also being held to answer any questions regarding the study's purpose, methodology and the proposed modifications to the Township's D.C. by-law.

In accordance with the legislation, the background study and proposed D.C. by-law will be available for public review at least 60 days prior to by-law passage.

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

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

Table 1-1 outlines the study process to date and the proposed schedule to be followed with respect to the D.C. by-law adoption process.

Process Steps	Dates
1. Project initiation meeting with Township Staff	August 13, 2020
2. Data collection	August 2020 – October 2020
 Presentation of draft findings and D.C. policy discussion with Township Staff 	October 9, 2020

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



Process Steps	Dates
4. D.C. Background Study and draft D.C. by-law available to public	October 14, 2020
5. Public Meeting of Council	November 9, 2020
6. D.C. By-law passage	December 14, 2020
7. Newspaper notice given of by-law passage	By 20 days after passage
8. Last day for by-law appeal	40 days after passage
9. Township makes available D.C. pamphlet	by 60 days after in force date

1.3 Changes to the Development Charges Act, 1997: More Homes, More Choice Act (Bill 108) the Plan to Build Ontario Together Act (Bill 138), and the COVID-19 Economic Recovery Act (Bill 197)

On May 2, 2019, the Province introduced Bill 108, which proposed changes to the D.C.A. The Bill was introduced as part of the Province's *"More Homes, More Choice: Ontario's Housing Supply Action Plan.*" The Bill received Royal Assent on June 6, 2019.

While having received Royal Assent, many of the amendments to the D.C.A. would not come into effect until they are proclaimed by the Lieutenant Governor. As of January 1, 2020, the following provisions had been proclaimed:

• Transitional provisions were in effect which have been subsequently replaced by updated provisions within Bill 197.



- Effective January 1, 2020, rental housing and institutional developments will pay D.C.s in six equal annual installments, with the first payment commencing at the date of occupancy. Non-profit housing developments will pay D.C.s in 21 equal annual installments. Interest may be charged on the installments, and any unpaid amounts may be added to the property and collected as taxes.
- Effective January 1, 2020, the D.C. amount for all developments occurring within two years of a site plan or zoning by-law amendment planning approval (for applications submitted after this section is proclaimed) shall be determined based on the D.C. charge in effect on the day of site plan or zoning by-law amendment application. If the development is not proceeding via these planning approvals, or if the building permit is issued after the two-year period of application approval, then the amount is determined the earlier of the date of issuance of a building permit or occupancy.

In response to the global pandemic that began affecting Ontario in early 2020, the Province released Bill 197, the COVID-19 Economic Recovery Act, which provided amendments to a number of Acts, including the D.C.A. and *Planning Act*. This Bill also revised some of the proposed changes identified in Bill 108. Bill 197 was tabled on July 8, 2020 and received Royal Assent on July 21, 2020, however, the changes would not come into effect until proclaimed by the Lieutenant Governor. On September 18, 2020 the Province proclaimed the remaining amendments to the D.C.A. that were made through Bill 108 and Bill 197. The following provides a summary of the changes to the D.C.A. that are now in effect:

List of D.C. Eligible Services

- Under Bill 108 some services were to be included under the D.C.A. and some would be included under the Community Benefits Charge (C.B.C.) authority. However, Bill 197 revised this proposed change and has included all services (with some exceptions) under the D.C.A. These services are as follows:
 - Water supply services, including distribution and treatment services.
 - Wastewater services, including sewers and treatment services.
 - Storm water drainage and control services.
 - Services related to a highway.
 - Electrical power services.
 - \circ Toronto-York subway extension, as defined in subsection 5.1 (1).



- Transit services other than the Toronto-York subway extension.
- Waste diversion services.
- Policing services.
- Fire protection services.
- Ambulance services.
- Library Services.
- Long-term care services.
- Parks and recreation services (but not the acquisition of land for parks).
- Public health services.
- Childcare and early years services.
- Housing services.
- Provincial Offences Act Services.
- o Services related to emergency preparedness.
- Services related to airports, but only in the Regional Municipality of Waterloo.
- Additional services as prescribed

Classes of D.C. Services

The D.C.A. had allowed for categories of services to be grouped together into a minimum of two categories (90% and 100% services).

The Act (as proclaimed) repeals that provision and replaces the above with the four following subsections:

- A D.C. by-law may provide for any eligible service or capital cost related to any eligible service to be included in a class, set out in the by-law.
- A class may be composed of any number or combination of services and may include parts or portions of the eligible services or parts or portions of the capital costs in respect of those services.
- A D.C. by-law may provide for a class consisting of studies in respect of any eligible service whose capital costs are described in paragraphs 5 and 6 of s. 5 of the D.C.A.
- A class of service set out in the D.C. by-law is deemed to be a single service with respect to reserve funds, use of monies, and credits.



10% Statutory Deduction

As well, the removal of 10% deduction for soft services under Bill 108 has been maintained.

Statutory Exemptions

Statutory exemptions to the payment of D.C.s for the creation of secondary residential dwelling units in prescribed classes of existing residential buildings or structures ancillary to existing residential buildings. Furthermore, the creation of a second dwelling unit in prescribed classes of proposed new residential buildings, including structures ancillary to dwellings.

Transition

Services, other than those described in paragraphs 1 to 10 of subsection 2 (4) of the D.C.A. (i.e. 'soft services') within an existing D.C. by-law can remain in effect, even if the by-law expires, until the earlier of the day the by-law is repealed, the day the municipality passes a C.B.C. by-law under subsection 37 (2) of the *Planning Act,* or the specified date (i.e. September 18, 2022).



Chapter 2 Current Township of North Dumfries D.C. Policy

Watson & Associates Economists Ltd. H:North Dumfries/2020 DC Update\Report\North Dumfries 2020 D.C. Background Study - Final.docx



2. Current Township of North Dumfries D.C. Policy

2.1 **By-law Enactment**

The Township adopted by-law Number 3122-19 on December 9, 2019, which provides for municipal-wide D.C.s to be imposed in the Township. By-law 3122-19 is set to expire on January 1, 2025.

2.2 Services Covered

The following Township-wide services are included under By-law 3122-19:

- Roads and Related;
- Fire Protection Services;
- Parks and Recreation Services;
- Administration Studies; and
- Parking Services.

2.3 Timing of D.C. Calculation and Payment

Calculation and payment of D.C.s are due and payable at the time of building permit issuance for the development. This provision is subject to any agreement made pursuant to subsection 27(1) of the D.C.A.

2.4 Indexing

The by-law provides for annual indexing of the charges on December 1st of each year in accordance with section 7 of O. Reg. 82/98. Table 2-1 provides the current D.C.s in effect for residential and non-residential development types, as well as the breakdown of the charges by service.



Table 2-1 Township of North Dumfries Current Development Charges (2020\$)

		Residential					
Service	Single & Semi Detached	Multiples	Apartments with >= 2 Bedrooms	Apartments with < 2 Bedrooms	per sq.ft.		
Services Related to a Highway	3,178	2,107	1,303	2,411	1.30		
Fire Protection Services	178	118	73	135	0.07		
Parks and Recreation	2,796	1,854	1,147	2,121	0.06		
Administration Studies	183	121	75	139	0.07		
Parking Services	24	16	10	18	0.01		
Total	6,359	4,216	2,608	4,824	1.51		

2.5 **Redevelopment Credits**

D.C. credits for residential and non-residential redevelopments, are provided for demolitions/conversions of development that pre-exists five years prior to the date of payment of the D.C.

2.6 Area to Which the By-law Applies and Exemptions

By-law 3122-19 provides for the following statutory exemptions:

- The municipality or local board thereof;
- A board of education;
- The Regional Municipality of Waterloo, Township of North Dumfries, Grand River Conservation Authority, or a local board thereof;
- Residential development that results in only the enlargement of an existing dwelling unit, or that results only in the creation of up to two additional dwelling units (as specified by O.Reg. 82/98); and
- Industrial additions of up to and including 50% of the existing G.F.A. of the building – for industrial additions which exceed 50% of the existing G.F.A., only the portion of the addition in excess of 50% is subject to D.C.s;

The D.C. by-law also provides for the following non-statutory exemptions:

• A dwelling unit used exclusively for the purposes of non-profit assisted rental housing which is 100% funded by the Regional Municipality of Waterloo or the crown in right of Ontario or Canada;



- A temporary use permitted under a municipal zoning by-law enacted in accordance with section 39 of the Planning Act;
- A Home Occupation;
- A farm building;
- Temporary erection of a building without a foundation defined in the Building Code for a period not exceeding six consecutive months and not more than six months in any one calendar year on a site for which development charges have previously been paid; and
- An accessory use.



Chapter 3 Anticipated Development in the Township of North Dumfries



3. Anticipated Development in the Township of North Dumfries

3.1 Requirement of the Act

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

The growth forecast contained in this chapter (with supplemental tables in Appendix A) provides for the anticipated development for which the Township of North Dumfries will be required to provide services, over a 10-year (late-2020 to late-2030) and a longer-term (late-2020 to mid-2031) time horizon.

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

The D.C. growth forecast has been derived from the Township of North Dumfries Official Plan, Consolidation Date: November 2018. In preparing the growth forecast, the following information sources were consulted to assess the residential and nonresidential development potential for the Township of North Dumfries over the forecast period, including:

- Township of North Dumfries Development Charges Background Study, Watson & Associates Ltd., October 2019;
- Township of North Dumfries Development Charges Background Study, Hemson Consulting Ltd., December 2014;
- Region of Waterloo Official Plan, June 18, 2015;
- 2006, 2011 and 2016 population, household and employment Census data;
- Historical residential and non-residential building permit data;
- Residential supply data (in the development approvals process) as provided by the Township of North Dumfries;



- Non-residential supply data as provided by the Township of North Dumfries; and
- Discussions with planning staff regarding potential residential and non-residential development opportunities for the Township of North Dumfries.

3.3 Summary of Growth Forecast

A detailed analysis of the residential and non-residential growth forecasts is provided in Appendix A and the methodology employed is illustrated in Figure 3-1. The discussion provided herein summarizes the anticipated growth for the Township 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 Appendix A, *Schedule 1*, the Township's population is anticipated to reach approximately 16,400 by late-2030 and 16,730 by mid-2031, resulting in an increase of approximately 5,350 and 5,670 persons, respectively, over the 10-year and longer-term forecast periods.¹

¹ The population figures used in the calculation of the 2020 D.C. exclude the net Census undercount, which is estimated at approximately 4.0%.



Figure 3-1 Population and Household Forecast Model

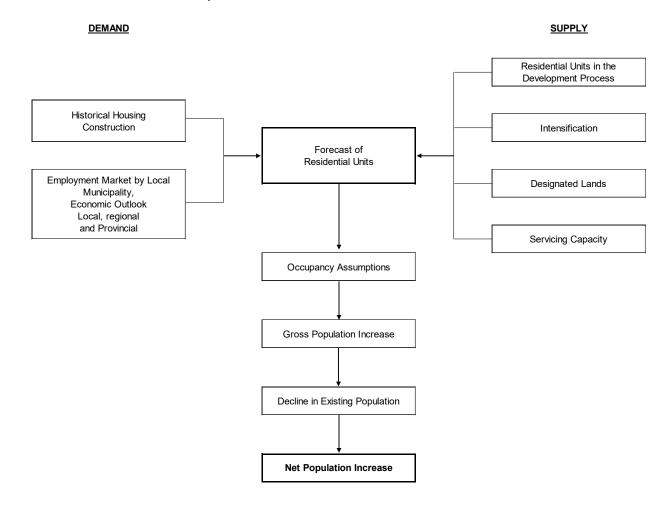




Table 3-1 Township of North Dumfries Residential Growth Forecast Summary

				ling Census Unde				Housing Units			Person Per
	Year	Population (Including Census Undercount) ¹	Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi- Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households	Unit (P.P.U.): Total Population/ Total Households
le.	Mid 2006	9,430	9,063	78	8,985	2,855	55	130	15	3,055	2.967
Historical	Mid 2011	9,710	9,334	24	9,310	2,953	142	116	18	3,229	2.891
Т	Mid 2016	10,620	10,215	90	10,125	3,150	235	130	20	3,535	2.890
st	Late 2020	11,500	11,057	98	10,959	3,312	322	222	20	3,876	2.853
Forecast	Late 2030	17,060	16,404	145	16,259	4,489	1,029	354	20	5,892	2.784
Ľ.	Mid 2031	17,400	16,731	147	16,584	4,559	1,072	364	20	6,014	2.782
	Mid 2006 - Mid 2011	280	271	-54	325	98	87	-14	3	174	
ıtal	Mid 2011 - Mid 2016	910	881	66	815	197	93	14	2	306	
Incremental	Mid 2016 - Late 2020	880	842	8	834	162	87	92	0	341	
Inc	Late 2020 - Late 2030	5,560	5,347	47	5,300	1,177	707	132	0	2,016	
	Late 2020 - Mid 2031	5,900	5,674	49	5,625	1,247	750	142	0	2,139	

Note: The 2031 population target of 17,400 takes into account the development potential of the lands identified as Special Policy Area 2.5.2 b) iv) on Map 2 of the Township of North Dumfries Official Plan, Consolidated November 2018.

Source: Derived from the Township of North Dumfries Official Plan, Consolidated November 2018, by Watson & Associates Economists Ltd., 2020.

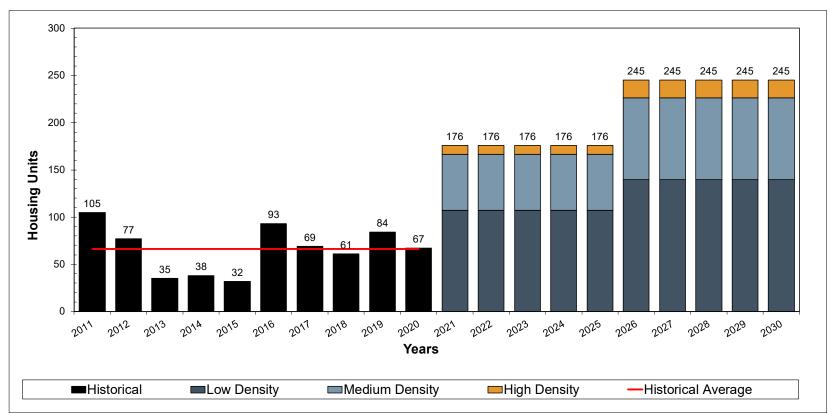
¹ Census undercount estimated at approximately 4.0%. Note: Population including the undercount has been rounded.

² Includes townhouses and apartments in duplexes.

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



Figure 3-2 Township of North Dumfries Annual Housing Forecast



Source: Historical housing activity derived from Statistics Canada building permit data for the Township of North Dumfries, 2011-2019, and 2020 from the Township of North Dumfries based on August Y.T.D. building permit activity and review of active residential applications.

¹ Growth forecast represents calendar year.



Provided below is a summary of the key assumptions and findings regarding the Township of North Dumfries D.C. growth forecast.

- 1. Housing Unit Mix (Appendix A Schedules 1, 5 and 6)
 - The housing unit mix for the Township was derived from a detailed review of historical development activity (as per Schedule 6), as well as active residential development applications (as per Schedule 5) and discussions with Township staff regarding anticipated development trends for North Dumfries.
 - Based on the above indicators, the 2020 to 2031 household growth forecast is comprised of a unit mix of 58% low density (single detached and semi-detached), 35% medium density (multiples except apartments) and 7% high density (bachelor, 1-bedroom and 2-bedroom apartments).
- 2. Planning Period
 - Short and longer-term time horizons are required for the D.C. process. The D.C.A. limits the planning horizon for certain services, such as parks, recreation and libraries, to a 10-year planning horizon. Services related to a highway, public works, fire, police, stormwater, water and wastewater services can utilize a longer planning period.
- 3. Population in New Housing Units (Appendix A Schedules 2, 3 and 4)
 - The number of housing units to be constructed in the Township of North Dumfries during the short- and long-term periods is presented on Figure 3-2. Over the 2020 to 2031 forecast period, the Township is anticipated to average approximately 204 new housing units per year.
 - Institutional population¹ is anticipated to grow modestly by 49 persons between 2020 to 2031.
 - Population in new units is derived from Schedules 2, 3 and 4, which incorporate historical development activity, anticipated units (see unit mix

¹ Institutional includes special care facilities such as nursing home or residences for senior citizens. A P.P.U. of 1.100 depicts 1-bedroom and 2 or more bedroom units in these special care facilities.



discussion) and average persons per unit (P.P.U.) by dwelling type for new units.

- Schedule 7a summarizes the average P.P.U. assumed for the new housing units by age and type of dwelling based on a 2016 custom Census data for the Township of North Dumfries. Due to data limitations, medium and high density PPU's were derived from Waterloo Region as outlined in Schedule 7b. The total calculated P.P.U. for all density types has been adjusted downward to account for the P.P.U. trends which has been recently experienced in both new and older units. Forecasted 15year average P.P.U.s by dwelling type are as follows:
 - Low density: 3.182
 - o Medium density: 2.414
 - \circ High density¹: 1.820
- 4. Existing Units and Population Change (Appendix A Schedules 2, 3 and 4)
 - Existing households for late-2020 are based on the 2016 Census households, plus estimated residential units constructed between early-2016 and late-2020 assuming a 6-month lag between construction and occupancy (see Schedule 2).
 - The decline in average occupancy levels for existing housing units is calculated in Schedules 2 through 4, by aging the existing population over the forecast period. The forecast population decline in existing households over the 2020 to 2031 forecast period is approximately 410.
- 5. Employment (Appendix A, Schedules 9a, 9b, 10 and 11)
 - 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.

¹ Includes bachelor, 1-bedroom and 2 or more bedroom apartments



- 2016 employment data¹ (place of work) for the Township of North Dumfries is outlined in Schedule 9a. The 2016 employment base is comprised of the following sectors:
 - 160 primary (3%);
 - 475 work at home employment (8%);
 - 3,310 industrial (58%);
 - 1,495 commercial/population related (26%); and
 - 315 institutional (5%).
- The 2016 employment by usual place of work, including work at home, is approximately 5,755. An additional 612 employees have been identified for the Township 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 6,370.
- Total employment, including work at home and N.F.P.O.W. for the Township of North Dumfries is anticipated to reach approximately 8,600 by late-2030 and 8,700 by 2031. This represents an employment increase of 1,7700 for the 10-year forecast period and 1,860 for the longer-term forecast.
- Schedule 9b, 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 work at home 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 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 gross floor area (G.F.A.) calculation.

¹ 2016 employment is based on Statistics Canada 2016 Place of Work Employment dataset 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."



- Total employment for the Township of North Dumfries (excluding work at home and N.F.P.O.W. employment) is anticipated to reach approximately 7,020 by late-2030 and 7,090 by mid-2031. This represents an employment increase of 1,350 and 1,420 over the 10-year and longer-term forecast periods, respectively.
- Non-Residential Sq.ft. Estimates (Gross Floor Area (G.F.A.), Appendix A, Schedule 9b)
 - Square footage estimates were calculated in Schedule 9b based on the following employee density assumptions:
 - 1,200 sq.ft. per employee for industrial;
 - o 580 sq.ft. per employee for commercial/population-related; and
 - o 560 sq.ft. per employee for institutional employment.
 - The Township-wide incremental Gross Floor Area (G.F.A.) is anticipated to increase by approximately 1.12 million sq.ft. over the 10-year forecast period and 1.19 million sq.ft. over the longer-term forecast period.
 - In terms of percentage growth, the 2020 to 2031 incremental G.F.A. forecast by sector is broken down as follows:
 - industrial 62%;
 - commercial/population-related 31%; and
 - institutional 7



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

s.s.2 (4) of the D.C.A. sets out the eligible services that can be included in a D.C. Bylaw as follows:

- Water supply services, including distribution and treatment services.
- Wastewater services, including sewers and treatment services.
- Storm water drainage and control services.
- Services related to a highway.
- Electrical power services.
- Toronto-York subway extension, as defined in subsection 5.1 (1).
- Transit services other than the Toronto-York subway extension.
- Waste diversion services.
- Policing services.
- Fire protection services.
- Ambulance services.
- Library Services.
- Long-term care services.
- Parks and recreation services (but not the acquisition of land for parks).
- Public health services.
- Childcare and early years services.
- Housing services.
- Provincial Offences Act Services.
- Services related to emergency preparedness.
- Services related to airports, but only in the Regional Municipality of Waterloo.
- Additional services as prescribed



In addition to the above eligible services, the D.C.A. also sets out in s.s.7 (3) that a development charge by-law may provide for a class consisting of studies.

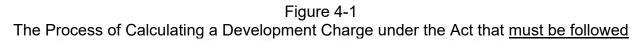
Two ineligible costs defined in s.s.5(3) of the D.C.A. are "computer equipment" and "rolling stock with an estimated useful life of (less than) seven years..." In addition, local roads are covered separately under subdivision agreements and related means (as are other local services).

Table 4-1 identifies the potential components within each service category, whether the Township provides the service, and whether the service has been included in the proposed D.C. by-law.

4.3 Increase in Need for Service

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





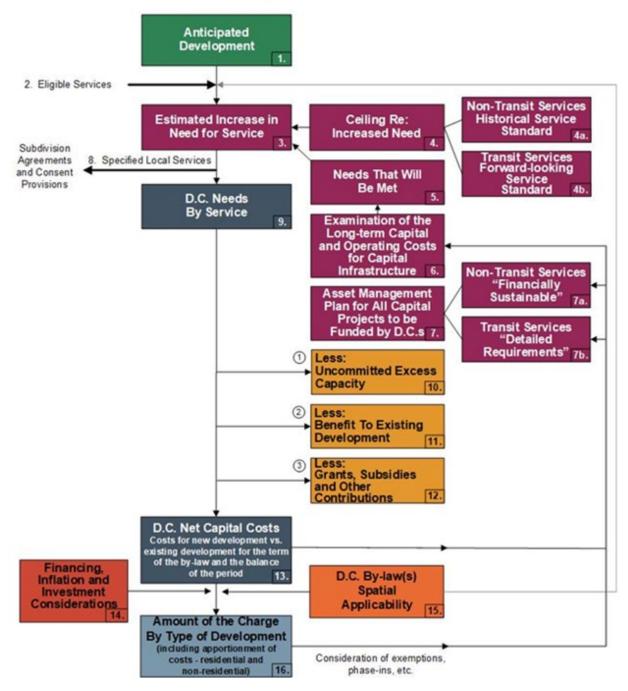




Table 4-1
Categories of Municipal Services to be Addressed as Part of the Calculation

Ca	tegories of Municipal Services	Inclusion in the D.C. Calculation	. Service Components	
1.	Services Related to a Highway	Yes	1.1	Arterial roads
		Yes	1.2	Collector roads
		Yes	1.3	Bridges, Culverts and
				Roundabouts
		No	1.4	Local municipal roads
		Yes	1.5	Traffic signals
		Yes	1.6	Sidewalks and streetlights
		Yes	1.7	Active Transportation
		Yes	1.8	Works Yard
		Yes	1.9	Rolling stock ¹
2.	Transit Services	n/a	2.1	Transit vehicles ¹ & facilities
		n/a	2.2	Other transit infrastructure
3.	Stormwater Drainage and	No	3.1	Main channels and drainage
	Control Services			trunks
		No	3.2	Channel connections
		No	3.3	Retention/detention ponds
4.	Fire Protection Services	Yes	4.1	Fire stations
1		Yes	4.2	Fire pumpers, aerials and
				rescue vehicles ¹
		Yes	4.3	Small equipment and gear

¹with 7+ year life time

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



Categories of Municipal Services		Inclusion in the D.C. Calculation		Service Components
5.	Parks and Recreation Services	Ineligible	5.1	Acquisition of land for parks,
	Outdoor Recreation Services (i.e. Parks and Open Space	Yes	5.2	woodlots and E.S.A.s Development of area
	and Indoor Recreation)	103	0.2	municipal parks
		Yes	5.3	Development of district parks
		Yes	5.4	Development of municipal- wide parks
		Yes	5.5	Development of special purpose parks
		Yes	5.6	Parks rolling stock ¹ and yards
		Yes	5.7	Arenas, indoor pools, fitness
				facilities, community centres,
		Vaa	FO	etc. (including land)
		Yes	5.8	Recreation vehicles and equipment ¹
6.	Library Services	No	6.1	Public library space (incl.
0.			0.1	furniture and equipment)
		n/a	6.2	Library vehicles ¹
		n/a		Library materials
7.	Electrical Power Services	n/a		Electrical substations
		n/a		Electrical distribution system
		n/a		Electrical system rolling stock
9. \	Nastewater Services	n/a	9.1	Treatment plants
		n/a	9.2	Sewage trunks
		n/a		Local systems
10		n/a		Vehicles and equipment ¹
10.	Water Supply Services	n/a		Treatment plants
		n/a		Distribution systems
		n/a n/a		Local systems
11	Waste Diversion Services			Vehicles and equipment ¹ Landfill collection, transfer
' '.		Ineligible		vehicles and equipment
		Ineligible	11 2	Landfills and other disposal
				facilities
		n/a	11.3	Waste diversion facilities
		n/a	11.4	Waste diversion vehicles and
				equipment ¹

¹with 7+ year life time



Categories of Municipal Services	Inclusion in the D.C. Calculation	Service Components
12. Policing Services	n/a	12.1 Police detachments
	n/a	12.2 Police rolling stock ¹
	n/a	12.3 Small equipment and gear
13. Long-Term Care Services	n/a	13.1 Long-Term Care space
	n/a	13.2 Vehicles ¹
14. Child Care and early years	n/a	14.1 Childcare space
services	n/a	14.2 Vehicles ¹
15. Public Health	n/a	15.1 Public Health department
	n/a	space 15.2 Public Health department
		vehicles ¹
16. Housing Services	n/a	16.1 Social Housing space
17. Provincial Offences Act (P.O.A.)	n/a	17.1 P.O.A. space
18. Social Services	n/a	18.1 Social service space
19. Ambulance Services	n/a	19.1 Ambulance station space
	n/a	19.2 Vehicles ¹
20. Emergency Preparedness	n/a	20.1 Emergency Preparedness
Services		Space
	n/a	20.2 Equipment
21. Hospital Provision	Ineligible	21.1 Hospital capital contributions
22. Provision of Headquarters for	Ineligible	22.1 Office space
the General Administration of	Ineligible	22.2 Office furniture
Municipalities and Area Municipal Boards	Ineligible	22.3 Computer equipment
23. Other Transportation Services	Ineligible	23.1 Ferries
· ·	Ineligible	23.2 Airports (in the Regional
	U U	Municipality of Waterloo).
		23.2 (Other)
24. Provision of Cultural,	Ineligible	24.1 Cultural space (e.g. art
Entertainment and Tourism	Ineligible	galleries, museums and
Facilities and Convention	Ineligible	theatres)
Centres		24.2 Tourism facilities and
		convention centres

¹with 7+ year life time



Categories of Municipal Services	Inclusion in the D.C. Calculation	Service Components
25. Other Services	Yes	25.1 Studies in connection with acquiring buildings, rolling stock, materials and equipment, and improving land ² and facilities, including the D.C. background study cost
	Yes	25.2 Interest on money borrowed to pay for growth-related capital

¹with a 7+ year lifetime

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 Township's Local Service Policy is included in Appendix E.

4.5 Capital Forecast

Paragraph 7 of s.s.5(1) of the D.C.A. requires that "the capital costs necessary to provide the increased services must be estimated." The Act goes on to require two



potential cost reductions and the Regulation sets out the way in which such costs are to be presented. These requirements are outlined below.

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

The capital costs include:

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

In order for an increase in need for service to be included in the D.C. calculation, Township 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 Township'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.



The Township currently has no outstanding credit obligations.

4.7 **Classes of Services**

Section 7 of the D.C.A. states that a D.C. by-law may provide for any D.C. eligible service or the capital costs with respect to those services. Further, a class may be composed of any number or combination of services and may include parts or portions of each D.C. eligible services. With respect to growth-related studies, Section 7(3) of the D.C.A. states that:

"For greater certainty, a development charge by-law may provide for a class consisting of studies in respect of any service listed in subsection 2 (4) whose capital costs are described in paragraphs 5 and 6 of subsection 5 (3)."

These provisions allow for services to be grouped together to create a class for the purposes of the D.C. by-law and D.C. reserve funds. The D.C. calculations and draft by-law provided herein include a class for growth studies. This class is comprised of the following services:

- Growth-Related Studies
 - Roads and Related Services;
 - Fire Protection Services; and
 - Parks and Recreation Services.

4.8 Eligible Debt and Committed Excess Capacity

Section 66 of the D.C.A. states that for the purposes of developing a D.C. by-law, a debt incurred with respect to an eligible service may be included as a capital cost, subject to any limitations or reductions in the Act. Similarly, s.18 of O.Reg. 82/98 indicates that debt with respect to an ineligible service may be included as a capital cost, subject to several restrictions.

In order for such costs to be eligible, two conditions must apply. First, they must have funded excess capacity which is able to meet service needs attributable to the anticipated development. Second, the excess capacity must be "committed," that is, either before or at the time it was created, Council must have expressed a clear



intention that it would be paid for by D.C.s or other similar charges. For example, this may have been done as part of previous D.C. processes.

4.9 Existing Reserve Funds

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

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

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

The Township's D.C. Reserve Funds balances, by service, are presented in Table 4-2. The 2019 year-end reserve fund balances have been adjusted to account for eligible and actual reserve fund draws and commitments occurring over the 2015-2020 period and anticipated 2020 D.C. revenue. These balances have been applied against future spending requirements for all services.

Service/Class	Totals
Services Related to a Highway	579,807
Fire Protection Services	151,499
Parks and Recreation	(549,174)
Growth-Related Studies	9,077
Total	191,209

Table 4-2 Township of North Dumfries Estimated Reserve Fund Balances (As of December 31, 2020)

4.10 **Deductions**

The D.C.A. potentially requires that four 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; and



• anticipated grants, subsidies and other contributions;

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

4.10.1 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 Township over the 10-year period immediately preceding the preparation of the background study..." O.Reg. 82.98 (s.4) goes further to indicate that "...both the quantity and quality of a service shall be taken into account in determining the level of service and the average level of service."

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

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

4.10.2 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 Township's "excess capacity," other than excess capacity which is "committed."

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



already available, then widening would not be included as an increase in need, in the first instance.

4.10.3 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 4.10.1 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 Township-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.

4.10.4 Reduction for Anticipated Grants, Subsidies and Other Contributions

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

4.11 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 7.3.8.

4.12 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.



Chapter 5 Development Charge Eligible Cost Analysis by Service



5. Development Charge Eligible Cost Analysis by Service

This chapter outlines the basis for calculating eligible costs for the D.C.s. The services outlined in Sections 5.1 apply on a uniform-basis across the Township. The required calculation process set out in s.5(1) paragraphs 2 to 7 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 this Chapter reflects Council's current intention. However, over time, Township projects and Council priorities change and accordingly, Council's intentions may be modified and different capital projects (and timing) may be required to meet the need for services required by new growth.

5.1 Service Levels and 11-Year Capital Costs for Township-Wide D.C. Calculation

This section evaluates the development-related capital requirements for all of the Township-wide services assessed over an 11-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.

5.1.1 Fire Protection Services

The Township currently operates one fire station with approximately 5,000 square feet of building space. In addition, the Township maintains an inventory of 6 vehicles and 118 equipment items used for the operation of the facility. These inventories provide an average historical level of service of \$444 per capita which results in a maximum of \$2.5 million to be included in the D.C. calculation.

The Township is anticipating the construction of a new emergency command centre, fire station addition, two new vehicles and various additional equipment items. The gross capital cost for these projects is \$1.1 million. A deduction of \$594,400 is applied in acknowledgement of the benefit to existing development. Adjustments are then made for the uncommitted reserve fund balance of \$151,500 which results in net growth-related capital costs of \$351,100 to be included in the D.C. calculation.



The allocation of the net growth-related costs for fire protection services between residential and non-residential development is 80% residential and 20% non-residential based on the relationship of incremental population and employment growth over the 11-year forecast period (i.e. 5,625 population and 1,421 employment).

5.1.2 Services Related to a Highway

The Township currently maintains 171 km of roadways and 5 bridges. To maintain these road networks, the Township utilizes approximately 18,000 sq. ft. of building space and a fleet of 25 vehicles. This level of investment provides a historical average level of service of \$11,413 per capita. Based on this historical level of investment, a maximum of \$64.2 million could be included in the D.C. calculations.

The review of the Township's services related to a highway growth-related needs for the forecast period (i.e. 2021-2031) identified total gross capital costs of \$13.2 million. These capital projects included various road reconstruction projects, intersection improvements, sidewalks, addition fleet, construction of a new operations facility and sand/salt storage structure and a studies. In recognition of the benefits to existing development, a deduction of \$2.3 million has been applied. Furthermore, a deduction of \$579,800 had been made to reflect the Township's uncommitted D.C. reserve funds collected towards these needs. This results in a total of \$10.4 million being included in the D.C. calculation.

The net growth-related costs for services related to a highway have been allocated between future residential and non-residential development on the basis of incremental population to employment growth over the 11-year forecast period (i.e. 80% residential/ 20% non-residential).

5.1.3 Parks and Recreation Services

The Township provides 35.5 hectares of developed parkland that contains 46 amenities (i.e. baseball diamonds, soccer fields, playgrounds, picnic facilities and various other facilities). Additionally, the Township has 92,200 square feet of recreation facility space. These facilities, parkland and amenities are maintained using a fleet of 16 vehicles. This historical level of investment produces an average level of service of \$3,452 per capita, resulting in a maximum D.C.-eligible amount of \$19.4 million that could be included in the calculation of the charge.



The 11-year capital needs for parks and recreation services have a gross capital cost of \$22.2 million. These capital costs include growth-related debt payments for the past construction of the North Dumfries Community Centre, a new indoor pool facility, addition parkland development, amenities and vehicles, and studies. Deductions totaling \$10.7 million are made for the benefit to existing and anticipated grants. After adding approximately \$550,000 reflective of existing reserve fund deficits a total of \$12.0 million being included in the D.C. calculation.

While parks and recreation services usage is predominately residential based, there is some use of the facilities by non-residential users. To acknowledge this use, the growth-related capital costs for the Recreation Complex debt have been allocated 95% to residential and 5% non-residential development types. The growth-related capital costs for non-facility needs have been allocated 100% to residential development.

5.1.4 Growth-Related Studies

The D.C.A. permits the inclusion of studies undertaken to facilitate the completion of the Township's capital works program. As discussed in Section 4.7, these studies have been allocated as a class of services based on each service to which the study relates.

For planning related studies, a deduction of 10% has been applied to recognize the extent to which the studies relate to non-D.C.-eligible services. All studies have been allocated to the classes of services in the following manner:

- Roads and Related Services 47.7%
- Fire Protection Services 2.2%
- Parks and Recreation Services 50.1%

The following provides a list of the studies included in the calculations:

- Development Charges Background Studies
- Official Plan Update
- Zoning By-law Update
- Economic Development Strategy

The cost of these studies is \$504,900 of which \$221,900 is attributable to existing benefit and \$13,800 is attributable to grants, subsidies and other contributions. A deduction of \$22,200 has been made to recognize the portion of planning studies



related to D.C.-ineligible services, as mentioned above. The existing reserve fund balance of \$9,100 has been deducted resulting in a net D.C.-eligible cost of \$238,000 to be included in the calculations.

The allocation of the net growth-related costs for the growth-related class between residential and non-residential development has been allocated according to each specific services' share as mentioned above.



Infrastructure Costs Covered in the D.C. Calculation – Fire Protection Services

			0.000				Less:	Potentia	al D.C. Recov	erable Cost
Prj .No	Increased Service Needs Attributable to Anticipated Development 2021-2031	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 80%	Non- Residential Share 20%
	Facilities		-	-	-	-		-	-	-
1	Emergency Command Centre	2021	51,000	-	51,000	-		51,000	40,800	10,200
2	Station Addition (improve training faclities & create new offices)	2021	168,000	-	168,000	-		168,000	134,400	33,600
			-	-	-	-		-	-	-
	Vehicles		-	-	-	-		-	-	-
3	Pumper with Water Tower	2026	791,000	-	791,000	593,300		197,700	158,160	39,540
4	Deputy Chief/Fire Prevention Vehicle	2021	38,000	-	38,000	-		38,000	30,400	7,600
			-	-	-	-		-	-	-
	Equipment and Other Capital		-	-	-	-		-	-	-
5	Additional Fire Fighter Equipment (3)	2020	12,000	-	12,000	-		12,000	9,600	2,400
6	SCBA Spare Bottles (6)	2022	17,000	-	17,000	-		17,000	13,600	3,400
7	SCBA Breathing Apparatus (3)	2022	20,000	-	20,000	-		20,000	16,000	4,000
			-	-	-	-		-	_	-
	Reserve Fund Adjustment							(151,499)	(121,199)	(30,300)
	Total		1,097,000	-	1,097,000	593,300	-	352,201	281,761	70,440



Infrastructure Costs Covered in the D.C. Calculation – Services Related to a Highway

							Less:	Potential D.C. Recoverable Cost			
Prj .No	Increased Service Needs Attributable to Anticipated Development 2021-2031	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 80%	Non-Residential Share 20%	
	Road Reconstruction		-	-	-	-		-	-	-	
1	Brant-Waterloo Rd, Swan to 120 m east of Reids ville Rd.	2024	1,825,100	-	1,825,100	-		1,825,100	1,460,080	365,020	
2	Brant-Waterloo Rd, Swan to Trussler Rd.	2029	1,804,600	-	1,804,600	-		1,804,600	1,443,680	360,920	
3	Brant-Waterloo Rd, 120 m east of Reidsville to 1300 m west of Spragues Rd.	2025	1,336,500	-	1,336,500	-		1,336,500	1,069,200	267,300	
4	Reidsville Rd, Brant-Waterloo to Wrigley Rd.	2026	1,816,900	-	1,816,900	-		1,816,900	1,453,520	363,380	
			-	-	-	-		-	-	-	
	Sidewalks		-	-	-	-		-	-	-	
5	Inglis St Sidewalk, Northumberland to Colquhoun	2020	117,300	-	117,300	78,591		38,709	30,967	7,742	
6	Gibson St Sidewalk, MacDonald to east terminus	2020	44,700	-	44,700	-		44,700	35,760	8,940	
			-	-	-	-		-	-	-	
_	Intersections		-	-	-	-		-	-	-	
7	Intersection Improvement, Elliott @ Inglis	2025	306,100	-	306,100	153,050		153,050	122,440	30,610	
	Public Works - Vehicles		-	-	-	-		-	-	-	
8	1/2 ton Pickup with crew cab	2025	40,600	-	- 40,600	-		- 40,600	- 32,480	- 8.120	
9	John Deere Grader (2009) + plow and snow wing	2023	423,500	-	423,500	377,600		45,900	36,720	9,180	
10	Ford 1 Ton Crew Cab c/w hoist box (2014) + plow / sander unit	2022	100,000	-	100,000	71,400		28,600	22,880	5,720	
			-	-	-	_		-	-	-	
	Facilities		-	-	-	-		-	-	-	
11	Operations Centre (NPV of Pricipal Payments)	2024-2043	3,207,447	-	3,207,447	848,852		2,358,595	1,886,876	471,719	
12	Operations Centre (NPV of Interest Payments)	2024-2043	1,697,404	-	1,697,404	449,218		1,248,186	998,549	249,637	
13	Sand / Salt Storage Structure	2025	265,400	-	265,400	177,818		87,582	70,066	17,516	
			-	-	-	-		-	-	-	
	Studies		-	-	-	-		-	-	-	
14	Traffic Operations Study	2025	56,100	-	56,100	14,025		42,075	33,660	8,415	
15 16	Roads Needs Assessment	2021 2026	66,300	-	66,300	33,150 33,150		33,150	26,520 26,520	6,630	
16	Roads Needs Assessment Roads Needs Assessment	2026	66,300 66,300	-	66,300 66,300	33,150		33,150 33,150	26,520	6,630 6,630	
17	noada Needa Aasessillelit	2001							- 20,020	- 0,030	
	Reserve Fund Adjustment			_	_			(579,807)	(463,846)	(115,961)	
	Total		13,240,551	-	13,240,551	2,270,004	-	10,390,740	8,312,592	2,078,148	



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

						Le	SS:	Potential	D.C. Recover	able Cost
Prj.No	Increased Service Needs Attributable to Anticipated Development 2021-2031	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share Various	Non- Residential Share Various
	Indoor Recreation									
1	NPV Principal - Debt on Recreation Complex	2021-2024	840,468	-	840,468	-		840,468	798,445	42,023
2	NPV Interest - Debt on Recreation Complex	2021-2024	106,014	-	106,014	-		106,014	100,713	5,301
3	Indoor Pool Facility	2028	15,303,700	-	15,303,700	9,900,129		5,403,571	5,403,571	-
	Park Development, Amenities, and Vehicles									
4	Leash Free Dog Park	2025	89,200	-	89,200	57,704		31,496	31,496	-
5	Basketball Court @ NDCC	2022	119,400	-	119,400	77,241		42,159	42,159	-
6	Off-Road Trails - Various Locations	2021-2028	294,300	-	294,300	190,386		103,914	103,914	-
7	Additional Trail Network	2029-2030	313,700	-	313,700	202,936		110,764	110,764	-
8	3 Lit Cell Tennis Court	2024	378,900	-	378,900	245,115	31,251	102,534	102,534	-
9	Schmidt Park - Unorganized Sports Field	2024	67,600	-	67,600	-		67,600	67,600	-
10	Hilltop P4S3/Broos P1 Parkette	2021	262,900	-	262,900	-		262,900	262,900	-
11	Rox'Shire Parkette	2027	262,900	-	262,900	-		262,900	262,900	-
12	Legacy P1/Broos P2 Neighbourhood Park	2023	736,800	-	736,800	-		736,800	736,800	-
13	Isley Pit Parkette	2025	262,900	-	262,900	-		262,900	262,900	-
14	Cambridge West Neighbourhood Park	2027	736,800	-	736,800	-		736,800	736,800	-
15	Cambridge West Parkette	2029	262,900	-	262,900	-		262,900	262,900	-
16	#1 SW Quandrant - Ayr Parkette	2029	262,900	-	262,900	-		262,900	262,900	-
17	#1 SW Quadrant - Ayr Neighbourhood Park	2031	736,800	-	736,800	-		736,800	736,800	-
	#2 SW Quandrant - Ayr Parkette	2031	262,900	-	262,900	-		262,900	262,900	-
	#2 SW Quadrant - Ayr Neighbourhood Park	2031	736,800	-	736,800	-		736,800	736,800	-
			, , , , , , , , , , , , , , , , , , , ,							
	Studies									
20	Leisure Master Plan	2021	102,000	-	102,000	25,500		76,500	76,181	319
21	Leisure Master Plan	2027	51,000	-	51,000	12,750		38,250	38,090	160
			_	-	-	-		-	-	-
	Reserve Fund Adjustment							549,174	546,881	2,293
	Total		22,190,882	-	22,190,882	10,711,761	31,251	11,997,043	11,946,947	50,096



Infrastructure Costs Covered in the D.C. Calculation – Growth-Related Studies

						01			Less:	Potent	tial D.C. Recove	arable Cost
Prj.No	Increased Service Needs Attributable to Anticipated Development 2021-2031	Timing (year)	Service to Which Project Relates	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Other Deductions (to recognize benefit to non-D.C. services)	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share pecific Share
1	Development Charges Background Study:										Service S	becine Share
1a	Development Charges Study	2025	Services Related to a Highway	14,600	-		14,600	-		14,600	11,680	2,920
1b	Development Charges Study	2025	Fire Protection Services	680	-		680	-		680	544	136
1c	Development Charges Study	2025	Parks and Recreation Services	15,320	-		15,320	-		15,320	15,256	64
	Sub-total Development Charges Study			30,600	-	-	30,600	-	-	30,600	27,480	3,120
2	Development Charges Study Update:											
2a	Development Charges Study	2030	Services Related to a Highway	14,600	-		14,600	-		14,600	11,680	2,920
2b	Development Charges Study	2030	Fire Protection Services	680	-		680	-		680	544	136
2c	Development Charges Study	2030	Parks and Recreation Services	15,320	-		15,320	-		15,320	15,256	64
	Sub-total Development Charges Study			30,600	-	-	30,600	-	-	30,600	27,480	3,120
3	Official Plan Update:											
3a	Official Plan	2020	Services Related to a Highway	92,470	-	4,624	87,847	46,235		41,612	33,289	8,322
3b	Official Plan	2020	Fire Protection Services	4,280	-	214	4,066	2,140		1,926	1,541	385
3c	Official Plan	2020	Parks and Recreation Services	97,050	-	4,853	92,198	48,525		43,673	43,490	182
	Sub-total Official Plan			193,800	-	9,690	184,110	96,900	-	87,210	78,320	8,890
4	Official Plan Update:											
4a	Official Plan	2026	Services Related to a Highway	29,200	-	1,460	27,740	14,600		13,140	10,512	2,628
4b	Official Plan	2026	Fire Protection Services	1,350	-	68	1,283	675		608	486	122
4c	Official Plan	2026	Parks and Recreation Services	30,650	-	1,533	29,118	15,325		13,793	13,735	58
	Sub-total Official Plan			61,200	-	3,060	58,140	30,600	-	27,540	24,733	2,807



Infrastructure Costs Covered in the D.C. Calculation – Growth-Related Studies Cont'd

						01			Less:	Potent	ial D.C. Recove	rable Cost
Prj.No	Increased Service Needs Attributable to Anticipated Development 2021-2031	Timing (year)	Service to Which Project Relates	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Other Deductions (to recognize benefit to non-D.C. services)	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share Service Sj	Non-Residential Share pecific Share
5	Zoning By-law Update:											
5a	Zoning By-law	2022	Services Related to a Highway	60,840	-	3,042	57,798	30,420		27,378	21,902	5,476
5b	Zoning By-law	2022	Fire Protection Services	2,810	-	141	2,670	1,405		1,265	1,012	253
5c	Zoning By-law	2022	Parks and Recreation Services	63,850	-	3,193	60,658	31,925		28,733	28,613	120
	Sub-total Zoning By-law			127,500	-	6,375	121,125	63,750	-	57,375	51,527	5,848
6	Economic Development Stategy:											
6a	Economic Development Stategy	2021	Services Related to a Highway	29,200	-	1,460	27,740	14,600	6,570	6,570	5,256	1,314
6b	Economic Development Stategy	2021	Fire Protection Services	1,350	-	68	1,283	675	304	304	243	61
6c	Economic Development Stategy	2021	Parks and Recreation Services	30,650	-	1,533	29,118	15,325	6,896	6,896	6,867	29
	Sub-total Economic Development Strategy			61,200	-	3,060	58,140	30,600	13,770	13,770	12,366	1,404
	Reserve Fund Adjustment									(9,077)	(8,151)	(925)
	Total			504,900	-	22,185	482,715	221,850	13,770	238,018	213,755	24,264



Chapter 6 D.C. Calculation

Watson & Associates Economists Ltd. H:North Dumfries/2020 DC Update\Report\North Dumfries 2020 D.C. Background Study - Final.docx



6. D.C. Calculation

The calculation of the maximum D.C.s that could be imposed by Council have been undertaken using a cash-flow approach for the growth-related capital costs identified in Chapter 5. The cash-flow calculations of the maximum D.C.s s that could be imposed by Council have been undertaken to account for the timing of revenues and expenditures and the resultant financing needs. The cash-flow calculations have been undertaken, by service or class of service, for each forecast development type, i.e. residential and non-residential. D.C. cash flow calculation tables are provided in Appendix C and have been undertaken to account for 1% earnings on D.C. reserve fund balances and 3% interest charged for reserve fund borrowing.

The D.C. cash-flow calculations are summarized in Table 6- for all services and classes of service over the 2021-2031 forecast period.

The calculation for residential development is generated on a per capita basis and is based upon four forms of housing types (single and semi-detached, apartments 2+ bedrooms, apartment's bachelor and 1 bedroom, and other multiples). The non-residential D.C. has been calculated on a per sq.ft. of G.F.A. basis. Table 6-2 summarizes the recommended schedule of charges, reflecting the maximum D.C.s by residential dwelling type and per sq.ft. of G.F.A. for non-residential development in 2020\$ values. The calculated rates are also presented in Table 6-3 including indexing to 2021\$ (i.e. +2.6%) reflective of the anticipated by-law effective date of January 1, 2021.

Table 6-4 compares the Township's existing charges to the charges proposed herein (2020\$ rates presented in Table 6-2), for a single detached residential dwelling unit and per sq.ft. of G.F.A. for non-residential development. The calculated charges are \$11,115 for a single detached residential dwelling unit, \$1.90 per sq.ft. for non-residential G.F.A. The residential charges for a single detached dwelling unit represent a 75% increase (+\$4,798) from the current charges of \$6,359. The proposed charges for non-residential development represent a 27% increase (+\$0.42) over the current charges of \$1.50 per sq.ft. of G.F.A.



Table 6-1
Municipal-Wide Services D.C. Calculation
2021-2031

		2021\$ D.CE	Eligible Cost	2021\$ D.CEli	gible Cost
SERVICE/CLASS		Residential	Non-Residential	S.D.U.	per sq.ft.
		\$	\$	\$	\$
1. <u>Services Related to a Highway</u>		8,312,592	2,078,148	4466	1.79
2. Fire Protection Services		280,881	70,220	139	0.08
3. Parks and Recreation		11,946,947	50,096	6480	0.04
4. Growth-Related Studies					
4.1 Services Related to a Highway		101,993	11,577	33	0.01
4.2 Fire Protection Services		4,715	535	2	0.00
4.3 Parks and Recreation		107,046	12,151	35	0.01
TOTAL		\$20,754,174	2,222,728	\$11,156	\$1.92
Financing Costs		\$404,873	\$50,485		
D.CEligible Capital Cost		\$21,159,047	2,273,214		
11-Year Gross Population/GFA Growth (sq,ft,)		6,035	1,185,400		
Cost Per Capita/Non-Residential GFA (sq.ft.)		\$3,506.06	\$1.92		
By Residential Unit Type	<u>P.P.U.</u>				
Single and Semi-Detached Dwelling	3.182	\$11,156			
Apartments - 2 Bedrooms +	2.110	\$7,398			
Apartments - Bachelor and 1 Bedroom	1.305	\$4,575			
Other Multiples	2.414	\$8,464			

Table 6-2 Schedule of Calculated D.C.s (2020\$)

		RESIDEN	TIAL		NON-RESIDENTIAL
Service/Class of Service	Single and Semi- Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	(per sq.ft. of Gross Floor Area)
Municipal Wide Services/Class of Service:					
Services Related to a Highway	4,466	2,962	1,832	3,388	1.79
Fire Protection Services	139	92	57	106	0.08
Parks and Recreation	6,480	4,297	2,658	4,916	0.04
Growth-Related Studies	70	46	29	53	0.01
Total Municipal Wide Services/Class of Services	11,156	7,397	4,576	8,463	1.92

Table 6-3 Schedule of Calculated D.C.s (2021\$)

		RESIDEN	TIAL		NON-RESIDENTIAL
Service/Class of Service	Single and Semi- Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	(per sq.ft. of Gross Floor Area)
Municipal Wide Services/Class of Service:					
Services Related to a Highway	4,582	3,038	1,879	3,476	1.83
Fire Protection Services	143	95	59	108	0.08
Parks and Recreation	6,648	4,408	2,726	5,043	0.04
Growth-Related Studies	72	48	30	55	0.01
Total Municipal Wide Services/Class of Services	11,445	7,589	4,694	8,682	1.96



Table 6-4

Comparison of Current and Calculated (2020\$) Residential (per Single-Detached Unit) and Non-Residential (per sq. ft.) D.C.s

Residential (engle Detaction) comparison									
Service/Class of Service	Current	Calculated							
Municipal Wide Services/Classes:									
Services Related to a Highway	3,178	4,466							
Fire Protection Services	178	139							
Parks and Recreation	2,796	6,480							
Growth-Related Studies	183	70							
Parking Services	24	-							
Total Municipal Wide Services/Classes	6,359	11,156							

Residential (Single Detached) Comparison

Non-Residential (per sq.ft.) Comparison

Service/Class of Service	Current	Calculated							
Municipal Wide Services/Classes:									
Services Related to a Highway	1.30	1.79							
Fire Protection Services	0.07	0.08							
Parks and Recreation	0.06	0.04							
Growth-Related Studies	0.07	0.01							
Parking Services	0.01	-							
Total Municipal Wide Services/Classes	1.50	1.92							



Chapter 7 D.C. Policy Recommendations and D.C. By-law Rules



7. D.C. Policy Recommendations and D.C. Policy Rules

7.1 Introduction

Subsection 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.

Subsection 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 subsection 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 Township's existing policies; with consideration for the updates from Bill 108 and Bill 197. 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:

- A class of services be established for growth-related studies;
- the Township uses a uniform Township-wide D.C. calculation for all municipal services and classes; and
- one municipal D.C. by-law be used for all services and classes.

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., subsection 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 bylaw under section 34 of the Planning Act;
- (b) the approval of a minor variance under section 45 of the Planning Act;
- (c) a conveyance of land to which a by-law passed under subsection 50
 (7) of the Planning Act applies;
- (d) the approval of a plan of subdivision under section 51 of the Planning Act;
- (e) a consent under section 53 of the Planning Act;
- (f) the approval of a description under section 9 of the Condominium Act, 1998; or
- (g) the issuing of a permit under the Building Code Act, 1992 in relation to a building or structure."



7.3.2 Determination of the Amount of the Charge

The following conventions be adopted:

- 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 past 15 years. 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).
- Costs allocated to residential and non-residential uses are based upon a number of conventions, as may be suited to each municipal circumstance, as detailed in Chapter 5.

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.

The demolition credit is allowed only if the land was improved by occupied structures and if the demolition permit related to the site was issued less than five years prior to the issuance of a building permit. The credit can, in no case, exceed the amount of D.C.s that would otherwise be payable.

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, section 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 (subsection 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 (section 3); and
- 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 section 2 of O. Reg. 82/98).
- The creation of a second dwelling unit in prescribed classes of proposed new residential buildings, including structures ancillary to dwellings, subject to the prescribed restrictions based on prescribed limits set out in s.2 of O.Reg. 82/98.
- b) Non-statutory exemptions:
 - A dwelling unit used exclusively for the purposes of non-profit assisted rental housing which is 100% funded by the Regional Municipality of Waterloo or the crown in right of Ontario or Canada;
 - Grand River Conservation Authority
 - A temporary use permitted under a municipal zoning by-law enacted in accordance with section 39 of the Planning Act;
 - A Home Occupation;
 - A farm building;
 - Temporary erection of a building without a foundation defined in the Building Code for a period not exceeding six consecutive months and not more than six months in any one calendar year on a site for which development charges have previously been paid; and
 - An accessory use.

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

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

Commencing January 1, 2020, rental housing and institutional developments will pay D.C.s in six equal annual payments commencing at occupancy. Non-profit housing developments will pay D.C.s in 21 equal annual payments. Moreover, the D.C. amount for all developments occurring within 2 years of a Site Plan or Zoning By-law Amendment planning approval (for applications submitted after January 1, 2020), shall be determined based on the D.C. in effect on the day of the Site Plan or Zoning By-law Amendment application.

Installment payments and payments determined at the time of Site Plan or Zoning Bylaw Amendment application will be subject to annual interest charges. The applicable interest rate will be equal to the prime interest rate plus 2%.

For the purposes of administering the By-law, the following definitions are provided as per O. Reg. 454-19:

"Rental housing" means development of a building or structure with four or more dwelling units all of which are intended for use as rented residential premises.

"Institutional development" means development of a building or structure intended for use,

- a. as a long-term care home within the meaning of subsection 2 (1) of the *Long-Term Care Homes Act,* 2007;
- b. as a retirement home within the meaning of subsection 2 (1) of the *Retirement Homes Act*, 2010;
- c. by any of the following post-secondary institutions for the objects of the institution:
 - i. a university in Ontario that receives direct, regular and ongoing operating funding from the Government of Ontario,
 - ii. a college or university federated or affiliated with a university described in subclause (i), or



- iii. an Indigenous Institute prescribed for the purposes of section 6 of the *Indigenous Institutes Act*, 2017;
- d. as a memorial home, clubhouse or athletic grounds by an Ontario branch of the Royal Canadian Legion; or
- e. as a hospice to provide end of life care.

"Non-profit housing development" means development of a building or structure intended for use as residential premises by,

- a. a corporation without share capital to which the *Corporations Act* applies, that is in good standing under that Act and whose primary object is to provide housing;
- b. a corporation without share capital to which the *Canada Not-for-profit Corporations Act* applies, that is in good standing under that Act and whose primary object is to provide housing; or
- *c.* a non-profit housing co-operative that is in good standing under the *Co-operative Corporations Act.*

7.3.7 Indexing

All D.C.s will be subject to mandatory indexing annually on December 1st of each year, in accordance with provisions under the D.C.A.

7.3.8 D.C. Spatial Applicability

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

- 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).
- 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.

All Township services are recovered based on a uniform, Township-wide basis. There have been several reasons why area-rating has not been imposed on these services including:

- All Township services require that the average 10-year service standard be calculated to establish an upper ceiling on the amount of funds which can be collected from all developing landowners. If a D.C. by-law applied to only a part of the municipality, the level of service cannot exceed that which would be determined if the by-law applied to the whole municipality. As such, when applied to forecast growth within the specific area, it would establish an area specific level of service ceiling which could reduce the total revenue recoverable for the municipality, potentially resulting in D.C. revenue shortfalls and impacts on property taxes and user rates
- Township-wide D.C.s ensures a consistent approach to financing the entire cost associated with growth-related capital projects. For example, user rates and property taxes are required to finance the share of growth-related capital projects not recoverable by D.C.s and all associated operating costs. Therefore, the use of area specific D.C.s results in a share of growth-related capital costs being recovered from a specific area, with the remaining capital costs of the projects (i.e. non-D.C. recoverable share) and the associated operating costs with those new assets being recovered from uniform user rates and property taxes, applied to the entire Township.
- Services are generally available across the Township, used often by all residents and are not restricted to one specific geographic area. The use of a Township-wide D.C. approach reflects these system-wide benefits of service and more closely aligns with the funding principles of service provision (e.g. uniform Township-wide property tax rates, etc.).

For the reasons noted above, it is recommended that Council continue the D.C. approach to calculate the charges on a uniform Township-wide basis for all services/classes of service.



7.4 Other D.C. By-law Provisions

It is recommended that:

7.4.1 Categories of Services/Classes for Reserve Fund and Credit Purposes

It is recommended that the Township's D.C. collections be contributed into 4 separate reserve funds including:

- Services related to a Highway;
- Fire Protection Services;
- Parks and Recreation Services; and
- a class for Growth-Related Studies.

7.4.2 By-law In-force Date

The proposed by-laws under D.C.A., 1997 will come into force on January 1, 2021.

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 section 11 of O. Reg. 82/98).

7.4.4 Other Recommendations

It is recommended that Council:

"Classes of services be established for growth studies;"

"Approve the capital project listing set out in Chapter 5 of the D.C. Background Study dated October 14, 2020, subject to further annual review during the capital budget process;"

"Determine that no further public meeting is required;" and

"Approve the D.C. By-law as set out in Appendix F."



Chapter 8 Asset Management Plan

Watson & Associates Economists Ltd. H:North Dumfries/2020 DC Update\Report\North Dumfries 2020 D.C. Background Study - Final.docx

8. Asset Management Plan

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

The A.M.P. shall,

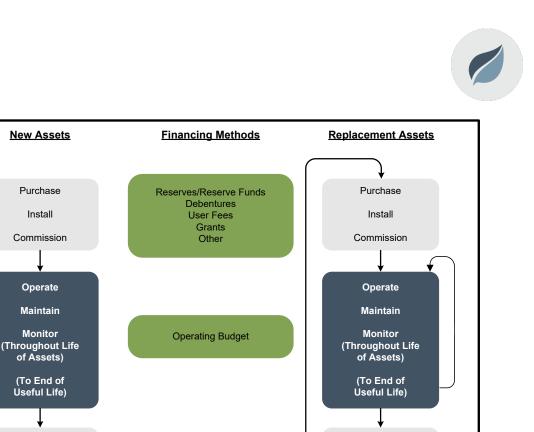
- a) deal with all assets whose capital costs are proposed to be funded under the development charge by-law;
- b) demonstrate that all the assets mentioned in clause (a) are financially sustainable over their full life cycle;
- c) contain any other information that is prescribed; and
- d) be prepared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

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

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

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

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



Removal/Decommission

Disposal



Proceeds on Disposal Funding of Disposal / **Decommissioning Costs**

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

The above provides for the general approach to be considered by Ontario municipalities. At this time, there is not a mandated approach for municipalities hence leaving discretion to individual municipalities as to how they plan for the long-term replacement of their assets. The Township completed it's A.M.P. in 2013, however, this A.M.P. did not include all the assets identified in this background study. As a result, the asset management requirement for this D.C. Background Study has been undertaken independently of the 2013 A.M.P.

New Assets

Purchase

Install

Commission

Operate

Maintain

Monitor

of Assets)

(To End of

Useful Life)

Removal/Decommission

Disposal



In recognition to the above schematic, the following table (presented in 2020\$) has been developed to provide the annualized expenditures and revenues associated with new growth. Note that the D.C.A. does not require an analysis of the non-D.C. capital needs or their associated operating costs so these are omitted from the table below. Furthermore, as only the present infrastructure gap has been considered at this time within the A.M.P., the following does not represent a fiscal impact assessment (including future tax/rate increases) but provides insight into the potential affordability of the new assets:

- 1. The non-D.C. recoverable portion of the projects which will require financing from Township financial resources (i.e. taxation, rates, fees, etc.). This amount has been presented on an annual debt charge amount based on 20-year financing.
- Lifecycle costs for the 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 \$2.1 million.
- 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 \$2.9 million. This amount, totalled with the existing operating revenues of \$10.5 million, provides annual revenues of \$13.5 million by the end of the period.
- 6. In consideration of the above, the capital plan is deemed to be financially sustainable.



Table 8-1

Asset Management – Future Expenditures and Associated Revenues (2020\$)

	2031 (Total)
Expenditures (Annualized)	2031 (10tal)
Annual Debt Payment on Non-Growth Related Capital	892,280
Lifecycle:	
Annual Lifecycle - Township-Wide Services	617,398
Sub-Total - Annual Lifecycle	617,398
Incremental Operating Costs (for D.C. Services)	\$2,054,003
Total Expenditures	\$3,563,680
Revenue (Annualized)	
Total Existing Revenue ¹	\$10,540,701
Incremental Tax and Non-Tax Revenue (User Fees,	
Fines, Licences, etc.)	\$2,918,513
Total Revenues	\$13,459,214

1 As per Sch. 10 of FIR



Chapter 9 By-Law Implementation



9. By-law Implementation

9.1 **Public Consultation Process**

9.1.1 Introduction

This chapter addresses the mandatory, formal public consultation process (Section 9.1.2), as well as the optional, informal consultation process (Section 9.1.3). The latter is designed to seek the co-operation and participation of those involved, in order to produce the most suitable policy. Section 9.1.4 addresses the anticipated impact of the D.C. on development from a generic viewpoint.

9.1.2 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 regarding additional public meetings, once made, is final and not subject to review by a Court or the Local Planning Appeal Tribunal (L.P.A.T.) (formerly the Ontario Municipal Board (O.M.B.)).

9.1.3 Other Consultation Activity

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



- 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 Township 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 Township 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.

9.2 Anticipated Impact of the Charge on Development

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

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



9.3 Implementation Requirements

9.3.1 Introduction

Once the Township 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.

9.3.2 Notice of Passage

In accordance with s.13 of the D.C.A., when a D.C. by-law is passed, the Township 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.

9.3.3 By-law Pamphlet

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

9.3.4 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 Township 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 Township 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.

9.3.5 Complaints

A person required to pay a D.C., or his agent, may complain to the 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 Township Council to the L.P.A.T.



9.3.6 Credits

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

9.3.7 Front-Ending Agreements

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

9.3.8 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."

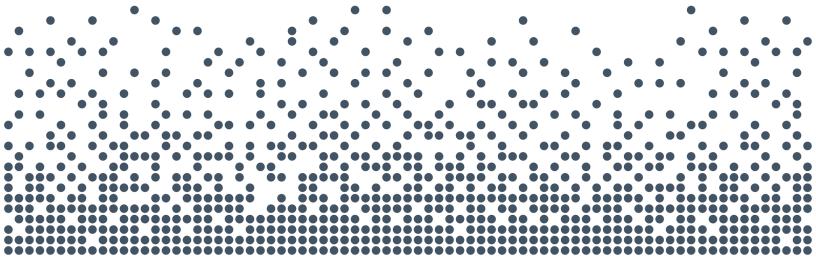


It is also noted that s.s.59(4) of the D.C.A. requires that the municipal approval authority for a draft plan of subdivision under s.s.51(31) of the Planning Act, use its power to impose conditions to ensure that the first purchaser of newly subdivided land is informed of all the D.C.s related to the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

In this regard, if the Township 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 Township D.C.s related to the site.

If the Township 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 Township of North Dumfries Residential Growth Forecast Summary

			Excluc	ling Census Unde	ercount	Housing Units					Person Per
	Year	Population (Including Census Undercount) ¹	Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi- Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households	Unit (P.P.U.): Total Population/ Total Households
le le	Mid 2006	9,430	9,063	78	8,985	2,855	55	130	15	3,055	2.967
Historical	Mid 2011	9,710	9,334	24	9,310	2,953	142	116	18	3,229	2.891
Т	Mid 2016	10,620	10,215	90	10,125	3,150	235	130	20	3,535	2.890
st	Late 2020	11,500	11,057	98	10,959	3,312	322	222	20	3,876	2.853
Forecast	Late 2030	17,060	16,404	145	16,259	4,489	1,029	354	20	5,892	2.784
Ľ.	Mid 2031	17,400	16,731	147	16,584	4,559	1,072	364	20	6,014	2.782
	Mid 2006 - Mid 2011	280	271	-54	325	98	87	-14	3	174	
Ital	Mid 2011 - Mid 2016	910	881	66	815	197	93	14	2	306	
Incremental	Mid 2016 - Late 2020	880	842	8	834	162	87	92	0	341	
Inc	Late 2020 - Late 2030	5,560	5,347	47	5,300	1,177	707	132	0	2,016	
	Late 2020 - Mid 2031	5,900	5,674	49	5,625	1,247	750	142	0	2,139	

Note: The 2031 population target of 17,400 takes into account the development potential of the lands identified as Special Policy Area 2.5.2 b) iv) on Map 2 of the Township of North Dumfries Official Plan, Consolidated November 2018.

Source: Derived from the Township of North Dumfries Official Plan, Consolidated November 2018, by Watson & Associates Economists Ltd., 2020.

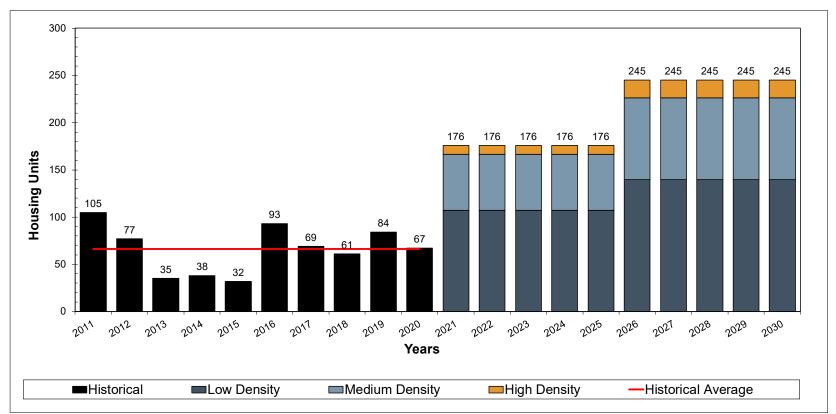
¹ Census undercount estimated at approximately 4.0%. Note: Population including the undercount has been rounded.

² Includes townhouses and apartments in duplexes.

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



Figure A-1 Township of North Dumfries Annual Housing Forecast¹



Source: Historical housing activity derived from Statistics Canada building permit data for the Township of North Dumfries, 2011-2019, and 2020 from the Township of North Dumfries based on August Y.T.D. building permit activity and review of active residential applications.

¹ Growth forecast represents calendar year.



Schedule 2 Township of North Dumfries Current Year Growth Forecast Mid 2016 to Late 2020

			Population
Mid 2016 Population			10,215
Occupants of New Housing Units, Mid 2016 to Late 2020	Units (2) multiplied by P.P.U. (3) gross population increase	341 <u>2.645</u> 901	901
Occupants of New Equivalent Institutional Units, Mid 2016 to Late 2020	Units multiplied by P.P.U. (3) gross population increase	7 <u>1.100</u> 8	8
Decline in Housing Unit Occupancy, Mid 2016 to Late 2020	Units (4) multiplied by P.P.U. decline rate (5) total decline in population	3,535 -0.019 -67	-67
Population Estimate to Late 20	11,057		
Net Population Increase, Mid 2	842		

(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 Unit¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
Singles & Semi Detached	3.245	47%	1.541
Multiples (6)	2.380	25%	0.606
Apartments (7)	1.841	27%	0.497
Total		100%	2.645

¹Based 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 3 Township of North Dumfries 10-Year Growth Forecast Late 2020 to Late 2030

			Population
Late 2020 Population			11,057
Occupants of New Housing Units, Late 2020 to Late 2030	Units (2) multiplied by P.P.U. (3) gross population increase	2,016 2.823 5,692	
Occupants of New Equivalent Institutional Units, Late 2020 to Late 2030	Units multiplied by P.P.U. (3) gross population increase	43 <u>1.100</u> 47	47
Decline in Housing Unit Occupancy, Late 2020 to Late 2030	Units (4) multiplied by P.P.U. decline rate (5) total decline in population	3,876 -0.101 -392	-392
Population Estimate to Late 20	16,404		
Net Population Increase, Late 2	5,347		

(1) Late 2020 Population based on:

2016 Population (10,215) + Mid 2016 to Late 2020 estimated housing units to beginning of forecast period $(341 \times 2.645 = 901) + (7 \times 1.1 = 8) + (3,535 \times -0.019 = -67) = 11,057$

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

(3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
Singles & Semi Detached	3.182	58%	1.858
Multiples (6)	2.414	35%	0.846
Apartments (7)	1.820	7%	0.119
one bedroom or less	1.305		
two bedrooms or more	2.110		
Total		100%	2.823

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) Late 2020 households based upon 2016 Census (3,535 units) + Mid 2016 to Late 2020 unit estimate (341 units) = 3,876 units.

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

(6) Includes townhouses and apartments in duplexes.

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



Schedule 4 Township of North Dumfries Long Term Growth Forecast Late 2020 to Mid 2031

			Population
Late 2020 Population			11,057
Occupants of New Housing Units, 2020 to 2031	Units (2) multiplied by P.P.U. (3) gross population increase	2,139 <u>2.822</u> 6,035	6,035
Occupants of New Equivalent Institutional Units, 2020 to 2031	Units multiplied by P.P.U. (3) gross population increase	45 <u>1.100</u> 49	49
Decline in Housing Unit Occupancy, 2020 to 2031	Units (4) multiplied by P.P.U. decline rate (5) total decline in population	3,876 -0.106 -410	-410
Population Estimate to 2031	16,731		
Net Population Increase, 2020	5,674		

(1) Late 2020 Population based on:

2016 Population (10,215) + Mid 2016 to Late 2020 estimated housing units to beginning of forecast period $(341 \times 2.645 = 901) + (7 \times 1.1 = 8) + (3,535 \times -0.019 = -67) = 11,057$

(2) Late 2020 Population based on:

(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
Singles & Semi Detached	3.182	58%	1.855
Multiples (6)	2.414	35%	0.847
Apartments (7)	1.820	7%	0.120
one bedroom or less	1.305		
two bedrooms or more	2.110		
Total		100%	2.822

[']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) Late 2020 households based upon 2016 Census (3,535 units) + Mid 2016 to Late 2020 unit estimate (341 units) = 3,876 units.

(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 Township of North Dumfries Summary of Units Within Development Approvals Process

	Density Type						
Stage of Development	Singles & Semi- Detached	Multiples ¹	Apartments ²	Total			
Registered Not Built	102	143	101	346			
% Breakdown	29%	41%	29%	100%			
Draft Plans Approved	681	385	0	1,066			
% Breakdown	64%	36%	0%	100%			
Application Under Review	225	97	30	352			
% Breakdown	64%	28%	9%	100%			
Total	1,008	625	131	1,764			
% Breakdown	57%	36%	7%	100%			

Note: The supply table does not include vacant designated greenfield lands. Supply includes Isley Pit.

Source: Current inventory of housing units in development process provided by Township of North Dumfries, September 2020, and summarized by Watson & Associates Economists Ltd., 2020.

¹ Includes townhomes and apartments in duplexes.

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



Schedule 6 Township of North Dumfries Historical Residential Building Permits Years 2011 to 2020

Ver	Residential Building Permits						
Year	Singles & Semi Detached	Multiples ¹	Apartments ²	Total			
2011	88	17	0	105			
2012	59	18	0	77			
2013	35	0	0	35			
2014	38	0	0	38			
2015	20	12	0	32			
Sub-total	240	47	0	287			
Average (2011 - 2015)	48	9	0	57			
% Breakdown	83.6%	16.4%	0.0%	100.0%			
2016	39	54	0	93			
2017	57	11	1	69			
2018	22	0	39	61			
2019	32	0	52	84			
2020	23	44	0	67			
Sub-total	173	109	92	374			
Average (2016 - 2020)	35	22	18	75			
% Breakdown	46.4%	29.0%	24.6%	100.0%			
2011 - 2020							
Total	413	156	92	661			
Average	41	16	9	66			
% Breakdown	62.5%	23.5%	13.9%	100.0%			

Source: Historical housing activity derived from Statistics Canada building permit data for the Township of North Dumfries, 2011-2019, and 2020 from the Township of North Dumfries based on August Y.T.D. building permit activity and review of active residential applications.

¹ Includes townhouses and apartments in duplexes.

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



Schedule 7a Township of North Dumfries Person Per Unit by Age and Type of Dwelling (2016 Census)

Dwelling	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	15 Year Average	15 Year Forecast ¹
1-5	-	-	-	3.178	-	3.245		
6-10	-	-	-	3.038	-	3.242		
11-15	-	-	-	3.171	-	3.163	3.217	3.182
16-20	-	-	-	2.983	-	3.081		
20-25	-	-	-	3.118	4.538	3.409		
25-35	-	-	-	2.830	3.706	2.945		
35+	-	-	2.257	2.655	3.963	2.743		
Total	-	-	2.304	2.877	4.236	2.979		

Age of						
Dwelling	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total
1-5	-	-	-	3.055	-	3.098
6-10	-	-	-	3.192	-	3.469
11-15	-	-	-	3.047	-	3.058
16-20	-	-	-	3.016	-	2.932
20-25	-	-	-	3.115	4.538	3.300
25-35	-	-	1.688	2.815	3.706	2.760
35+	-	1.583	2.044	2.685	4.038	2.624
Total	-	1.647	2.000	2.880	4.151	2.859

¹ PPU has been forecasted based on 2001 to 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 7b Waterloo Region Person Per Unit by Age and Type of Dwelling (2016 Census)

Age of			Multip					
Dwelling	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	15 Year Average	15 Year Forecast ³
1-5	-	1.273	1.867	2.669	-	2.380		
6-10	-	1.205	1.886	2.600	-	2.384		
11-15	-	1.361	1.874	2.762	-	2.510	2.425	2.414
16-20	-	1.333	1.921	2.827	-	2.600		
20-25	-	1.500	1.860	2.813	4.636	2.563		
25-35	-	1.366	1.922	2.823	4.154	2.545		
35+	-	1.274	1.960	2.831	3.359	2.461		
Total	1.769	1.295	1.920	2.775	3.779	2.483		

Age of			Apartm	ents ²				
Dwelling	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	15 Year Average	15 Year Forecast ³
1-5	-	1.300	1.872	2.793	3.091	1.841		
6-10	-	1.303	1.990	2.487	-	1.796		
11-15	-	1.274	2.102	2.722	-	1.901	1.846	1.820
16-20	-	1.458	1.952	3.217	-	1.851		
20-25	-	1.362	1.904	3.106	-	1.809		
25-35	-	1.242	1.899	2.976	-	1.740		
35+	1.214	1.222	1.894	2.756	2.852	1.693		
Total	1.238	1.255	1.911	2.787	2.800	1.742		

Age of	All Density Types												
Dwelling	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total							
1-5	-	1.301	1.889	3.187	4.654	2.697							
6-10	-	1.306	1.969	3.219	4.596	2.978							
11-15	-	1.348	2.027	3.268	4.519	3.071							
16-20	-	1.457	1.955	3.097	4.590	2.901							
20-25	-	1.402	1.917	3.024	4.248	2.688							
25-35	-	1.269	1.909	2.875	4.006	2.595							
35+	1.462	1.250	1.898	2.693	4.020	2.358							
Total	1.473	1.281	1.914	2.915	4.223	2.587							

¹ Includes townhouses and apartments in duplexes.

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

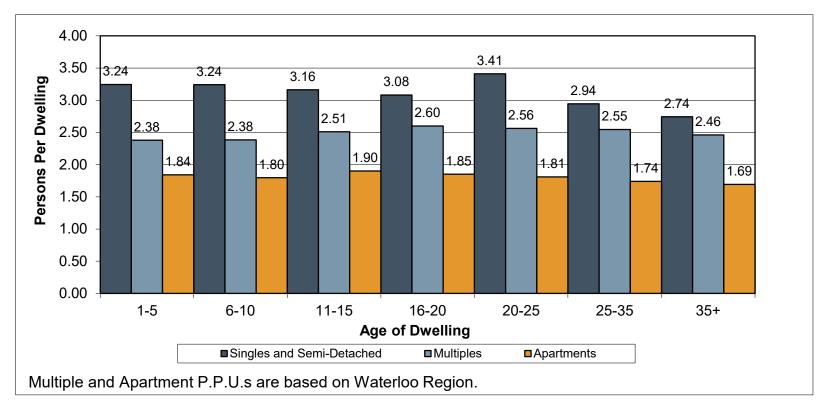
³ PPU has been forecasted based on 2001 to 2016 historical trends.

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 8 Township of North Dumfries Person Per Unit Structural Type and Age of Dwelling (2016 Census)





Schedule 9a Township of North Dumfries Employment Forecast, 2020 to 2031

			_		Activi	ty Rate								Employment				Employment
Period	Population	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total	N.F.P.O.W. ¹	Total Including NFPOW	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total	N.F.P.O.W. ¹	Total Employment (Including N.F.P.O.W.)	Total (Excluding Work at Home and N.F.P.O.W.)
Mid 2006	9,063	0.013	0.048	0.399	0.129	0.022	0.611	0.053	0.664	115	435	3,615	1,170	200	5,535	484	6,019	5,100
Mid 2011	9,334	0.013	0.049	0.322	0.105	0.028	0.517	0.052	0.569	125	455	3,005	980	265	4,830	483	5,313	4,375
Mid 2016	10,215	0.016	0.047	0.324	0.146	0.031	0.563	0.060	0.623	160	475	3,310	1,495	315	5,755	612	6,367	5,280
Late 2020	11,057	0.015	0.046	0.316	0.151	0.031	0.559	0.059	0.618	167	508	3,494	1,664	347	6,180	657	6,837	5,672
Late 2030	16,404	0.012	0.041	0.249	0.138	0.029	0.469	0.056	0.524	193	672	4,077	2,270	479	7,691	912	8,603	7,019
Mid 2031	16,731	0.012	0.041	0.246	0.138	0.029	0.465	0.055	0.520	195	685	4,108	2,302	488	7,778	922	8,700	7,093
								Increme	ntal Change				•	•				
Mid 2006 - Mid 2011	271	0.001	0.001	-0.077	-0.024	0.006	-0.093	-0.002	-0.095	10	20	-610	-190	65	-705	-1	-706	-725
Mid 2011 - Mid 2016	881	0.0023	-0.0022	0.0021	0.0414	0.0024	0.0459	0.0081	0.0540	35	20	305	515	50	925	129	1,054	905
Mid 2016 - Late 2020	842	-0.0006	-0.0006	-0.0080	0.0042	0.0006	-0.0045	-0.0005	-0.0050	7	33	184	169	32	425	45	470	392
Late 2020 - Late 2030	5,347	-0.0033	-0.0050	-0.0675	-0.0122	-0.0022	-0.0901	-0.0038	-0.0939	26	164	583	606	132	1,511	255	1,766	1,347
Late 2020 - Mid 2031	5,674	-0.0034	-0.0050	-0.0705	-0.0129	-0.0022	-0.0940	-0.0043	-0.0983	28	177	614	638	141	1,598	265	1,863	1,421
		•						Annua	Average					•		•	•	
Mid 2006 - Mid 2011	54	0.0001	0.0001	-0.0154	-0.0048	0.0013	-0.0187	-0.0003	-0.0190	2	4	-122	-38	13	-141	0	-141	-145
Mid 2011 - Mid 2016	176	0.0005	-0.0004	0.0004	0.0083	0.0005	0.0092	0.0016	0.0108	7	4	61	103	10	185	26	211	181
Mid 2016 - Late 2020	211	-0.0001	-0.0002	-0.0020	0.0010	0.0001	-0.0011	-0.0001	-0.0012	2	8	46	42	8	106	11	118	98
Late 2020 - Late 2030	535	-0.0003	-0.0005	-0.0067	-0.0012	-0.0002	-0.0090	-0.0004	-0.0094	3	16	58	61	13	151	26	177	135
Late 2020 - Mid 2031	540	-0.0003	-0.0005	-0.0067	-0.0012	-0.0002	-0.0089	-0.0004	-0.0094	3	17	58	61	13	152	25	177	135

Source: Derived from the Township of North Dumfries Official Plan, Consolidated November 2018, by Watson & Associates Economists Ltd., 2020. * 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, traveling salespersons, independent truck drivers, etc.



Schedule 9b Township of North Dumfries Employment and Gross Floor Area (G.F.A.) Forecast, 2020 to 2031

				Employment			Gross Floor Area in Square Feet (Estimated) ¹					
Period	Population	Primary	Industrial	Commercial/ Population Related	Institutional	Total	Industrial	Commercial/ Population Related	Institutional	Total		
Mid 2006	9,063	115	3,615	1,170	200	5,100						
Mid 2011	9,334	125	3,005	980	265	4,375						
Mid 2016	10,215	160	3,310	1,495	315	5,280						
Late 2020	11,057	167	3,494	1,664	347	5,672						
Late 2030	16,404	193	4,077	2,270	479	7,019						
Mid 2031	16,731	195	4,108	2,302	488	7,093						
		•		Incren	nental Change	-						
Mid 2006 - Mid 2011	271	10	-610	-190	65	-725						
Mid 2011 - Mid 2016	881	35	305	515	50	905						
Mid 2016 - Late 2020	842	7	184	169	32	392	220,900	98,200	18,100	337,200		
Late 2020 - Late 2030	5,347	26	583	606	132	1,347	699,500	351,300	73,700	1,124,500		
Late 2020 - Mid 2031	5,674	28	614	638	141	1,421	736,700	369,900	78,800	1,185,400		
	•			Ann	ual Average		-					
Mid 2006 - Mid 2011	54	2	-122	-38	13	-145						
Mid 2011 - Mid 2016	176	7	61	103	10	181						
Mid 2016 - Late 2020	211	2	46	42	8	98	55,225	24,550	4,525	84,300		
Late 2020 - Late 2030	535	3	58	61	13	135	69,950	35,130	7,370	112,450		
Late 2020 - Mid 2031	493	2	53	55	12	124	70,162	35,229	7,505	112,895		

Source: Watson & Associates Economists Ltd., 2020.

¹ Square Foot Per Employee Assumptions

Industrial 1,200 580

Commercial/ Population Related

Institutional 560

* Reflects Late 2019 to Mid 2031 forecast period



Schedule 10 Township of North Dumfries Non-Residential Construction Value Years 2007 to 2016 (000's 2018 \$)

YEAR				ustrial			Comm				Instit	utional			T	otal		
		New		Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total	
	007	8,015	609		8,624	814	356		1,170	29	0	0	29	8,858		0	9,823	
	800	2,351	205	1,448	4,004	3,671	288	0	3,959	29	82	0	111	6,050		1,448	8,073	
	009	2,371	534	678	3,583	895	1,331	283	2,509	0	339	0	339	3,266		961	6,431	
	010	521	494	0	1,015	16,219	815	820	17,853	0	0	0	0	16,739		820	18,868	
)12	3,034	248	0	3,281	2,187	854	836	3,877	10	552	1,018		5,230		1,855	8,739	
	013	1,948	511	0	2,460	484	6,104	0	6,588	515	0	0	515	2,948		0	9,563	
)14	807	533	2,890	4,229	4,727	1,439	858	7,023	0	464	0	464	5,534		3,747	11,716	
)15	4,566	291	365	5,222	4,208	933	0	5,141	0	0	0	0	8,774	1,224	365	10,363	
	016	7,582	688	1,118	9,388	535	1,732	0	2,267	0	187	0	187	8,117	2,607	1,118	11,842	
Subtotal		31,546	4,319	6,933	42,798	34,329	14,130	6,713	55,172	583	1,692	1,018	3,293	66,458	20,141	14,664	101,263	
Percent of Total		74%	10%	16%	100%	62%	26%	12%	100%	18%	51%	31%	100%	66%	20%	14%	100%	
Average		3,155	432	1,156	4,280	3,433	1,413	1,343	5,517	146	282	1,018	412	6,646	2,014	1,833	10,126	
0007 0011																		
2007 - 2011 Period Total					40.040				20.070				546				40.040	
					18,218				30,276				546 109				49,040	
2007 - 2011 Average % Breakdown					3,644 37.1%				6,055 61.7%				1.1%				9,808 100.0%	
% Breakdown					37.1%				01.7%				1.1%				100.0%	
2012 - 2016																		
Period Total					24,580				24,896				2,747				52,223	
2012 - 2016 Average					24,560 4,916				24,090 4,979				2,747 549				52,225 10,445	
% Breakdown					4,910 47.1%				4,979 47.7%				5.3%				10,445	
					47.170				41.170				5.576				100.076	
2007 - 2016																		
Period Total					42,798				55,172				3,293				101,263	
2007 - 2016 Average					4,280				5,517				329 329				101,203	
% Breakdown					42.3%				54.5%				3.3%				100.0%	
// Dicaldowill					72.070				57.570				0.070				100.070	

Source: Statistics Canada Publication, 64-001-XIB

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



Schedule 11 Township of North Dumfries Employment to Population Ratio by Major Employment Sector, 2006 to 2016

			Year		Cha	nge	Commonto	
NAICS		2006	2011	2016	06-11	11-16	Comments	
	Employment by industry							
	Primary Industry Employment							
11	Agriculture, forestry, fishing and hunting	210	245	185	35	-60	Categories which relate to local land-based resources	
21	Mining and oil and gas extraction	15	20	35	5	15		
	Sub-total	225	265	220	40	-45		
	Industrial and Other Employment							
22	Utilities	0	0	15	0	15		
23	Construction	335	455	410	120	-45		
31-33	Manufacturing	1,970	1,450	1,460	-520	10	Categories which relate primarily to industrial land	
41	Wholesale trade	460	370	495	-90	125	supply and demand	
48-49	Transportation and warehousing	835	765	955	-70	190		
56	Administrative and support	98	80	88	-18	8		
	Sub-total	3,698	3,120	3,423	-578	303		
	Population Related Employment							
44-45	Retail trade	340	250	495	-90	245		
51	Information and cultural industries	15	35	15	20	-20		
52	Finance and insurance	150	90	175	-60	85		
53	Real estate and rental and leasing	15	65	45	50	-20		
54	Professional, scientific and technical services	215	175	335	-40	160	Categories which relate primarily to population growth	
55	Management of companies and enterprises	0	0	10	0	10	within the municipality	
56	Administrative and support	98	80	88	-18	8		
71	Arts, entertainment and recreation	130	135	220	5	85		
72	Accommodation and food services	135	105	85	-30	-20		
81	Other services (except public administration)	255	180	240	-75	60		
	Sub-total	1,353	1,115	1,708	-238	593		
	Institutional							
61	Educational services	110	75	175	-35	100		
62	Health care and social assistance	115	150	170	35	20		
91	Public administration	35	105	60	70	-45		
	Sub-total	260	330	405	70	75		
	Total Employment	5,535	4,830	5,755	-705	925		
	Population	9,063	9,334	10,215	271	881		
	Employment to Population Ratio							
	Industrial and Other Employment	0.41	0.33	0.34	-0.07	0.00		
	Population Related Employment	0.15	0.12	0.17	-0.03	0.05		
	Institutional Employment	0.03	0.04	0.04	0.01	0.00		
	Primary Industry Employment	0.02	0.03	0.02	0.00	-0.01		
	Total	0.61	0.52	0.56	-0.09	0.05		

Source: Statistics Canada Employment by Place of Work

Note: 2006-2016 employment figures are classified by North American Industry Classification System (NAICS) Code



Appendix B Historical Level of Service Calculations



The Township of North Dumfries Service Standard Calculation Sheet

Service: Fire Protection Services - Facilities Unit Measure: sq.ft. of building area											
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Bld'g	Value/sq.ft. with land, site works, etc.
4,952	4,952	4,952	4,952	4,952	4,952	4,952	4,952	4,952	4,952	\$265	\$310
4,952	4,952	4,952	4,952	4,952	4,952	4,952	4,952	4,952	4,952		
	sq.ft. of build 2011 4,952	sq.ft. of building area 2011 2012 4,952 4,952	sq.ft. of building area 2011 2012 2013 4,952 4,952 4,952	sq.ft. of building area 2011 2012 2013 2014 4,952 4,952 4,952 4,952	sq.ft. of building area 2011 2012 2013 2014 2015 4,952 4,952 4,952 4,952 4,952	sq.ft. of building area 2011 2012 2013 2014 2015 2016 4,952 4,952 4,952 4,952 4,952 4,952	sq.ft. of building area 2011 2012 2013 2014 2015 2016 2017 4,952 4,952 4,952 4,952 4,952 4,952 4,952	sq.ft. of building area 2011 2012 2013 2014 2015 2016 2017 2018 4,952 4,952 4,952 4,952 4,952 4,952 4,952 4,952	sq.ft. of building area 2011 2012 2013 2014 2015 2016 2017 2018 2019 4,952 4,952 4,952 4,952 4,952 4,952 4,952 4,952 4,952	sq.ft. of building area 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 4,952 4,952 4,952 4,952 4,952 4,952 4,952 4,952 4,952 4,952 4,952 4,952 4,952	sq.ft. of building area 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 Bld'g Value (\$/sq.ft.) 4,952

Population	9,310	9,605	9,820	9,924	10,037	10,125	10,364	10,561	10,689	11,057
Per Capita Standard	0.5319	0.5156	0.5043	0.4990	0.4934	0.4891	0.4778	0.4689	0.4633	0.4479

10 Year Average	2011-2020
Quantity Standard	0.4891
Quality Standard	\$310
Service Standard	\$152

D.C. Amount (before deductions)	11 Year
Forecast Population	5,625
\$ per Capita	\$152
Eligible Amount	\$852,919



The Township of North Dumfries Service Standard Calculation Sheet

Service: Fire Protection Services - Vehicles & Equipment Unit Measure: No. of vehicles											
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020 Value (\$/Vehicle)
Pumper 1	1	1	1	1	1	1	1	1	1	1	\$594,400
Pumper 2	1	1	1	1	1	1	1	1	1	1	\$594,400
Rescue/Command Unit	1	1	1	1	1	1	1	1	1	1	\$412,100
55ft. Aerial	1	1	1	-	-	-	-	-	-	-	\$588,700
Tanker	1	1	1	2	2	2	2	2	2	2	\$383,000
Fire Chief's Vehicle	-	1	1	1	1	1	1	1	1	1	\$44,600
Total	5	6	6	6	6	6	6	6	6	6	
											-

Population	9,310	9,605	9,820	9,924	10,037	10,125	10,364	10,561	10,689	11,057
Per Capita Standard	0.0005	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0005

10 Year Average	2011-2020
Quantity Standard	0.0006
Quality Standard	\$406,917
Service Standard	\$244

D.C. Amount (before deductions)	11 Year
Forecast Population	5,625
\$ per Capita	\$244
Eligible Amount	\$1,373,344



The Township of North Dumfries Service Standard Calculation Sheet

Service: Unit Measure:

Fire Protection Services - Small Equipment and Gear No. of equipment and gear

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020 Value (\$/item)	
Personal Equipment (e.g. bunker gear, uniforms)	35	35	35	35	35	35	35	35	35	35	\$3,600	
SCBA (breathing apparatus)	15	15	15	15	15	15	15	15	15	15	\$6,500	
SCBA (spare bottles)	30	30	30	30	30	30	30	30	30	30	\$1,400	
SCBA (face pieces)	35	35	35	35	35	35	35	35	35	35	\$400	
Communications Equipment (mobile units, radios)	1	1	1	1	1	1	1	1	1	1	\$117,700	
Extrication Tools	1	1	1	1	1	1	1	1	1	1	\$65,000	
Shore Based Water Rescue	1	1	1	1	1	1	1	1	1	1	\$26,000	
Total	118	118	118	118	118	118	118	118	118	118		
Deputation	0.210	0.605	0.000	0.024	10.027	10 105	10.004	10 561	10 690	11.057	1	

Population	9,310	9,605	9,820	9,924	10,037	10,125	10,364	10,561	10,689	11,057
Per Capita Standard	0.0127	0.0123	0.0120	0.0119	0.0118	0.0117	0.0114	0.0112	0.0110	0.0107

10 Year Average	2011-2020
Quantity Standard	0.0117
Quality Standard	\$4,121
Service Standard	\$48

D.C. Amount (before deductions)	11 Year
Forecast Population	5,625
\$ per Capita	\$48
Eligible Amount	\$271,238



The Township of North Dumfries Service Standard Calculation Sheet

Service: Unit Measure:	Services Related to a Highway - Roads km of roadways										
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020 Value (\$/km)
All Roads	171	171	171	171	171	171	171	171	171	171	\$519,300
Total	171	171	171	171	171	171	171	171	171	171	
Population	9,310	9,605	9,820	9,924	10,037	10,125	10,364	10,561	10,689	11,057	
Per Capita Standard	0.0184	0.0178	0.0174	0.0172	0.0170	0.0169	0.0165	0.0162	0.0160	0.0155]

10 Year Average	2011-2020
Quantity Standard	0.0169
Quality Standard	\$518,970
Service Standard	\$8,771

D.C. Amount (before deductions)	11 Year
Forecast Population	5,625
\$ per Capita	\$8,771
Eligible Amount	\$49,334,625



The Township of North Dumfries Service Standard Calculation Sheet

Service:

Services Related to a Highway - Bridges, Culverts & Structures Number of Bridges, Culverts & Structures

Unit Measure:	Number of Bridges, Culverts & Structures										
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020 Value (\$/item)
Bridges	5	5	5	5	5	5	5	5	5	5	\$3,611,300
Total	5	5	5	5	5	5	5	5	5	5	

Population	9,310	9,605	9,820	9,924	10,037	10,125	10,364	10,561	10,689	11,057
Per Capita Standard	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005

10 Year Average	2011-2020
Quantity Standard	0.0005
Quality Standard	\$3,566,600
Service Standard	\$1,783

D.C. Amount (before deductions)	11 Year
Forecast Population	5,625
\$ per Capita	\$1,783
Eligible Amount	\$10,031,063



The Township of North Dumfries Service Standard Calculation Sheet

Service: _Unit Measure:	Services Related to a Highway - Facilities ft² of building area											
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Main Shop	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	\$411	\$457
Cold Storage Building	3,456	3,456	3,456	3,456	3,456	3,456	3,456	3,456	3,456	3,456	\$177	\$199
Quonset	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	\$59	\$69
SaltDome	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	\$77	\$89
Total	18,040	18,040	18,040	18,040	18,040	18,040	18,040	18,040	18,040	18,040		

Population	9,310	9,605	9,820	9,924	10,037	10,125	10,364	10,561	10,689	11,057
Per Capita Standard	1.9377	1.8782	1.8371	1.8178	1.7973	1.7817	1.7406	1.7082	1.6877	1.6315

10 Year Average	2011-2020
Quantity Standard	1.7818
Quality Standard	\$286
Service Standard	\$510

D.C. Amount (before deductions)	11 Year
Forecast Population	5,625
\$ per Capita	\$510
Eligible Amount	\$2,868,019



The Township of North Dumfries

Service Standard Calculation Sheet

Service:

Services Related to a Highway - Vehicles & Equipment

Unit Measure:	No. of vehicles	•			ont						
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020 Value (\$/Vehicle)
Ford Pick Up (1)	1	1	1	1	1	1	1	1	1	1	\$47,700
Sterling Tandem (2)	1	1	1	1	1	1	1	1	1	1	\$286,600
Chevrolet Pick Up (11)	1	1	1	1	1	1	1	1	1	1	\$40,600
Frieghtliner Tandem (14)	1	1	1	1	1	1	1	1	1	1	\$286,600
Volvo Tandem (15)	1	1	1	1	1	1	1	1	1	1	\$286,600
International Bucket Truck Single Axle (16)	1	1	1	1	1						\$294,300
Freightliner Tandem (17)	1	1	1	1	1	1	1	1	1	1	\$286,600
Freightliner Tandem (18)	1	1	1	1	1	1	1	1	1	1	\$286,600
Freightliner Single Axle (19)	1	1	1	1	1	1	1	1	1	1	\$238,800
Freightliner Single Axle (20)	1	1	1	1	1	1	1	1	1	1	\$238,800
Ford 1 Ton Single Axle (25)	1	1	1	1	1	1	1	1	1	1	\$82,800
John Deere Grader (4)	1	1	1	1	1	1	1	1	1	1	\$422,500
Vermeer 1500 Wood Chipper (n/a)	1	1	1	1	1	1	1	1	1	1	\$69,200
Loader (21)	1	1	1	1	1	1	1	1	1	1	\$291,900
Mower Tractor Ford (24)	1	1	1	1	1	1	1	1	1	1	\$102,900
Mower (n/a)	1	1	1	1	1	1	1	1	1	1	\$26,500
Radio Tower	1	1	1	1	1	1	1	1	1	1	\$88,400
Fuel System Tank and Pumps	1	1	1	1	1	1	1	1	1	1	\$117,700
Water Tank	1	1	1	1	1	1	1	1	1	1	\$14,100
Miscellaneous Tools and Equipment	1	1	1	1	1	1	1	1	1	1	\$23,600
Sweeper attachment for Tractor (2018)								1	1	1	\$16,100
Backhoe (2015)					1	1	1	1	1	1	\$148,700
2 ton Mobile Asphalt Hot Box								1	1	1	\$38,300
Tandem Axle Float (2018)								1	1	1	\$20,800
Generator								1	1	1	\$20,400
Tandem										1	\$286,600
Total	20	20	20	20	21	20	20	24	24	25	

Population	9,310	9,605	9,820	9,924	10,037	10,125	10,364	10,561	10,689	11,057
Per Capita Standard	0.0021	0.0021	0.0020	0.0020	0.0021	0.0020	0.0019	0.0023	0.0022	0.0023

10 Year Average	2011-2020
Quantity Standard	0.0021
Quality Standard	\$166,081
Service Standard	\$349

D.C. Amount (before deductions)	11 Year
Forecast Population	5,625
\$ per Capita	\$349
Eligible Amount	\$1,961,831



The Township of North Dumfries Service Standard Calculation Sheet

Service: Unit Measure:	Parkland Deve Hectares of P	•									
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020 Value (\$/Acre)
Victoria Park	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	\$106,000
Piper's Glen	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	\$106,000
Centennial Park	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	\$106,000
Schmidt Park	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	\$106,000
Douglas Park	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	\$106,000
Roseville Community Centre	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	\$106,000
Browns Subdivision	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	\$106,000
Branchton Park	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	\$106,000
Riverside Park	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	\$106,000
Clyde Park	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	\$106,000
Hilltop Drive	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$106,000
Cowan Park	-	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	\$106,000
Total	27.3	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	
F											1

Population	9,310	9,605	9,820	9,924	10,037	10,125	10,364	10,561	10,689	11,057
Per Capita Standard	0.0029	0.0037	0.0036	0.0036	0.0035	0.0035	0.0034	0.0034	0.0033	0.0032

10 Year Average	2011-2020
Quantity Standard	0.0034
Quality Standard	\$106,568
Service Standard	\$362

D.C. Amount (before deductions)	11 Year
Forecast Population	5,625
\$ per Capita	\$362
Eligible Amount	\$2,038,106



The Township of North Dumfries Service Standard Calculation Sheet

Service:	Parkland Ame	enities									
Unit Measure:	No. of parklan	d amenities	;								
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020 Value (\$/item)
Baseball Diamonds											
Branchton Park	1	1	1	1	1	1	1	1	1	1	\$96,500
Piper's Glen	1	1	1	1	1	1	1	1	1	1	\$96,500
Roseville Community Centre	1	1	1	1	1	1	1	1	1	1	\$96,500
Schmidt (lit)	2	2	2	2	2	2	2	2	2	2	\$173,000
Victoria Park (lit)	2	2	2	2	2	2	2	2	2	2	\$173,000
Lion's Park	1	1	1	1	1	1	1	1	1	1	\$96,500
Clyde Park	1	1	1	1	1	1	1	1	1	1	\$96,500
Soccer Fields											
Clyde Park	1	1	1	1	1	1	1	1	1	1	\$96,500
Piper's Glen	2	2	2	1	1	1	1	1	1	1	\$96,500
Cowan Park (senior lit)	-	1	1	1	1	1	1	1	1	1	\$173,000
Cowan Park (senior)	-				1	1	1	1	1	1	\$96,500
Cowan Park (intermediate)	-	2	2	2	2	2	2	2	2	2	\$48,300
Browns	1	1	1	1	1	1	1	1	1	1	\$96,500
Roseville Community Centre	1	1	1	1	1	1	1	1	1	1	\$96,500
Schmidt	1	1	1	1	1	1	1	1	1	1	\$96,500
Playgrounds											
Branchton Park	1	1	1	1	1	1	1	1	1	1	\$58,900
Browns Subdivision	1	1	1	1	1	1	1	1	1	1	\$58,900
Douglas Park	1	1	1	1	1	1	1	1	1	1	\$58,900
Hilltop Drive	1	1	1	1	1	1	1	1	1	1	\$58,900
Piper's Glen	1	1	1	1	1	1	1	1	1	1	\$58,900
Riverside Park	1	1	1	1	1	1	1	1	1	1	\$58,900
Victoria Park	1	1	1	1	1	1	1	1	1	1	\$58,900
Roseville Community Centre	1	1	1	1	1	1	1	1	1	1	\$58,900
Cowan Park	-	1	1	1	1	1	1	1	1	1	\$58,900
Lion's	1	1	1	-	-	-	-	-	-	-	\$58,900
Clyde Park	1	1	1	1	1	1	1	1	1	1	\$58,900
Picnic Facilities											
Branchton Park	1	1	1	1	1	1	1	1	1	1	\$11,700
Centennial Park	1	1	1	1	1	1	1	1	1	1	\$11,700
Clyde Park	1	1	1	1	1	1	1	1	1	1	\$11,700
Victoria Park	1	1	1	1	1	1	1	1	1	1	\$11,700
Cowan Park	-	-	1	1	1	1	1	1	1	1	\$11,700
Schmidt	1	1	1	1	1	1	1	1	1	1	\$11,700



The Township of North Dumfries Service Standard Calculation Sheet

Service: Unit Measure:	Parkland Ame	-									
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020 Value (\$/item)
Other Park Facilities											\$0
Tennis Court - Victoria Park (2 cell, lit)	1	1	1	1	1	1	1	1	1	1	\$252,600
Concession/Storage Building - Victoria Park	1	1	1	1	1	1	1	1	1	1	\$11,700
Park Washrooms - Victoria Park	1	1	1	1	1	1	1	1	1	1	\$23,600
Bandshell - Victoria Park	1	1	1	1	1	1	1	1	1	1	\$23,600
Pavilion - Centennial Park	1	1	1	1	1	1	1	1	1	1	\$23,600
Watson's Pond Pedestrial Bridge	1	1	1	1	1	1	1	1	1	1	\$29,500
Splash Pad - Cowan Park		1	1	1	1	1	1	1	1	1	\$280,600
Park Washrooms - Schmidt	-	-	1	1	1	1	1	1	1	1	\$23,600
Concession/Storage Building - Schmidt	1	1	1	1	1	1	1	1	1	1	\$11,700
Park Washrooms - Cowan Soccer Park		1	1	1	1	1	1	1	1	1	\$23,600
Concession/Storage BuildiIng - Cown Soccer Park	-	-	1	1	1	1	1	1	1	1	\$11,700
Pavillion - Cowan Park			1	1	1	1	1	1	1	1	\$23,600
Total	37	43	47	45	46	46	46	46	46	46	
Denvelation	0.040	0.005	0.000	0.004	40.007	40.405	40.004	40.504	40.000	44.057	1

Population	9,310	9,605	9,820	9,924	10,037	10,125	10,364	10,561	10,689	11,057
Per Capita Standard	0.0040	0.0045	0.0048	0.0045	0.0046	0.0045	0.0044	0.0044	0.0043	0.0042

10 Year Average	2011-2020
Quantity Standard	0.0044
Quality Standard	\$75,123
Service Standard	\$331

D.C. Amount (before deductions)	11 Year
Forecast Population	5,625
\$ per Capita	\$331
Eligible Amount	\$1,859,288



The Township of North Dumfries Service Standard Calculation Sheet

Service: Unit Measure:	Parks and Re No. of vehicle			Equipment							
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020 Value (\$/Vehicle)
Truck #1 - 2009	1	1	1	1	1	1	1	1	1	1	\$40,600
Truck #2 2004	1	1	1	1	1	1	1	1	1	1	\$40,600
Truck #3 1999	1	1	1	1	1	1	1	1	1	1	\$40,600
Trailer	1	1	1	1	1	1	1	1	1	1	\$9,400
Olympia Outside Groomer	1	1	1	1	1	1	1	1	1	1	\$12,400
Zamboni	1	1	1	1	1	1	1	1	1	1	\$100,300
Zamboni	1	1	1	1	1	1	1	1	1	1	\$100,300
Kubota ATV Side by Side	1	1	1	1	1	1	1	1	1	1	\$19,500
Kubota 45 hp Tractor	-	1	1	1	1	1	1	1	1	1	\$55,100
Edger/Electric	1	1	1	1	1	2	2	2	2	2	\$7,000
Edger/Propane	1	1	1	1	1						\$4,700
Wide Deck Mower	1	1	1	1	1	1	1	1	1	1	\$89,200
Turf / Trail Management Equipment	1	1	1	1	1	1	1	1	1	1	\$14,300
5 foot Zero Turn Mowers (2018)	2	2	2	2	2	2	2	2	2	2	\$20,100
Trailer								1	1	1	\$5,000
Total	14	15	15	15	15	15	15	16	16	16	
Population	9,310	9,605	9,820	9,924	10,037	10,125	10,364	10,561	10,689	11,057	

Population	9,310	9,605	9,820	9,924	10,037	10,125	10,304	10,501	10,009	
Per Capita Standard	0.0015	0.0016	0.0015	0.0015	0.0015	0.0015	0.0014	0.0015	0.0015	

10 Year Average	2011-2020
Quantity Standard	0.0015
Quality Standard	\$37,580
Service Standard	\$56

D.C. Amount (before deductions)	11 Year
Forecast Population	5,625
\$ per Capita	\$56
Eligible Amount	\$317,081

0.0014



The Township of North Dumfries Service Standard Calculation Sheet

Service: _Unit Measure:	Recreation Fa ft ² of building											
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Ayr Community Centre & Arena	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	\$236	\$264
North Dumfries Community Complex (Elig	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	\$278	\$310
Roseville Community Centre	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	\$236	\$264
501 Scott Street, Ayr (Community Hall)	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$265	\$296
Total	92,200	92,200	92,200	92,200	92,200	92,200	92,200	92,200	92,200	92,200		
	0.040	0.005	0.000	0.004	40.007	40.405	10.004	10 501	10,000	44.057		

Population	9,310	9,605	9,820	9,924	10,037	10,125	10,364	10,561	10,689	11,057
Per Capita Standard	9.9033	9.5992	9.3890	9.2906	9.1860	9.1062	8.8962	8.7302	8.6257	8.3386

10 Year Average	2011-2020
Quantity Standard	9.1065
Quality Standard	\$297
Service Standard	\$2,703

D.C. Amount (before deductions)	11 Year
Forecast Population	5,625
\$ per Capita	\$2,703
Eligible Amount	\$15,205,669



Appendix C Cash-Flow Calculations



Cash Flow Calculations - Fire Protection Services

		Development Related Expenditures	Related	Development Related Long- Term Debt		\$43.83			1% / 3%	D.C. Reserve
	D.C.	Nominal	Project Cost	Existing Debt		Per Capita per			D.C. Reserve	Fund
	Reserve	Project Cost	Inflated at 3%	Payments		Year			Fund	Closing
	Fund					Inflated at		Annual	Interest	Balance
	Opening				Population	(3%) Starting in	Anticipated	Surplus/	Earnings/	after
Year	Balance				Growth	2020	Revenues	(Deficit)	(Cost)	Interest
2021	121,199	205,600	205,600		549	43.83	24,048	(60,353)	2,360	(57,993)
2022	(57,993)	29,600	30,488		549	45.15	24,769	(63,711)	(911)	(64,622)
2023	(64,622)	-	-		549	46.50	25,512	(39,110)	(1,556)	(40,666)
2024	(40,666)	-	-		549	47.90	26,278	(14,388)	(826)	(15,214)
2025	(15,214)	-	-		549	49.33	27,066	11,852	(50)	11,802
2026	11,802	157,280	182,331		549	50.81	27,878	(142,650)	1,169	(141,481)
2027	(141,481)	-	-		549	52.34	28,714	(112,767)	(3,814)	(116,581)
2028	(116,581)	-	-		549	53.91	29,576	(87,005)	(3,054)	(90,059)
2029	(90,059)	-	-		549	55.53	30,463	(59,595)	(2,245)	(61,840)
2030	(61,840)	-	-		549	57.19	31,377	(30,463)	(1,385)	(31,848)
2031	(31,848)	-	-		549	58.91	32,318	471	(471)	0
Total		392,480	418,419	0	6,035		308,001		(10,781)	

Cash Flow Calculation - Fire Protection Services - Residential

Note: Numbers may not add due to rounding

Cash Flow Calculation - Fire Protection Services - Non-Residential

		Development Related Expenditures	Development Related Expenditures	Development Related Long- Term Debt		\$0.076			1% / 3%	
		Nominal	Project Cost	Existing Debt		per sq.ft. per				
		Project Cost	Inflated at 3%	Payments		Year			D.C. Reserve	D.C. Reserve
	D.C. Reserve				Sq. Ft. of	Inflated at			Fund	Fund Closing
	Fund Opening				Gross Floor	(3%) Starting in	Anticipated	Annual Surplus/	Interest Earnings	Balance after
Year	Balance				Area	2020	Revenues	(Deficit)	/(Cost)	Interest
2021	30,300	51,400	51,400		79,027	0.076	6,012	(15,088)	590	(14,498)
2022	(14,498)	7,400	7,622		79,027	0.078	6,192	(15,928)	(228)	(16,156)
2023	(16,156)	-	-		79,027	0.081	6,378	(9,777)	(389)	(10,166)
2024	(10,166)	-	-		79,027	0.083	6,569	(3,597)	(206)	(3,803)
2025	(3,803)	-	-		79,027	0.086	6,767	2,963	(13)	2,951
2026	2,951	39,320	45,583		79,027	0.088	6,970	(35,663)	292	(35,370)
2027	(35,370)	-	-		79,027	0.091	7,179	(28,192)	(953)	(29,145)
2028	(29,145)	-	-		79,027	0.094	7,394	(21,751)	(763)	(22,515)
2029	(22,515)	-	-		79,027	0.096	7,616	(14,899)	(561)	(15,460)
2030	(15,460)	-	-		79,027	0.099	7,844	(7,616)	(346)	(7,962)
2031	(7,962)	_	-		79,027	0.102	8,080	118	(118)	(0)
Total		98,120	104,605	0	869,293		77,000		(2,695)	

Note: Numbers may not add due to rounding



Cash Flow Calculations – Services Related to a Highway

		Development Related Expenditures	Related Expenditures	Development Related Long- Term Debt		\$1,403.66			1% / 3%	D.C. Reserve
	D.C. Reserve	Nominal Project Cost	Project Cost Inflated at 3%			Per Capita per Year			D.C. Reserve Fund	Fund Closing
	Fund	FIOJECI COSI	innateu at 576			Inflated at		Annual	Interest	Balance
	Opening				Population	(3%) Starting in	Anticipated	Surplus/	Earnings/	after
Year	Balance				Growth	2020	Revenues	(Deficit)	(Cost)	Interest
2021	463,846	26,520	26,520		549	1,403.66	770,099	1,207,424	8,622	1,216,046
2022	1,216,046	22,880	23,566		549	1,445.77	793,202	1,985,681	16,244	2,001,925
2023	2,001,925	-	-		549	1,489.14	816,998	2,818,923	24,104	2,843,027
2024	2,843,027	1,496,800	1,635,594	211,930	549	1,533.82	841,508	1,837,011	41,875	1,878,887
2025	1,878,887	1,327,846	1,494,502	211,930	549	1,579.83	866,753	1,039,208	31,655	1,070,863
2026	1,070,863	1,480,040	1,715,772	211,930	549	1,627.23	892,755	35,916	24,811	60,727
2027	60,727	-	-	211,930	549	1,676.04	919,538	768,335	6,265	774,600
2028	774,600	-	-	211,930	549	1,726.32	947,124	1,509,794	13,541	1,523,335
2029	1,523,335	1,443,680	1,828,811	211,930	549	1,778.11	975,538	458,133	30,315	488,448
2030	488,448	-	-	211,930	549	1,831.46	1,004,804	1,281,322	10,968	1,292,290
2031	1,292,290	26,520	35,641	2,321,481	549	1,886.40	1,034,948	(29,883)	29,883	0
Total		5,824,286	6,760,405	6,398,815	6,035		9,863,266		238,283	

Cash Flow Calculation - Services Related to a Highway - Residential

Note: Numbers may not add due to rounding

Cash Flow Calculation - Services Related to a Highway - Non-Residential

		Development Related Expenditures	Development Related Expenditures	Development Related Long- Term Debt		\$1.787			1% / 3%	
		Nominal	Project Cost			per sq.ft. per				
		Project Cost	Inflated at 3%			Year			D.C. Reserve	D.C. Reserve
	D.C. Reserve				Sq. Ft. of	Inflated at			Fund	Fund Closing
	Fund Opening				Gross Floor	(3%) Starting in	Anticipated	Annual Surplus/	Interest Earnings	Balance after
Year	Balance				Area	2020	Revenues	(Deficit)	/(Cost)	Interest
2021	115,961	6,630	6,630		107,764	1.787	192,525	301,856	2,155	304,011
2022	304,011	5,720	5,892		107,764	1.840	198,300	496,420	4,061	500,481
2023	500,481	-	-		107,764	1.895	204,249	704,731	6,026	710,757
2024	710,757	374,200	408,898	52,982	107,764	1.952	210,377	459,253	10,469	469,722
2025	469,722	331,961	373,625	52,982	107,764	2.011	216,688	259,802	7,914	267,716
2026	267,716	370,010	428,943	52,982	107,764	2.071	223,189	8,979	6,203	15,182
2027	15,182	-	-	52,982	107,764	2.133	229,885	192,084	1,566	193,650
2028	193,650	-	-	52,982	107,764	2.197	236,781	377,449	3,385	380,834
2029	380,834	360,920	457,203	52,982	107,764	2.263	243,884	114,533	7,579	122,112
2030	122,112	-	-	52,982	107,764	2.331	251,201	320,330	2,742	323,072
2031	323,072	6,630	8,910	580,370	107,764	2.401	258,737	(7,471)	7,471	(0)
Total		1,456,071	1,690,101	951,247	1,185,400		2,465,817		59,571	

Note: Numbers may not add due to rounding



Cash Flow Calculations – Parks and Recreation Services

		Development Related Expenditures Nominal Project Cost		Development Related Long- Term Debt Existing Debt Payments		ecreation - Reside \$2,036.61 Per Capita per Year Inflated at (3%) Starting in	Anticipated	Annual Surplus/	1% / 3% D.C. Reserve Fund Interest Earnings/	D.C. Reserve Fund Closing Balance after
Year	Balance				Growth	2020	Revenues	(Deficit)	(Cost)	Interest
2021	(546,881)	352,070	352,070	241,814	549	2,036.61	1,117,359	(23,405)		(20,318)
2022	(20,318)	55,148	56,803	241,993	549	2,097.71	1,150,880	831,766	7,045	838,811
2023	838,811	749,789	795,451	241,520	549	2,160.64	1,185,406	987,246	19,500	1,006,746
2024	1,006,746	183,124	200,104	242,277	549	2,225.46	1,220,968	1,785,333	18,384	1,803,717
2025	1,803,717	307,385	345,964		549	2,292.22	1,257,597	2,715,350	26,055	2,741,405
2026	2,741,405	12,989	15,058	-	549	2,360.99	1,295,325	4,021,672	33,966	4,055,638
2027	4,055,638	1,050,780	1,254,686		549	2,431.82	1,334,185	4,135,138	53,501	4,188,638
2028	4,188,638	5,416,560	6,661,685		549	2,504.77	1,374,211	(1,098,837)	82,066	(1,016,771)
2029	(1,016,771)	1,044,251	1,322,826		549	2,579.92	1,415,437	(924,159)	3,524	(920,636)
2030	(920,636)	58,149	75,872		549	2,657.32	1,457,900	461,393	(4,612)	456,780
2031	456,780	1,473,600	1,980,395		549	2,737.04	1,501,637	(21,978)	21,978	(0)
Total		10,703,844	13,060,914	967,604	6,035		14,310,906		264,493	

Note: Numbers may not add due to rounding

Cash Flow Calculation - Parks and Recreation - Non-Residential Development Related Long-Development Related Development Related \$0.042 Expenditures Expenditures Term Debt D.C. Existing Debt per sq.ft. per Nominal Project Cost Reserve Fund Project Cost Year Inflated at D.C. Reserve Fund D.C. Reserve Fund Closing Inflated at 3% Payments Sq. Ft. of Opening Gross Floor (3%) Starting in Anticipated Annual Surplus/ Interest Earnings Balance after Year Balance Area 2020 Revenues (Deficit) /(Cost) Interest 2021 (2,293) 319 319 12,727 12,736 107,764 0.042 4.566 (10,774) (18,743) 65 (10,709) (10,709) 107,764 0.044 (60) 2022 4,703 (18,802) 2023 (18,802) 12,712 107,764 0.045 4,844 (26,670 (301 (26,971) (34,733) 2024 (26,971) 12,751 107,764 0.046 4.989 (543 (35,276) (31,118) (26,680) (981) (854) 107,764 107,764 2025 2026 (35,276) (31,118) 0.048 5,139 5,293 0.049 (25,825 (26,680) (22,134) 160 191 107.764 0.051 5.452 (21.418) (716) 2027 (22,134) 107,764 5,615 5,784 (16,519) (17,099) 2028 0.052 (580) 2029 (17,099) 107,764 0.054 (11,315 (426 (11,741) (6,047) 2030 (11.741)107.764 0.055 5.957 (5.784) (263) (89) 6,136 58,478 2031 Total (6,047) 107,764 0.057 89 (0) 50,927 510 1,185,400 479

Note: Numbers may not add due to rounding



Cash Flow Calculations – Parks and Recreation Services

		Development Related Expenditures	Related	Development Related Long- Term Debt		\$21.95			1% / 3%	D.C. Reserve
	D.C.	Nominal	Project Cost	Existing Debt		Per Capita per			D.C. Reserve	Fund
	Reserve	Project Cost	Inflated at 3%	Payments		Year			Fund	Closing
	Fund					Inflated at		Annual	Interest	Balance
	Opening				Population	(3%) Starting in	Anticipated	Surplus/	Earnings/	after
Year	Balance				Growth	2020	Revenues	(Deficit)	(Cost)	Interest
2021	8,151	12,366	12,366		549	21.95	12,044	7,829	204	8,033
2022	8,033	51,527	53,072		549	22.61	12,405	(32,634)	408	(32,226)
2023	(32,226)	-	-		549	23.29	12,778	(19,449)	(775)	(20,224)
2024	(20,224)	27,480	30,028		549	23.99	13,161	(37,091)	14	(37,077)
2025	(37,077)	-	-		549	24.71	13,556	(23,522)	(909)	(24,431)
2026	(24,431)	24,733	28,672		549	25.45	13,962	(39,140)	(93)	(39,234)
2027	(39,234)	-	-		549	26.21	14,381	(24,852)	(961)	(25,814)
2028	(25,814)	-	-		549	27.00	14,813	(11,001)	(552)	(11,553)
2029	(11,553)	27,480	34,811		549	27.81	15,257	(31,107)	135	(30,972)
2030	(30,972)	-	-		549	28.64	15,715	(15,257)	(693)	(15,951)
2031	(15,951)	-	-		549	29.50	16,186	236	(236)	C
Total		143,586	158,950	0	6,035		154,259		(3,460)	

Note: Numbers may not add due to rounding

Cash Flow Calculation - Growth-Related Studies - Non-Residential

		Development Related Expenditures	Development Related Expenditures	Development Related Long- Term Debt		\$0.013			1% / 3%	
	D.C. Reserve	Nominal Project Cost	Project Cost Inflated at 3%	Existing Debt		per sq.ft. per Year			D.C. Reserve	D.C. Reserve
	Fund	Project Cost	innaleu al 3%	Payments	Sq. Ft. of	Inflated at			Fund	Fund Closing
	Opening				Gross Floor	(3%) Starting in	Anticipated	Annual Surplus/	Interest Earnings	Balance after
Year	Balance				Area	2020	Revenues	(Deficit)	/(Cost)	Interest
2021	925	1,404	1,404		107,764	0.013	1,367	889	23	912
2022	912	5,848	6,024		107,764	0.013	1,408	(3,704)	46	(3,657)
2023	(3,657)	-	-		107,764	0.013	1,450	(2,207)	(88)	(2,295)
2024	(2,295)	3,120	3,409		107,764	0.014	1,494	(4,210)	2	(4,209)
2025	(4,209)	•	-		107,764	0.014	1,539	(2,670)	(103)	(2,773)
2026	(2,773)	2,807	3,254		107,764	0.015	1,585	(4,442)	(11)	(4,453)
2027	(4,453)	-	-		107,764	0.015	1,632	(2,820)	(109)	(2,930)
2028	(2,930)	-	-		107,764	0.016	1,681	(1,248)	(63)	(1,311)
2029	(1,311)	3,120	3,952		107,764	0.016	1,732	(3,531)	15	(3,516)
2030	(3,516)	-	-		107,764	0.017	1,784	(1,732)	(79)	(1,811)
2031	(1,811)	-	-		107,764	0.017	1,837	27	(27)	0
Total		16,299	18,043	0	1,185,400		17,511		(393)	

Note: Numbers may not add due to rounding



Appendix D Long-Term Capital and Operating Cost Examination



Appendix D: Long-Term Capital and Operating Cost Examination

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 Township's approved 2018 Financial Information Return (FIR).

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

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

SERVICE	ANNUAL LIFECYCLE EXPENDITURES	ANNUAL OPERATING EXPENDITURES	TOTAL ANNUAL EXPENDITURES
Services Related to a Highway	191,872	273,436	465,308
Fire Protection Services	23,007	536,860	559,867
Parks and Recreation	402,518	1,243,707	1,646,225
Growth-Related Studies	-	-	-
TOTAL	617,398	2,054,003	2,671,400

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



Appendix E Local Service Policy



Appendix E: Local Service Policy

The following provides local service and developer contribution policy for the Township.

1. Roads and Related Services

- 1.1 Secondary/Collector Roads
 - The local component of a secondary/collector road internal to a development is a direct developer responsibility under s.59 of the D.C.A. as a local service. The oversized share of a secondary/collector road internal to a development is D.C. recoverable.
 - The local component of collector roads external to a development are a local service if the works are within the area to which the plan relates and, therefore, a direct developer responsibility under s.59 of the D.C.A. Otherwise, the works are included in the D.C. calculation to the extent permitted under s.5(1) of the D.C.A.
- 1.2 Primary/Arterial Roads
 - New primary/arterial roads and arterial road improvements are included as part of road costing funded through D.C.s. Only the oversizing component would be recovered through D.C.s and local road equivalent costs are considered to be a local service.
- 1.3 Local Roads
 - Local roads, as defined by the Township's engineering standards, are local services and a direct developer responsibility under s.59 of the D.C.A.
- 1.4 Subdivision/Site Entrances and Related
 - Entrances and all related costs (including, but not limited to: signalization, turn lanes, utilities and extensions, etc.), no matter the class of road, are a local service and a direct developer responsibility under s.59 of the D.C.A.
- 1.5 Streetlights



- Streetlights internal to a development or site are a direct developer responsibility through local service provisions (s.59 of the D.C.A.).
- Streetlights external to a development but related to the subject lands are a direct developer responsibility through local service provisions (s.59 of the D.C.A.).
- New streetlights in other areas related to development may be included in the D.C. calculation to the extent permitted under S. 5(1) of the D.C.A.
- 1.6 Sidewalks
 - Sidewalks internal to a development or site are a direct developer responsibility through local service provisions (s.59 of the D.C.A.).
 - Sidewalks/Walkways external to a development but required and related to the subject lands (including between a neighborhoods within a subdivision or between a subdivision and external roads are a direct developer responsibility through local service provisions (s.59 of the D.C.A.).
 - New sidewalks in other areas related to development are included in the D.C. calculation to the extent permitted under s.5(1) of the D.C.A.
- 1.7 Bike or Transit Lanes
 - Bike or transit lanes, where requested, internal to a development or site are a direct developer responsibility through local service provisions (s.59 of the D.C.A.).
 - Bike or transit lanes external to a development but required and related to the subject lands are a direct developer responsibility through local service provisions (s.59 of the D.C.A.).
 - New bike or transit lanes in other areas related to development are included in the D.C. calculation to the extent permitted under s.5(1) of the D.C.A.
- 1.8 Noise Abatement Measures



- Noise abatement measures internal to a development are a direct developer responsibility through local service provisions (s.59 of the D.C.A.).
- Noise abatement measures external to a development but required and related to, or mitigate impacts from, the development of the subject lands, are a direct developer responsibility through local service provisions (s.59 of the D.C.A.).
- 1.9 Street Tree Planting
 - Street tree planting, as required in the Engineering Standards, is considered a local area service and a direct responsibility of the developer.
- 1.10 Land Acquisition for Road Allowances
 - Land acquisition for planned road allowances within development lands is a dedication under the *Planning Act* provisions.
 - Land acquisition for planned road allowances outside of development lands, and that is not a dedication under the *Planning Act*, is included in the D.C. calculation to the extent permitted under s.5(1) of the D.C.A.
 - Additional land acquisition for bridges or grade separations (beyond normal dedication requirements) is to the extent eligible as identified and included, if applicable, in the D.C. background study.

2. Stormwater Management Services

- The costs of stormwater management (S.W.M.) facilities internal to subdivision and related to a plan of subdivision are considered to be a local service under the D.C.A. and the associated costs are not included in the D.C. calculation. Local S.W.M. facilities would typically include:
 - Stormwater management facilities servicing local drainage areas;
 - Storm sewer oversizing associated with local drainage areas; and
 - Storm sewer works on existing roads.



- New stormwater facilities in other areas, which may or may not be associated with D.C. eligible road infrastructure, may be included in the D.C. calculation.
- Master drainage planning studies or similar non-development specific studies may be included in the D.C. calculation.

3. Parkland Development

- For the purpose of parkland development, local services include the requirement for the owner to undertake preparation of the park plan, retaining necessary consultants to prepare design and grading plans for the park, prior to development. In addition, the owner is required to provide stripping and stockpiling, leveling, topsoiling, seeding and stormwater servicing including all appurtenances (consistent with the plan), fencing the property perimeter, and provide municipal water and wastewater services to the lot line. These requirements are part of the conditions of s.51 and 53 *Planning Act* agreements. The municipality also requires the owner to dedicate parkland or provide cash-in-lieu, consistent with the *Planning Act* provisions. All of these costs are deemed a direct responsibility of the developer and have not been included in the D.C. calculation.
- With respect to other parkland development costs, the municipal policy is to include all other components of parkland development in the D.C. calculation, including parking, park furniture, signage, landscaping and walkways and multi-purpose trails, in addition to the necessary fields, diamonds, playground equipment, lighting, irrigation and field houses.
- Off-Road Trails within subdivision, including fencing where applicable, are a direct responsibility of the developer and have not been included in the D.C. calculation.



Appendix F Proposed Development Charges By-law



BY-LAW NUMBER _____-20

OF THE

CORPORATION OF THE TOWNSHIP OF NORTH DUMFRIES

Being a By-law to impose certain Development Charges in The Township of North Dumfries pursuant to the Development Charges Act, S.O., 1997, c. 27, as amended (the "Act") with respect to services provided by the Township of North Dumfries.

WHEREAS subsection 2(1) of the *Development Charges Act, 1997,* S.O. 1997, c. 27, as amended (the *"Act"*) provides that the Council of a municipality may by by-law impose development charges against land to pay for increased capital costs required because of increased needs for services arising from development of the area to which the by-law applies;

AND WHEREAS a development charge background study has been completed in accordance with section 10 of the *Act;*

AND WHEREAS the Council of the Township of North Dumfries has given notice and held a public meeting on the 9th day of November, 2020 in accordance with section 12 of the *Act* and the Regulations made under the *Act*:

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF NORTH DUMFRIES ENACTS AS FOLLOWS:

1. Definitions:

In this by-law:

- 1.1 "Accessory building" means a building or structure, or part of a building or structure, that is:
 - 1.1.1 a parking garage that is exclusively devoted to providing vehicle parking to the main use situated on the same Site;
 - 1.1.2 a mechanical room that is exclusively devoted to providing heating, cooling, ventilating, electrical, mechanical or telecommunications



equipment for a building or buildings that contain one or more Dwelling Units or Lodging Units situated on the same Site;

- 1.1.3 an entrance way, elevator, stairwell or hallway that provides access to a Dwelling Unit or Lodging Unit, or Dwelling Units or Lodging Units, on the same Site;
- 1.1.4 a pool area, change room, restroom, fitness facility, kitchen, laundry room, lounge or meeting room that is for the exclusive use of the residents of a Dwelling Unit or Lodging Unit, or Dwelling Units or Lodging Units, on the same Site;
- 1.1.5 a storage room that provides storage exclusively to a resident or residents of a Dwelling Unit or Lodging Unit, or Dwelling Units or Lodging Units, on the same Site; or
- 1.1.6 an exterior deck, porch, canopy, gazebo, storage shed or stairway that is exclusively devoted to the use of the residents of a Dwelling Unit or Lodging Unit, or Dwelling Units or Lodging Units, on the same Site;
- 1.1.7 And for the purposes of this definition, "Site" shall include common elements of the same condominium as the applicable main use, buildings, Dwelling Units or Lodging Units;
- 1.2 *"accessory use"* means a use, including a building or structure, that is naturally and normally incidental, subordinate in purpose or floor area or both, and exclusively devoted to a principal use, building or structure situate on the same lot;
- 1.3 *"Act"* means the Development Charges Act, 1997 S.O. 1997, c.27, as amended;
- 1.4 *"bedroom"* means a habitable room larger than seven square metres, including a den, study or other similar area, but does not include a living room, dining room or kitchen;
- 1.5 *"capital costs"* means costs incurred or proposed to be incurred by the *Township* directly or by others on behalf of, and as authorized by, the *Township;*
 - 1.5.1 to acquire land or an interest in land, including a leasehold interest;



- 1.5.2 to improve land;
- 1.5.3 to acquire, lease, construct or improve buildings and structures;
- 1.5.4 to acquire, lease, construct or improve facilities including:
 - 1.5.4.1 rolling stock with an estimated useful life of seven years or more;
 - 1.5.4.2 furniture and equipment, other than computer equipment;
- 1.5.5 to undertake studies in connection with any of the matters in clauses 1.2.1 to 1.2.4;
- 1.5.6 to undertake the development charge background study required under s.10 of the Development Charges Act; and
- 1.5.7 interest on money borrowed to pay for costs described in paragraphs 1.2.1 to 1.2.4.
- 1.6 *"Council"* means the Council of The Corporation of the Township of North Dumfries;
- 1.7 *"development"* includes re-development;
- 1.8 *"development charge"* means a charge imposed against land under this By-law;
- 1.9 "dwelling unit" means one or more rooms occupied or designed for human habitation which include a separate, private entrance together with cooking and sanitary facilities for the exclusive use of the occupants thereof. A unit or room in a hotel, motel, nursing or retirement home, independent living facility on the same Site as a nursing or retirement home, hospice, rehabilitation facility, student residence where meals and supervision are available, group home or hostel designed for human habitation shall not constitute a Dwelling Unit;
- 1.10 "existing industrial building" means a building or buildings existing on a site on the day this By-law is passed or the first building or buildings constructed on a vacant site pursuant to site plan approval under section 41 of the Planning Act, R.S.O. 1990, c. P.13 (the "Planning Act") subsequent to the passing of this By-



law for which full development charges were paid, and is used for or in connection with,

- 1.10.1 the production, compounding, processing, packaging, crating, bottling, packing or assembling of raw or semi-processed goods or materials ("manufacturing") or warehousing;
- 1.10.2 research or development in connection with manufacturing;
- 1.10.3 retail sales by a manufacturer, if the retail sales are at the site where the manufacturing is carried out and such retail sales are restricted to goods manufactured at the site; or
- 1.10.4 office or administrative purposes, if they are,
 - 1.10.4.1 carried out with respect to manufacturing or warehousing; and
 - 1.10.4.2 in or attached to the building or structure used for such manufacturing or warehousing;
- 1.11 *"farm"* means a parcel of land on which the predominant activity is farming. A farm shall not include a greenhouse;
- 1.12 *"farm occupation"* means a vocational use permitted by the applicable zoning bylaw and carried on in a building or as an accessory use in a portion of a building on a farm where farming occurs;
- 1.13 *"farming*" means the production of crops or the breeding, raising or maintaining of livestock, or both, and includes but is not limited to:
 - 1.13.1 fur farming;
 - 1.13.2 fruit and vegetable growing;
 - 1.13.3 the keeping of bees;
 - 1.13.4 fish farming; and
 - 1.13.5 sod farming,



and includes such buildings and structures located on a Farm that are designed and intended to be used solely for or in connection with:

- i) storage or repair of farm equipment;
- ii) storage of materials used in the production or maintenance of crops or livestock on the Farm; or
- iii) storage of the products derived from the Farm's production of crops or livestock.

Farm and Farming shall not include a Dwelling Unit located on a Farm or such buildings or structures located on a Farm that are designed and intended to be used solely for or in connection with the processing of the crops or livestock through mechanical, chemical or other means to create an altered product;

- 1.14 *"grade"* means with respect to a Dwelling Unit or Single Detached Dwelling means the average level of finished ground adjoining same at all exterior walls;
- 1.15 *"greenhouse*" means any nursery building where any form or quantity of flowers, household plants, landscaping plants, horticultural products or manufactured household or gardening products not produced on the Site is offered for sale;
- 1.16 *"gross floor area"* means the total floor area of a building or structure or part thereof measured between the outside faces of exterior walls or between the outside faces of exterior walls and the centre line of an partition walls and, in the case of a dwelling unit, included only those areas above grade. The gross floor area shall include any area which is being used for the repair or for the public sale of vehicles but shall exclude any area which is specifically designed for the parking of passenger motor;
- 1.17 "*home occupation*" means a vocational use, which is not a farm occupation, carried on in conjunction with a dwelling unit on the same property as permitted by the applicable Township Zoning By-law
- 1.18 *"industrial building*" means a building that is used for:



- 1.18.1 the production, compounding, processing, packaging, crating, bottling, packing or assembling of raw or semi-processed goods or materials ("manufacturing") or warehousing;
- 1.18.2 research or development in connection with manufacturing;
- 1.18.3 retail sales by a manufacturer, if the retail sales are an accessory use at the site where manufacturing is carried out; or
- 1.18.4 office or administrative purposes, if they are,
 - 1.18.4.1 carried out as an accessory use to the manufacturing and warehousing; and
 - 1.18.4.2 in or attached to the building or structure used for such manufacturing or warehousing;
- 1.19 "Institutional development" means development of a building or structure intended for use,
 - 1.19.1 as a long-term care home within the meaning of subsection 2(1) of the *Long-Term Care Homes Act,* 2007;
 - 1.19.2 as a retirement home within the meaning of subsection 2(2) of the *Retirement Homes Act*, 2010;
 - 1.19.3 by any of the following post-secondary institutions for the objects of the institutions:
 - 1.19.3.1 a university in Ontario that receives direct, regular and ongoing operating funding from the Government of Ontario
 - 1.19.3.2 A college or university federated or affiliated with a university described in subclause 1.19.3.2; or
 - 1.19.3.3 An Indigenous Institute prescribed for the purposes of section 6 of the *Indigenous Institutes Act*, 2017
 - 1.19.4 as a memorial home, clubhouse or athletic grounds by an Ontario branch of the Royal Canadian Legion; or



1.19.5 as a hospice to provide end of life care

- 1.20 *"local board"* has the same meaning as in section 1 of the Act;
- 1.21 *"local services"* means 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 s. 51 of the Planning Act or under s. 53 of the Planning Act;
- 1.22 "*lodging house*" means a building designed or intended to contain, or containing Lodging Units where the residents share access to common areas of the building, other than the Lodging Units;
- 1.23 *"lodging unit"* means a room located in a lodging house which:
 - 1.23.1 is designed to be occupied for human habitation by one resident;
 - 1.23.2 is not normally accessible to persons other than the resident without the permission of the resident; and
 - 1.23.3 may contain either cooking or sanitary facilities, but not both, for the exclusive use of the resident.

A unit or room in a hotel, motel, nursing or retirement home, independent living facility on the same Site as a nursing or retirement home, hospice, rehabilitation facility, student residence where meals and supervision are available, group home, or hostel designed for human habitation shall not constitute a Lodging Unit;

- 1.24 *"mixed use development"* means development containing both residential and non-residential uses;
- 1.25 "Non-profit housing development" means development of a building or structure intended for use as residential premises by,
 - 1.25.1 a corporation without share capital to which the *Corporations Act* applies, that is in good standing under that Act and whose primary objective is to provide housing;



- 1.25.2 a corporation without share capital to which the *Canada Not-for-profit Corporations Act* applies, that is in good standing under that Act and whose primary objective is to provide housing; or
- 1.25.3 a non-profit housing co-operative that is in good standing under the *Co-operative Corporations Act*.
- 1.26 *"non-residential uses"* means all commercial, industrial, institutional or other use, except farming, not included in the definition of residential uses;
- 1.27 *"owner"* means the owner of land or a person authorized by the owner who has made application for an approval for the *development* of land upon which a *development charge* is imposed;
- 1.28 "*pre-existing development*" means a use of land existing on the land at the time a development charge is payable or existing at any time in the five years prior thereto;
- 1.29 "Rental housing" means development of a building or structure with four or more dwelling units all of which are intended for use as rented residential premises.
- *1.30 "residential building"* includes the following:
 - 1.30.1 "Residential Building Apartment" means a Residential Building containing three (3) or more dwelling units which share common hall or halls and common entry at grade. Despite the foregoing, an apartment dwelling includes stacked townhouse dwellings;
 - 1.30.2 "*Residential Building Other Multiple*" means all dwellings other than single detached dwellings, semi-detached dwellings, and apartment dwellings within the respective meanings ascribed hereto under this Bylaw;
 - 1.30.3 *"Residential Building –Single Detached"* means a Residential Building containing one (1) only dwelling unit;
 - 1.30.4 "*Residential Building Semi-Detached*" means a Residential Building divided vertically into two (2) dwelling units by a solid common wall extending from the base of the foundation to the roof line and said



common wall shall have a horizontal distance of not less than fifty percent (50%) of the horizontal depth of the building;

- 1.30.5 *"Residential Building Stacked Townhouse*" means a building, other than a duplex, townhouse, or back to back townhouse, containing at least 3 dwelling units; each dwelling unit separated from the other vertically and/or horizontally and each dwelling unit having a separate entrance to grade;
- 1.30.6 *"Residential Building Townhouse dwelling*" means one Dwelling Unit within a building containing three or more Dwelling Units which is divided from the other Dwelling Units by one or more vertical solid walls or partitions extending from foundation to roof;
- 1.31 *"residential use"* means the use of land, buildings or structures for one or more dwelling units;
- 1.32 *"services"* means services or classes of service designated in Schedule B of this By-law;
- 1.33 *"Township"* means The Corporation of the Township of North Dumfries.

Application and Administration of Development Charges:

- 2. It is hereby declared by the Council of the Township that all development of land within the Township, unless otherwise specified in this by-law, will increase the need for services.
- 3 (1) Subject to subsection (2) to (6) inclusive, development charges shall apply, and shall be calculated and collected in accordance with the provisions of this Bylaw, on land to be developed or redeveloped for residential and non-residential use, where:
 - a) the development or redevelopment of the land will increase the need for services; and
 - b) the development or redevelopment requires one or more of the approvals which follow:



- the passing of a zoning By-law or of an amendment thereto under section 34 of the Planning Act;
- (ii) the approval of a minor variance under section 45 of the Planning Act;
- (iii) a conveyance of land to which a By-law passed under subsection 50(7) of the Planning Act applies;
- (iv) the approval of a plan of subdivision under section 51 of the Planning Act;
- (v) a consent under section 53 of the Planning Act;
- (vi) the approval of a description under section 50 of the Condominium Act, R.S.O. 1990, c.C.26; or
- (vii) the issuing of a permit under the Building Code Act, 1992, S.O.
 1992, c.23 (the "Building Code"), in relation to a building or structure.
- 3 (2) Where two or more of the actions described in subsection (1) are required before the land to which a development charge applies can be developed or redeveloped, only one development charge shall be imposed, calculated and collected in accordance with the provisions of this By-law;
- 3 (3) Despite subsection (2), if two or more of the actions described in subsection (1) occur at different times and if the subsequent action or actions has the effect of increasing the need for services as designated in this By-law, additional development charges shall be imposed, calculated and collected in accordance with the provisions of this By-law.
- 3 (4) Subject to subsection (4), this by-law applies to all lands within the Township whether or not the land or the use thereof is exempt from taxation under section 3 of the *Assessment Act*, RSO 1990, c. A-31;
- 3 (5) Council hereby imposes the development charges shown in Schedule "A" upon the development of land to which this by-law applies calculated in the manner set out in section 4 and Schedule "A";



- 3 (6) This by-law does not apply to:
 - (a) The development of land that is owned by and used exclusively for the purpose of a municipality, a Local Board or a School Board as defined by subsection 1 (1) of the Education Act,
 - (b) industrial building additions of up to and including 50% of the existing gross floor area (defined in O.Reg. 82/98, section 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 (subsection 4 (3) of the D.C.A.);
 - (c) Land developed for any municipal use by the:
 - (i) Regional Municipality of Waterloo
 - (ii) Township of North Dumfries
 - (iii) Grand River Conservation Authority

being institutions within the category of institution

- (d) the Crown in right of Ontario or the Crown in right of Canada,
- (e) a dwelling unit used exclusively for the purposes of non-profit assisted rental housing which is 100% funded by the Regional Municipality of Waterloo or the crown in right of Ontario or Canada;
- (f) the development of land that constitutes only:
 - (i) the enlargement of an existing dwelling unit,
 - (ii) one or two additional dwelling units in an existing single detached dwelling or ancillary structure to the existing single detached dwelling;
 - (iii) one additional dwelling unit in any other existing residential building or ancillary structure to the existing dwelling unit;



(iv) greater of one additional dwelling unit or 1% of the existing dwelling units in the building for existing rental residential buildings

ltem	Name of Class of Existing Residential Building	Description of Class of Existing Residential Buildings	Maximum Number of Additional Dwelling Units	Restrictions
1.	Existing single detached dwellings	Existing 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.
2.	Existing semi- detached dwellings or row dwellings	Existing residential buildings, each of which contains a single dwelling unit, that have one or two vertical walls, but no 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.
3.	Existing rental residential buildings	Existing residential rental buildings, each of which contains four or more dwelling units.	Greater of one and 1% of the existing units in the building	None
4.	Other existing residential buildings	An existing 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.

subject to the following restrictions:

- (g) Notwithstanding section 3 (6) (f) (ii), development charges shall be imposed if the total gross floor area of the additional one or two units exceeds the gross floor area of the existing dwelling unit.
- (h) Notwithstanding section 3 (6) (f) (iii), development charges shall be imposed if the additional unit has a gross floor area greater than:
 - (i) in the case of a semi-detached or row dwelling, the gross floor area of the existing dwelling unit; and



- (ii) in the case of any other residential building, the gross floor area of the smallest dwelling unit contained in the residential building
- (i) Notwithstanding the provisions of this By-law, development charges shall not be imposed with respect to the creation of a second dwelling unit in prescribed classes of proposed new residential buildings, including structures ancillary to dwellings, subject to the following restrictions:

ltem	Name of Class of Proposed New Residential Buildings	Description of Class of Proposed New Residential Buildings	Restrictions
1.	Proposed new detached dwellings	Proposed new residential buildings that would not be attached to other buildings and that are permitted to contain a second dwelling unit, that being either of the two dwelling units, if the units have the same gross floor area, or the smaller of the dwelling units.	The proposed new detached dwelling must only contain two dwelling units. The proposed new detached dwelling must be located on a parcel of land on which no other detached dwelling, semi- detached dwelling or row dwelling would be located.
2.	Proposed new semi-detached dwellings or row dwellings	Proposed new residential buildings that would have one or two vertical walls, but no other parts, attached to other buildings and that are permitted to contain a second dwelling unit, that being either of the two dwelling units, if the units have the same gross floor area, or the smaller of the dwelling units.	The proposed new semi-detached dwelling or row dwelling must only contain two dwelling units. The proposed new semi-detached dwelling or row dwelling must be located on a parcel of land on which no other detached dwelling, semi-detached dwelling or row dwelling would be located.
3.	Proposed new residential buildings that would be ancillary to a proposed new detached dwelling, semi- detached dwelling or row dwelling	Proposed new residential buildings that would be ancillary to a proposed new detached dwelling, semi-detached dwelling or row dwelling and that are permitted to contain a single dwelling unit.	The proposed new detached dwelling, semi-detached dwelling or row dwelling, to which the proposed new residential building would be ancillary, must only contain one dwelling unit. The gross floor area of the dwelling unit in the proposed new residential building must be equal to or less than the gross floor area of the detached dwelling, semi- detached dwelling or row dwelling to which the proposed new residential building is ancillary.



- (j) Development for any one or more of the following land uses:
 - (i) a temporary use permitted under a municipal zoning by-law enacted in accordance with section 39 of the Planning Act;
 - (ii) a Home Occupation
 - (iii) a farm building
 - (iv) temporary erection of a building without a foundation defined in the Building Code for a period not exceeding six consecutive months and not more than six months in any one calendar year on a site for which development charges have been previously paid
 - (v) an accessory use
- 3 (7) The services and classes of service to which the development charges imposed by subsection (2) relate to are those listed in Schedule "B" to this by-law

Calculation of Development Charges:

- 4 (1) Subject to the provisions of this By-law, the charges applicable to residential development shall be the sum of the amounts calculated by multiplying the number of units of each type referred to in Schedule "A" by the rates listed thereunder in the relevant services.
- 4 (2) Subject to the provisions of this By-law, the charges applicable to non-residential development shall be the sum of the amounts calculated by multiplying the square feet of non-residential gross floor area by the rates listed in Schedule "A" for the relevant services.
- 4 (3) Subject to the provisions of this By-law, development charges against land to be developed or redeveloped for mixed residential and non-residential use shall be the aggregate of the amount applicable to the residential component and the amount applicable to the gross floor area of the non-residential component.

Redevelopment Allowances



- 4 (4) Where there is a redevelopment, conversion, demolition, or change of use of a building or structure or part thereof, the Development Charges payable by the new or proposed development shall be credited by the amount to which the previous use of the building or structure was subject to Development Charges at the time this By-law was passed
- 4 (5) With respect to a residential building or structure or the residential portion of a mixed-use building or structure that has been demolished or converted, the credit shall by calculated by multiplying the number of dwelling units demolished or converted within five years of the date of building permit application by the Development Charge for the relevant demolished units in accordance with Schedule "A" of this By-law.
- 4 (6) With respect to a non-residential building or structure or the non-residential portion of a mixed-use building or structure that has been demolished or converted, the credit shall by calculated by multiplying the Gross Floor Area of that portion of the building demolished or converted within five years of the date of building permit application by the Development Charge for the relevant demolished units in accordance with Schedule "A" of this By-law.
- 4 (7) The credit with respect to a redevelopment, conversion, demolition, or change of use of a building or structure or part thereof shall not exceed the amount of the Development Charges payable with respect to new or proposed development.
- 4 (8) No credit shall be given with respect to the redevelopment, conversions, demolition, or change of use of a building or structure or part thereof where the existing building or structure or part thereof would have been exempt from Development Charges in accordance with this By-law.
- 4 (9) In determining whether subsections (1) through (5) inclusive apply, demolition or alteration shall be deemed to have occurred as of the date of the permit issued thereof and destruction due to natural or criminal acts shall be deemed to have occurred on the date such acts first occurred.

Administration

5 (1) Subject to any agreement made pursuant to subsection 27 (1) of the Development Charges Act, 1997, the whole of the development charge imposed



under this by-law shall be calculated at the rate in effect at the time of issuance of the building permit and paid in full to the Treasurer of the Township prior to the issuance of a building permit under the Building Code Act for any building or structure in connection with the development in respect of which the development charge hereunder is payable.

- 5 (2) Notwithstanding Subsection 5 (1), Development Charges for rental housing and institutional developments are due and payable in 6 installments commencing with the first installment payable on the date of occupancy, and each subsequent installment, including interest, payable on the anniversary date each year thereafter.
- 5 (3) Notwithstanding Subsection 5 (1), Development Charges for non-profit housing developments are due and payable in 21 installments commencing with the first installment payable on the date of occupancy, and each subsequent installment, including interest, payable on the anniversary date each year thereafter.
- 5 (4) Where the development of land results from the approval of a Site Plan or Zoning Bylaw Amendment received on or after January 1, 2020, and the approval of the application occurred within 2 years of building permit issuance, the Development Charges under Subsections 4 (1), 4 (2) and 4 (3) shall be calculated on the rates set out in Schedule "A" on the date of the planning application, including interest. Where both planning applications apply Development Charges under Subsections 4 (1), 4 (2) and 4 (3) shall be calculated on the rates, including interest, set out in Schedules "A" on the date of the later planning application.
- 5 (5) Despite sections 5 (1) to 5 (4), Council from time to time, and at any time, may enter into agreements providing for all or any part of a development charge to be paid before or after it would otherwise be payable, in accordance with section 27 of the Act.
- 5 (6) Interest for the purposes of sections 5 (2) to 5 (3) shall be determined as the bank of Canada prime interest rate plus 2% on the date of building permit issuance. Notwithstanding the foregoing, the interest rate shall not be less than 0%.
- 5 (7) Interest for the purposes of section 5 (4) shall be determined as the bank of Canada prime interest rate plus 2% on the date of the planning application was



received. Notwithstanding the foregoing, the interest rate shall not be less than 0%.

6 (1) The charges set out in Schedule "A" on which a development charge is based shall be adjusted without amendment to this by-law on December 1 each year, commencing on December 1, 2021 in accordance with section 7 of O. Reg. 82-98 as may be amended from time to time.

Prior Agreements and Payments:

- 7 (1) Where, in any servicing agreement entered into prior to By-law _____-20 coming into force, provision is made for payment in the future of a development charge in respect of a development of land to which this by-law applies at the applicable rate upon issuance of a building permit or other event and where such payment is made after the coming in force of this by-law, such payment shall be calculated in accordance with the development charges provided for in this by-law and shall be deemed to be a development charge payment made pursuant to this by-law and the Development Charges Act, 1997.
- 7 (2) Notwithstanding any provisions in this by-law quantifying a development charge for the development of a site, where a servicing agreement entered into prior to By-law ______-20 coming into force provides for the payment of a development charge in respect of a site to which this by-law applies at a fixed rate, or at a minimum rate which is greater than the development charge provided for herein, the charge set out in the agreement relates. Where the development to which the agreement relates has not been specified, the first development for which a building permit is issued shall be deemed to be that to which the agreement relates and any subsequent development, whether or not requiring any further approvals other than a building permit, shall be subject to the provisions of this by-law.
- 7 (3) Where a charge has been paid pursuant to a condition imposed on a consent given prior to By-law _____-20 coming into force be the Committee of Adjustment, such payment shall be deemed to be payment in full under this by-law.

Credits:



8. Credits may be given as required under sections 38 - 41 inclusive of the Development Charges Act, 1997, and shall be applied against the development charge payable under this by-law on a site to the maximum of the development charge otherwise payable for the services to which the work relates and in a manner set forth in such an agreement as Council may determine. When an agreement is entered into the credit assigned to a site shall not exceed the maximum density permitted by a draft plan of subdivision or the Township Zoning By-law which pertains to the site on that date, whichever is greater.

Reserve Funds:

9. The Treasurer shall establish and retain reserve funds for the services and classes of service set out in Schedule "B" in accordance with the provisions of the Development Charges Act, 1997 and shall on or before July 1 of each year prepare and provide to Council a financial statement with respect to each reserve fund or funds so established.

General Provisions:

- 10. Nothing in this by-law limits the right of Council to require or request an owner to install such services as the Council requires at the owner's expense. Nothing in this by-law relieves an owner of any obligation to install, at the owner's expense, such services as are requested or required by Council as a condition of any approval under the Planning Act.
- 11. Any servicing agreements made under the Planning Act, prior to the coming into force of By-law _____-20 shall remain in full force and effect and, to the extent of conflict with this by-law, shall prevail.
- 12. Where a development charge is payable hereunder, but any matter as to calculation, manner or timing of payment is not expressly provided for herein, such matters shall be determined in accordance with the Development Charges Act, 1997 and Regulations, where applicable by analogy to similar provisions hereof in accordance with the general principles underlying the Development Charges Act, 1997 and this by-law.
- 13. Nothing in this by-law shall be construed so as to commit or require the Township or its Council to authorize or proceed with any specific capital project or to enter



into a servicing agreement or to provide any credit for the construction of Township works at any time and Council shall retain discretion not to proceed with any of the capital projects forecasted if it deems appropriate or advisable for any reason including, but not limited to, the lack of funding from development charges or otherwise.

- 14. By-law 3122-19 is hereby repealed on the date this by-law comes into effect.
- 15. This by-law shall come into effect on the 1st day of January 2021.
- 16. This By-law shall continue in force and effect for a term not to exceed five years from the date it comes into force, unless it is repealed or replaced at an earlier date by a subsequent By-law

Read a first and second time this 14th day of December, 2020.

Mayor _____

CAO/Clerk _____

Read a third time and finally passed this 14TH day of December, 2020.

Mayor _____

CAO/Clerk _____



Schedule "A"

Schedule of Development Charges

		NON-RESIDENTIAL			
Service/Class of Service	Single and Semi- Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	(per sq.ft. of Gross Floor Area)
Municipal Wide Services/Class of Service:					
Services Related to a Highway	4,539	3,010	1,862	3,443	1.82
Fire Protection Services	144	95	59	109	0.08
Parks and Recreation	6,648	4,408	2,726	5,043	0.04
Growth-Related Studies	72	48	30	55	0.01
Total Municipal Wide Services/Class of Services	11,403	7,561	4,677	8,650	1.95



Schedule "B"

Services and Classes of Service:

Services Related to a Highway;

Fire Protection;

Parks and Recreation; and

Growth-Related Studies.