

Norfolk County 2018 Development Charges Background Study

For Public Circulation and Comment

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 Planning for growth

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List of Acronyms and Abbreviations

A.M.P.	Asset Management Plan
D.C.	Development Charge
D.C.A.	Development Charges Act
E.S.A.	Environmentally Safe Area
G.F.A.	Gross floor area
L.P.A.T.	Local Planning Appeal Tribunal
mm	Millimeters
N.F.P.O.W.	No fixed place of work
O.M.B.	Municipal Board
O.Reg.	Ontario Regulation
para.	Paragraph
P.P.U.	Persons per unit
R.S.O.	Revised Statute of Ontario
sq.ft.	Square foot
s.s.	Subsection

1. Introduction

1.1 Purpose of this Document

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

The County retained Watson & Associates Economists Ltd. (Watson) to undertake the D.C. Background Study process in 2017. Watson worked with senior staff from across the municipality 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 County's D.C. Background Study, as summarized in Chapter 4 and applied in Chapters 5 and 6. 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), Asset Management Plan requirements under the D.C.A. (Chapter 8), and the proposed by-law to be made available as part of the approval process (Appendix G).

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

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

1.2 Summary of the Process

The public meeting required under Section 12 of the D.C.A., 1997, is expected to take place in April or May, 2019. Its purpose is to present the study to the public and to solicit public input on the proposed D.C. by-law. The meeting is also being held to answer any questions regarding the study's purpose and methodology. The County will also be undertaking a development industry stakeholder consultation process prior to the statutory public meeting, currently anticipated to occur on February 12, 2019. Figure 1-1 outlines the process undertaken to date and the proposed schedule to be followed with respect to the D.C. by-law adoption process.

In accordance with the legislation, the D.C. Background Study and proposed D.C. By-Law will be made available for public review on December 21, 2018.

Following the development industry stakeholder consultation and statutory public meeting, 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;
- Council determination if any further public meetings are required on the matter;
- finalization of the study and Council consideration of the by-law; and
- imposition of new development charges.

**Figure 1-1
Schedule of Key D.C. Process Dates**

Process Steps	Dates
1. Project initiation meetings with County staff	November, 2017
2. Data collection, staff interviews, methodology review, preparation of D.C. calculations	January – September, 2018
3. Preparation of draft D.C. Background Study and review of draft findings with the County’s Senior Management Team	October, 2018
4. D.C. Background Study and proposed D.C. by-law available to public (60 days prior to by-law passage)	December 21, 2018
5. Development Consultation Meeting	February 12, 2019
6. Statutory notice of Public Meeting advertisement placed in newspaper(s)	At least 20 clear days prior to Public Meeting
7. Public Meeting of Council	April/May, 2019
8. Council considers adoption of D.C. Background Study and passage of by-law	June, 2019
9. D.C. By-Law in force date	July 1, 2019
10. Newspaper notice given of by-law passage	By 20 days after passage
11. Last day for by-law appeal	40 days after passage
12. County makes available D.C. pamphlet	by 60 days after in force date

2. Current Norfolk County D.C. Policy

2.1 By-law Enactment

By-law 2014-105 was passed on August 26, 2014 under the D.C.A., 1997. The by-law came into effect January 1, 2015 and imposes uniform County-wide D.C.s by service for permissible municipal services.

2.2 Services Covered

The following services are included under By-Law 2014-105:

General Services

- Library Board;
- Fire Protection;
- Recreation;
- Parking;
- Ambulance Services;
- Marinas; and
- General Government.

Engineered Services

- Roads and Related;
- Water; and
- Wastewater.

The By-Law provides for mandatory annual indexing of the charges. Table 2-1 provides the charges currently in effect for residential and non-residential development types, as well as a breakdown of the charges by service.

Table 2-1
Norfolk County
Schedule of Current Development Charges

Service	Residential				Non-Residential (per m ² of GFA)
	Single & Semi Detached	Multiples	Apartments with ≥ 2 Bedrooms	Apartments with < 2 Bedrooms	
Municipal Wide Services					
Roads and Related	1,370	801	596	496	5.62
Fire Protection	1,093	638	475	395	5.44
Parking	-	-	-	-	
Recreation	1,361	797	593	494	
Library Board	452	264	197	165	
General Government	143	83	63	52	0.72
Ambulance Services	64	38	28	24	0.33
Marinas	397	234	174	144	
Total Municipal Wide Services	4,880	2,855	2,126	1,770	12.11
Urban Services					
Water	5,782	3,382	2,517	2,097	32.47
Wastewater	3,390	1,981	1,476	1,229	17.74
Total Urban Services	9,172	5,363	3,993	3,326	50.21
Grand Total Rural Area	4,880	2,855	2,126	1,770	12.11
Grand Total Urban Area	14,052	8,218	6,119	5,096	62.32

2.3 Timing of D.C. Calculation and Payment

D.C. s are calculated and payable in full to the County at the time of building permit issuance for any land, buildings, or structures constituting development.

2.4 Redevelopment Credit

Where as a result of the redevelopment of land, where a building or structure existing on land was demolished, a D.C. credit will only be issued where a building permit has been issued for redevelopment within 10 years of the demolition permit. D.C.s are payable for the dwelling units or additional non-residential floor area created in excess of what was demolished.

D.C. credits are also provided for the conversion of floor area from one principal use to another principal use (i.e. residential and non-residential). The D.C. payable is equal to charge for floor area/units in the space created, less the charge that would have been payable for the existing floor area/units. In no case shall the net charge be less than zero.

2.5 Exemptions

The County's D.C. By-law includes statutory exemptions from payment of D.C.s with respect to:

- Industrial additions of up to and including 50% of the existing gross floor area (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 the payment of D.C.s;
- Land used for Municipal or Board of Education purposes; and
- Residential development that results in only the enlargement of an existing dwelling unit, or that results only in the creation of up to two additional dwelling units (as specified by O.Reg. 82/98).

The By-law also provides non-statutory exemptions from payment of D.C.s with respect to:

- Industrial development;
- Roof accommodation development;
- Temporary structures;
- Farm help house development;
- Farming business development;
- Affordable housing which receives funding from the County under its social housing program provided the development charge liabilities of the affordable housing project are not eligible for funding by senior levels of government;
- Parking garage exclusively devoted to parking, including the construction of an outdoor parking lot at grade, or the construction of a parking garage above or below grade;
- Places of worship;
- Development within the “Central Business Districts” as defined in the County's official plan, or official plans of any predecessor municipalities; and
- Brownfield development that has been approved by the County or any predecessor municipalities.
 - The amount of the exemption is equivalent the cost of remediation on, in, or under the property, as approved by the County, but not to exceed the amount of applicable development charges.

3. Anticipated Development in Norfolk County

3.1 Requirements 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 Norfolk County will be required to provide services, over a 10-year (2018-2028), 18-year (2018-2036) and a longer term (2018-2041) time horizon.

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

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

- Norfolk County Development Charges Background Study, June 2014;
- Norfolk County Residential Land Supply Comprehensive Review, November 2009;
- Grow Norfolk Five Year Official Plan Review, Industrial Lands Policy Review, August 2016;
- Grow Norfolk Five Year Official Plan Review, Residential Land Supply Analysis Report, February, 2017; and
- Historical residential and non-residential building permit data over the 2007 to 2017 period.

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 Norfolk County and describes the basis for the forecast. The results of the residential growth forecast analysis are summarized in Table 3-1 below, and Schedule 1 in Appendix A.

As identified in Table 3-1 and Schedule 1, the County's population is anticipated to reach approximately 67,560 by 2028, 69,220 by 2036, and 69,580 by 2031, resulting in an increase of 2,070, 3,730, and 4,100 persons, respectively, over the 10-year, 18-year, and longer-term forecast periods.¹ Further, the population forecast summarized in Schedule 1 excludes the net Census undercount, which is estimated at approximately 2.4%. The Census undercount represents the net number of persons missed during Census enumeration. In calculating Norfolk County's D.C. growth forecast, the net Census undercount has been excluded from the growth forecast. Accordingly, all references provided herein to the population forecast exclude the net Census undercount.

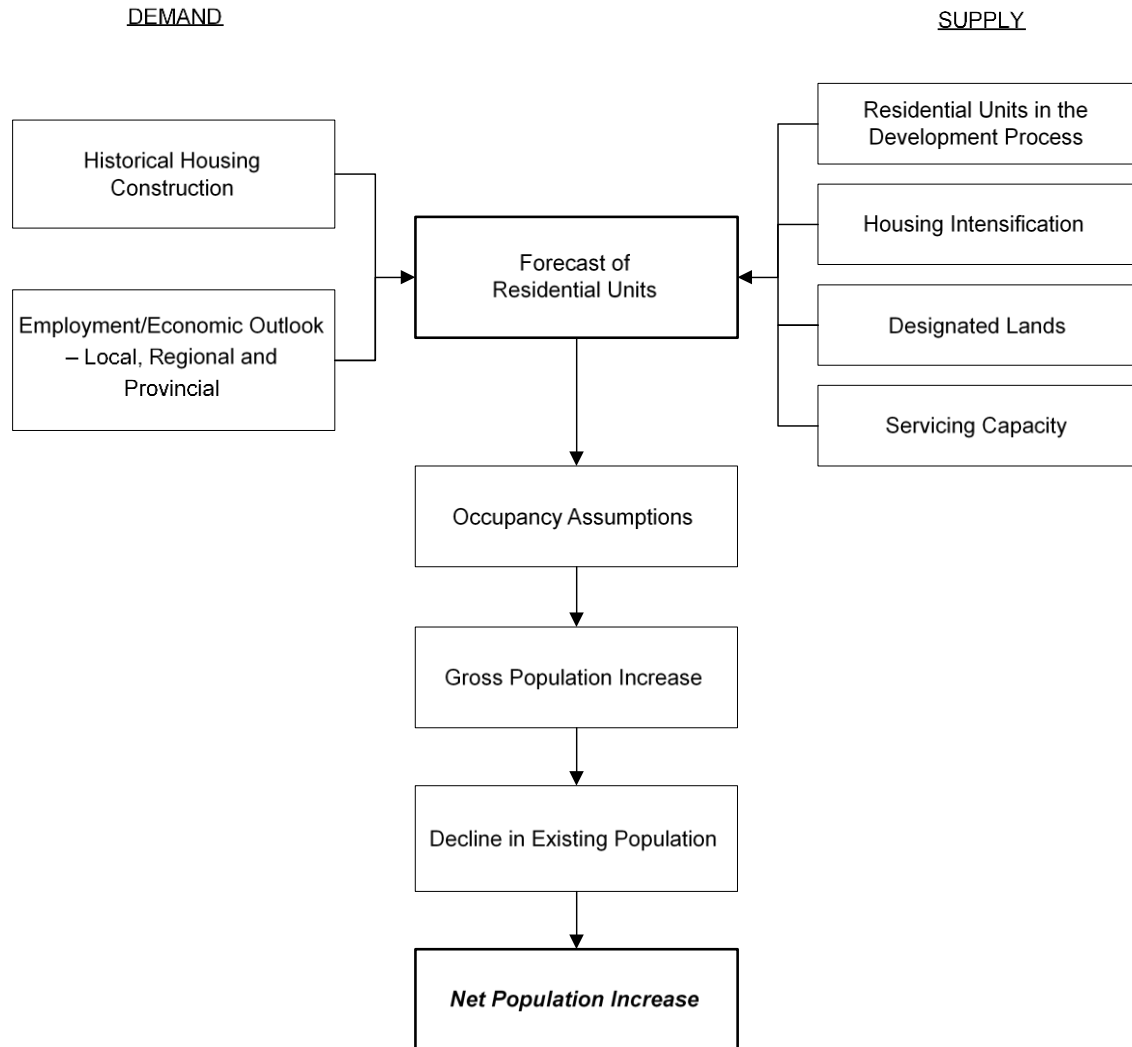
Provided below is a summary of the key assumptions and findings regarding the Norfolk County D.C. growth forecast update.

1. Housing Unit Mix (Appendix A – Schedules 1 through 8)

- The unit mix for the County was derived from the Grow Norfolk Five Year Official Plan Review, Residential Land Supply Analysis, February, 2017, as well as historical development activity (as per Schedule 7), and discussions with planning staff regarding the anticipated development trends for the County.
- Based on the above indicators, the 10-year household growth forecast is comprised of a unit mix of 84% low density (single detached and semi-detached), 6% medium density (multiples except apartments) and 9% high density (bachelor, 1-bedroom and 2-bedroom apartments).

¹ The population figures used in the calculation of the 2018 D.C. exclude the net Census undercount, which is estimated at approximately 2.4%.

**Figure 3-1
Population and Household Forecast Model**



**Table 3-1
Norfolk County
Residential Growth Forecast Summary**

	Year	Population (Including Census Undercount) ¹	Excluding Census Undercount			Housing Units					Person Per Unit (PPU): Total Population/ Total Households	Persons in Private Households/ Total Households
			Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi- Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households		
Historical	<i>Mid 2006</i>	64,090	62,563	1,118	61,445	20,710	1,110	2,085	340	24,245	2.580	2.534
	<i>Mid 2011</i>	64,720	63,175	1,815	61,360	21,630	1,190	2,070	160	25,050	2.522	2.450
	<i>Mid 2016</i>	65,610	64,044	1,614	62,430	22,355	1,320	2,085	260	26,020	2.461	2.399
Forecast	<i>Mid 2018</i>	67,090	65,488	1,654	63,834	22,940	1,320	2,286	260	26,806	2.443	2.381
	<i>Mid 2028</i>	69,210	67,558	1,700	65,858	24,180	1,414	2,422	260	28,276	2.389	2.329
	<i>Mid 2036</i>	70,910	69,221	1,744	67,477	25,076	1,511	2,549	260	29,396	2.355	2.295
	<i>Mid 2041</i>	71,280	69,583	1,754	67,829	25,882	1,618	2,710	260	30,471	2.284	2.284
Incremental	Mid 2006 - Mid 2011	630	612	697	-85	920	80	-15	-180	805		
	Mid 2011 - Mid 2016	890	869	-201	1,070	725	130	15	100	970		
	Mid 2016 - Mid 2018	1,480	1,444	40	1,404	585	0	201	0	786		
	Mid 2018 - Mid 2028	2,120	2,070	46	2,024	1,240	94	136	0	1,470		
	Mid 2018 - Mid 2036	3,820	3,733	90	3,643	2,136	191	263	0	2,590		
	Mid 2018 - Mid 2041	4,190	4,095	100	3,995	2,942	298	424	0	3,665		

Source: Watson & Associates Economists Ltd., 2018. 2041 forecast based on Norfolk County Population Projection Study by Hemson Consulting, 2014.

¹ Census undercount estimated at approximately 2.4%. Note: Population including the undercount has been rounded.

² Includes townhouses and apartments in duplexes.

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

Note: Numbers may not add up due to rounding.

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

- Schedule 2 summarizes the anticipated amount, type and location of development for Norfolk County by settlement and remaining urban area.
- The percentage of forecast housing growth between 2018 and 2041 by development location is summarized below.

Development Location	Percentage Housing Growth, 2018-2041
Courtland	1%
Delhi	6%
Port Dover	32%
Port Rowan	8%
Simcoe	33%
Waterford	14%
Rural	6%

3. Planning Period

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

4. Population in New Units (Appendix A – Schedules 2 through 8)

- The number of permanent housing units to be constructed in Norfolk County during the short- and long-term periods is presented on Figure 3-2. Over the 10-year, 18-year, and longer term forecast periods, the County is anticipated to average of approximately 147 and 144, and 159 new housing units per year, respectively.
- Population in new units is derived from Schedules 3, 4, and 5, which incorporate historical development activity, anticipated units (see unit mix discussion) and average persons per unit by dwelling type for new units.
- Schedule 8a summarizes the P.P.U. for the new housing units by age and type of dwelling based on a 2016 custom Census data. The total calculated P.P.U. for all density types has been adjusted to account for the downward P.P.U. trend which has been recently experienced in both new

and older units, largely due to the aging of the population. Adjusted 20-year average P.P.U.s by dwelling type are as follows:

- Low density: 2.652
- Medium density: 1.853
- High density: 1.433

5. Existing Units and Population Change (Appendix A – Schedules 2, 3, 4, and 5)

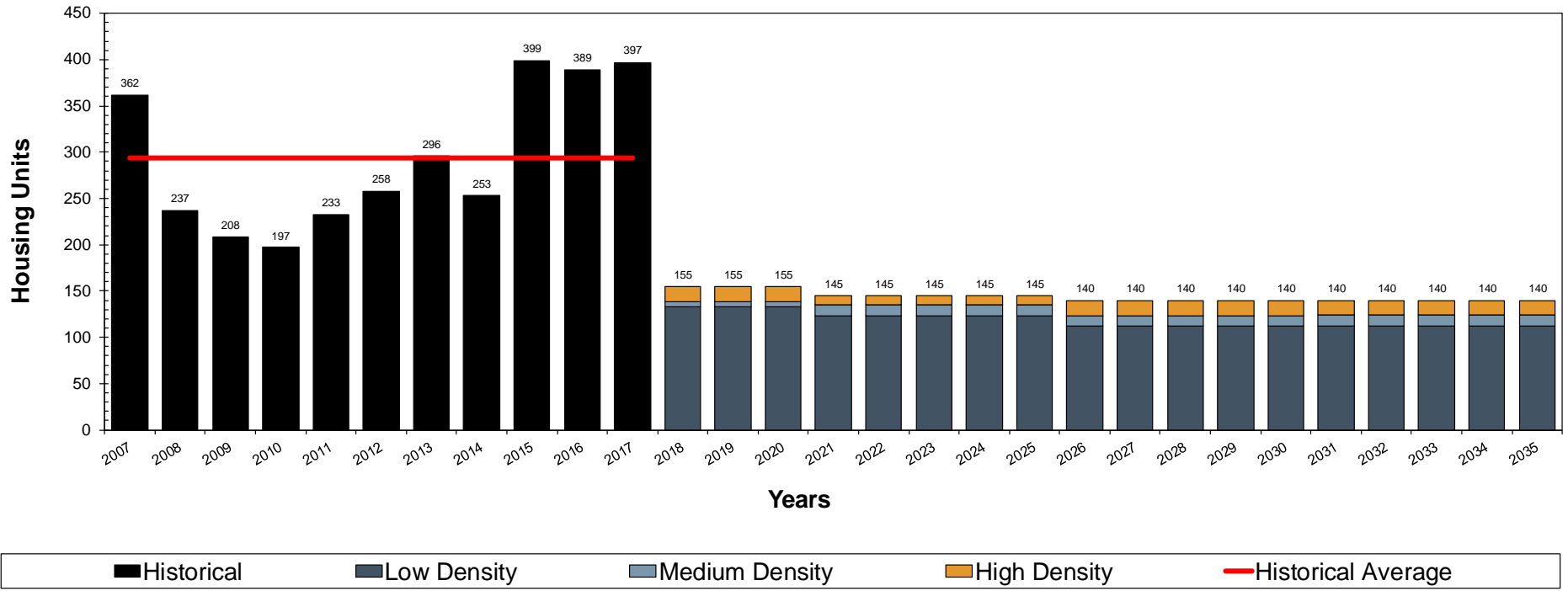
- Existing households for 2018 are based on the 2016 Census households, plus estimated residential units constructed between mid-2016 and 2017 assuming a 6-month lag between construction and occupancy (see Schedule 3).
- The decline in average occupancy levels for existing housing units is calculated in Schedules 3 through 5, by aging the existing population over the forecast period. The forecast population decline in existing households over the 10-year, 18-year, and longer-term forecast period is approximately 1,630, 2,750, and 4,970, respectively.

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

- Employment projections are largely based on the activity rate method, which is defined as the number of jobs in a municipality divided by the number of residents. Key employment sectors include primary, industrial, commercial/population-related, institutional, and work at home, which are considered individually below.
- 2016 employment data¹ (place of work) for Norfolk County is outlined in Schedule 10a. The 2016 employment base is comprised of the following sectors:
 - 1,375 primary (7%);
 - 2,770 work at home employment (14%);
 - 3,793 industrial (19%);
 - 7,518 commercial/population related (38%); and
 - 4,280 institutional (22%).

¹ 2016 employment estimated by Watson & Associates Economists Ltd.

**Figure 3-2
Norfolk County
Annual Housing Forecast**



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

¹ Growth forecast represents calendar year.

- The 2016 employment by usual place of work, including work at home, is estimated at 19,735. An additional 3,665 employees have been identified for the County in 2016 that have no fixed place of work (N.F.P.O.W.).¹ The 2016 employment base, including N.F.P.O.W., totals approximately 23,400
- Total employment, including work at home and N.F.P.O.W., for Norfolk is anticipated to reach approximately 24,190 by 2028, 24,750 by 2036, and 25,580 by 2041. This represents an employment increase of 620 for the 10-year forecast period, 1,180 for the 18-year forecast period, and 2,010 for the longer-term forecast period.
- Schedule 10b, Appendix A, summarizes the employment forecast, excluding work at home employment and N.F.P.O.W. employment, which is the basis for the D.C. employment forecast. The impact on municipal services from these employees has already been included in the population forecast. The need for municipal services related to N.F.P.O.W. employees has largely been included in the employment forecast by usual place of work (i.e. employment and gross floor area (G.F.A.) in the retail and accommodation sectors generated from N.F.P.O.W. construction employment). Furthermore, since these employees have no fixed work address, they cannot be captured in the non-residential G.F.A. calculation. Accordingly, work at home and N.F.P.O.W. employees have been removed from the D.C. calculation.
- Total employment for the Norfolk County (excluding work at home and N.F.P.O.W. employment) is anticipated to reach approximately 17,530 by 2028, 17,950 by 2036, and 18,510 by 2041. This represents an employment increase of 400, 820, and 1,380 over the 10-year, 18-year, and longer-term forecast periods, respectively.

7. Non-Residential Sq.ft. Estimates (G.F.A.), Appendix A, Schedule 9b)

- Square footage estimates were calculated in Schedule 10 based on the following employee density assumptions:
 - 1,500 sq.ft. per employee for primary
 - 1,400 sq.ft. per employee for industrial;
 - 550 sq.ft. per employee for commercial/population-related; and

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

- 700 sq.ft. per employee for institutional employment.
- The County-wide incremental G.F.A. increase is anticipated to be 307,600 sq.ft. over the 10-year forecast period, 629,600 sq. ft. over the 18-year period, and 1.18 million sq.ft. over the longer-term forecast period.
- In terms of percentage growth, the longer term incremental G.F.A. forecast by sector is broken down as follows:
 - primary – 11%;
 - industrial – 43%;
 - commercial/population-related – 34%; and
 - institutional – 11%.

4. The Approach to the Calculation of the Charge

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

4.1 Services Potentially Involved

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

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

4.2 Local Service Policy

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

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

4.3 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.

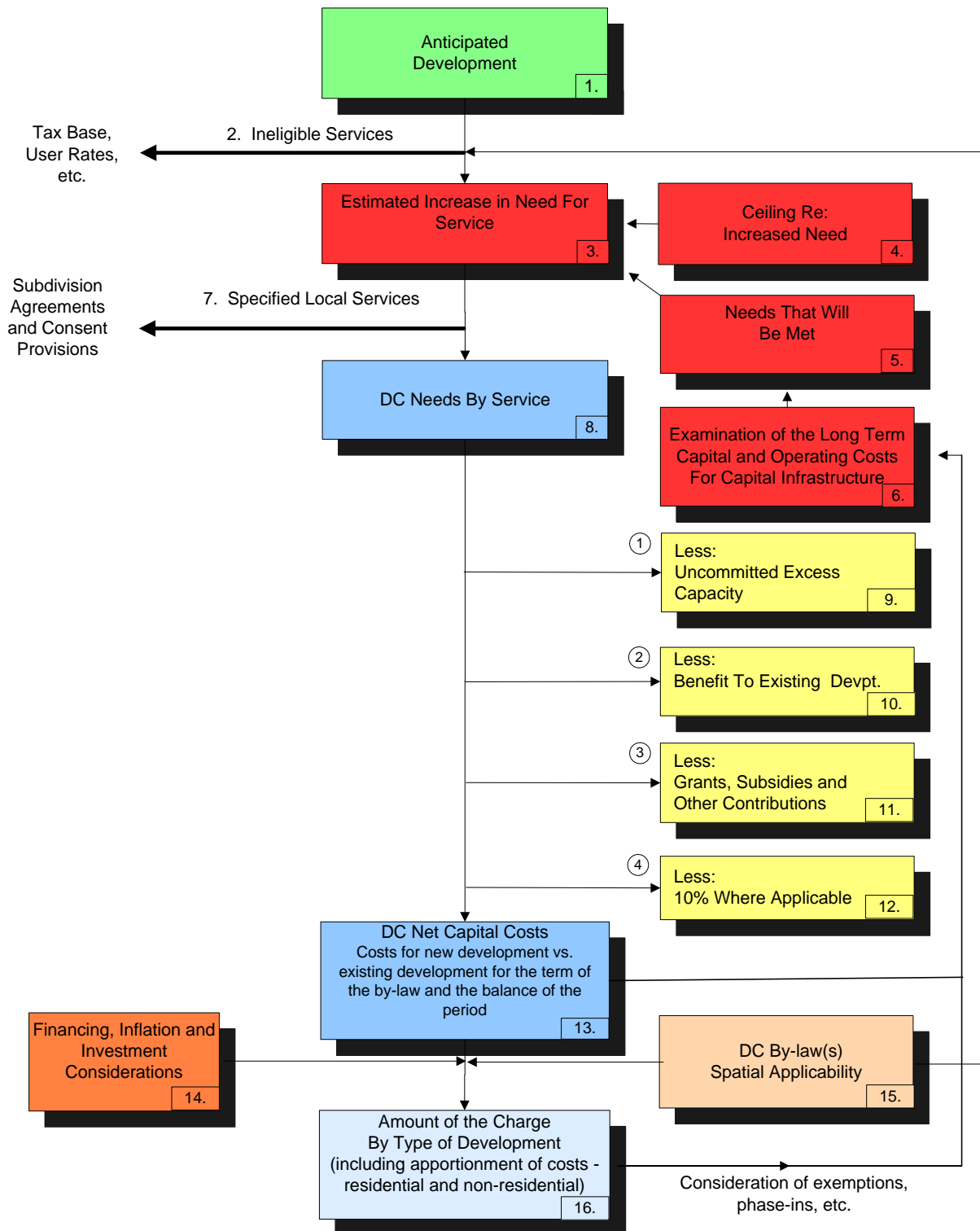
These estimates involve capital costing of the increased services discussed above. This entails costing actual projects or the provision of service units, depending on how each service has been addressed.

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, municipal council must indicate “...that it intends to ensure that such an increase in need will be met” (s.s.5(1)3). This can be done if the increase in service forms part of a Council-approved Official Plan, capital forecast or similar expression of the intention of Council (O.Reg. 82/98 s.3). The capital program contained herein reflects the County’s approved and proposed capital budgets and master servicing/needs assessments.

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



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

Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
1. Services Related to a Highway	Yes	1.1 Arterial roads	100
	Yes	1.2 Collector roads	100
	Local Service	1.3 Local roads	100
	Yes	1.4 Intersections and Traffic signals	100
	Yes	1.5 Sidewalks and streetlights	100
2. Other Transportation Services	n/a	2.1 Transit vehicles	100
	n/a	2.2 Other transit infrastructure	100
	n/a	2.3 Municipal parking spaces - indoor	90
	Yes	2.4 Municipal parking spaces - outdoor	90
	Yes	2.5 Works Yards	100
	Yes	2.6 Rolling stock ¹	100
	n/a	2.7 Ferries	90
	n/a	2.8 Airport facilities	90
3. Storm Water Drainage and Control Services	Yes	3.1 Main channels and drainage trunks	100
	Local Service	3.2 Channel connections	100
	Local Service	3.3 Retention/detention ponds	100
4. Fire Protection Services	Yes	4.1 Fire stations	100
	Yes	4.2 Fire pumpers, aerials and rescue vehicles	100
	Yes	4.3 Small equipment and gear	100
5. Outdoor Recreation Services (i.e. Parks and Open Space)	Ineligible	5.1 Acquisition of land for parks, woodlots and E.S.A.s	0
	Yes	5.2 Development of area municipal parks	90
	Yes	5.3 Development of district parks	90
	Yes	5.5 Development of special purpose parks	90
	Yes	5.6 Parks rolling stock ¹ and yards	90

¹with 7+ year life time
computer equipment excluded throughout

Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
6. Indoor Recreation Services	Yes	6.1 Arenas, indoor pools, fitness facilities, community centres, etc. (including land)	90
	Yes	6.2 Recreation vehicles and equipment ¹	90
7. Library Services	Yes	7.1 Public library space (incl. furniture and equipment)	90
	Yes	7.2 Library materials	90
8. Electrical Power Services	Ineligible	8.1 Electrical substations	0
	Ineligible	8.2 Electrical distribution system	0
	Ineligible	8.3 Electrical system rolling stock ¹	0
9. Provision of Cultural, Entertainment and Tourism Facilities and Convention Centres	Ineligible	9.1 Cultural space (e.g. art galleries, museums and theatres)	0
	Ineligible	9.2 Tourism facilities and convention centres	0
10. Waste Water Services	Yes	10.1 Treatment plants	100
	Yes	10.2 Collection systems	100
	Local Service	10.3 Local systems	100
11. Water Supply Services	Yes	11.1 Treatment plants	100
	Yes	11.2 Distribution systems	100
	Local Service	11.3 Local systems	100
12. Waste Management Services	Yes	12.1 Collection, transfer vehicles and equipment	90
	Ineligible	12.3 Landfills and other disposal facilities	0
	Yes	12.3 Other waste diversion facilities	90
13. Police Services	n/a	13.1 Police detachments	100
	n/a	13.2 Police rolling stock ¹	100
	n/a	13.3 Small equipment and gear	100
14. Homes for the Aged	n/a	14.1 Homes for the aged space	90

¹with 7+ year life time computer equipment excluded throughout

Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
15. Day Care	n/a	15.1 Day care space	90
16. Health	n/a	16.1 Health department space	90
17. Social Services	n/a	17.1 Social service space	90
18. Ambulance	Yes	18.1 Ambulance station space	90
	Yes	18.2 Vehicles ¹	90
19. Hospital Provision	Ineligible	19.1 Hospital capital contributions	0
20. Provision of Head-quarters for the General Administration of Municipalities and Area Municipal Boards	Ineligible	20.1 Office space (all services)	0
	Ineligible	20.2 Office furniture	0
	Ineligible	20.3 Computer equipment	0
21. Other Services	Yes	21.1 Studies in connection with acquiring buildings, rolling stock, materials and equipment, and improving land ² and facilities, including the D.C. background study cost	0-100
	Yes	21.2 Interest on money borrowed to pay for growth-related capital	0-100

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

¹with 7+ year life time

²same percentage as service component to which it pertains
computer equipment excluded throughout

4.4 Treatment of Credits

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

The County currently has no outstanding credit obligations.

4.5 Eligible Debt and Committed Excess Capacity

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

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

The County currently has outstanding debt payments for the growth-related portion of previously completed D.C. eligible works related to water and wastewater services, and these costs have been included in the D.C. eligible costs.

4.6 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 County's adjusted D.C. reserve fund balances, by service, as at June 30, 2018 are presented in Table 4-2. The library reserve fund balance has been adjusted to account for the Port Dover Library Renovations project, which has been completed but not yet funded from the D.C. reserve fund. These balances have been applied against future spending requirements for all services.

Table 4-2
Norfolk County
2017 Year-End D.C. Reserve Funds Balances
(December 31, 2017)

Service	Totals
Roads and Related Services	\$2,155,124
Fire Protection Services	\$656,752
Parking Services	308,603
Parks and Recreation Services	\$1,600,707
Library Services	(\$1,012,350)
Administration	\$197,645
Ambulance Services	\$69,720
Marinas	\$349,956
Water Services	\$2,916,820
Wastewater Services	\$1,677,296
Total	\$8,920,272

4.7 Deductions

The D.C.A., 1997 potentially requires that five deductions be made to the increase in the need for service. These relate to:

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

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

4.7.1 Reduction Required by Level of Service Ceiling

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

O.Reg. 82/98 (s.4) goes further to indicate that, "...both the quantity and quality of a

service shall be taken into account in determining the level of service and the average level of service.”

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

4.7.2 Reduction for Uncommitted Excess Capacity

Paragraph 5 of s.s.5(1) requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the County’s “excess capacity,” other than excess capacity which is “committed” (discussed above in 4.5).

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

4.7.3 Reduction for Benefit to Existing Development

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

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

In the case of services such as recreation facilities, community parks, libraries, etc., the service is typically provided on a municipal-wide system basis. For example, facilities of the same type may provide different services (i.e. leisure pool vs. competitive pool), different programs (i.e. hockey vs. figure skating) and different time availability for the same service (i.e. leisure skating available on Wednesday in one arena and Thursday in

another). As a result, residents will travel to different facilities to access the services they want at the times they wish to use them, and facility location generally does not correlate directly with residence location. Even where it does, displacing users from an existing facility to a new facility frees up capacity for use by others and generally results in only a very limited benefit to existing development. Further, where an increase in demand is not met for a number of years, a negative service impact to existing development is involved for a portion of the planning period.

4.7.4 Reduction for Anticipated Grants, Subsidies and Other Contributions

This step involves reducing the capital costs necessary to provide the increased services by capital grants, subsidies and other contributions made or anticipated by Council and in accordance with various rules such as the attribution between the share related to new vs. existing development O.Reg. 82/98, s.6. Where grant programs do not allow funds to be applied to growth-related capital needs, the proceeds can be applied to the non-growth share of the project exclusively. Moreover, Gas Tax revenues are typically used to fund non-growth-related works or the non-growth share of D.C. projects, given that the contribution is not being made in respect of particular growth-related capital projects.

4.7.5 The 10% Reduction

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

4.8 D.C. By-Law Spatial Applicability

There are four basic choices to be addressed when considering the geographic application of a D.C.:

1. the entire municipality for all services (which is the most commonly-used approach);
2. part of the municipality for all services; balance of the municipality is exempt (because it is outside the service’s coverage area or can be served at little or no incremental cost);

3. different by-laws and charges in different municipal service areas (in order to recognize distinctly different servicing cost situations); and
4. a uniform municipal-wide charge with separate charge covering additional area-specific services (e.g. the coverage area for specific works).

Subsection 2(9) of the D.C.A. may prescribe services for which a D.C. by-law must apply on an area-specific basis. For prescribed services, Council shall pass different D.C. by-laws for different parts of the municipality, in accordance with the prescribed criteria. Currently the Province has not prescribed services under this subsection of the D.C.A.

For services that are not prescribed under s.s. 2(9) of the D.C.A., the background study must give consideration of the use of more than one D.C. by-law to reflect different needs for services in different areas. Most municipalities in Ontario have established uniform, municipal-wide development charges. This is consistent with the County's approach to imposing its current development charges.

Consideration for area-specific charges have been reviewed with County staff, these discussions included:

- The D.C.A. requires a historic ten-year service level be calculated for all applicable services across the County to establish an upper limit on the amount of D.C.s which can be collected. If a development charge by-law applies to a part of the municipality, the level of service cannot exceed that which would be determined if the by-law applied to the municipality as a whole. As such, when applied to forecast growth within the specific area, it would establish an area specific level of service ceiling which would significantly reduce the total revenue recoverable for the County, potentially resulting in D.C. revenue shortfalls and impacts on property taxes and user rates.
- Attempting to impose an area-specific D.C. potentially causes equity issues in transitioning from a County-wide uniform approach to an area specific approach. A County-wide development charge is comparably more equitable when applied across all areas of the County, some of which are more developed (with most capital needs funded from County-wide development charges revenues) and others that are less developed (which would now be subject to potentially higher area-specific development charges, and no benefit of D.C. funding from other more developed areas of the County).

- As a result of its municipal structure, services are available across the County, used often by all constituents and are not restricted to one specific geographic area. The use of a County-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 property tax rates, etc.).

Based on the foregoing, the County is proposing to maintain the current approach of imposing all services on a uniform County-wide basis.

5. D.C. Eligible Cost Analysis by Service

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

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

5.1 Service Levels and 10-Year Capital Costs for County-wide D.C. Calculation

This section evaluates the development-related capital requirements for select services over the 10-year planning period (2018-2028). For these services, 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 Roads and Related Services

Roads and Related Services provided by the County include the provision of roads, bridges and culverts, and related operations facilities and vehicles. These assets include:

- 573 kilometers of collector and arterial roads;
- 239 bridges and major culverts;
- 99 operations vehicles; and
- 61,869 sq.ft. of Public Works facility space.

The average level of service provided over the historical 10-year period based on this inventory is \$10,949 per capita. When applied to anticipated growth over the 2019-2028 period, the per capita and employee level of service produces a maximum D.C. eligible amount for Roads and Related Services of approximately \$22.7 million.

With regard to the anticipated capital needs included in the calculation of the charge for Roads and Related Services, the projects provided for in the calculation of the charge include:

- road reconstructions;
- asphalt resurfacings;
- new road construction;
- new facility construction and existing facility renovations;
- new traffic signal installations; and
- the Roads and Related share of future updates to the Integrated Sustainable Master Plan.

The gross capital estimates for the anticipated Roads and Related Services capital needs totals \$45.2 million. Approximately \$378,000 in capital costs have been deducted as a post-period benefit reflecting the anticipated increase in needs for future development beyond the forecast period to 2028.

Recognizing the benefit to existing development, \$39.8 million has been deducted from the growth-related capital costs attributable to development over the forecast period. Lastly, the Roads and Related Services D.C. reserve fund is currently in a positive position totalling approximately \$2.2 million. After deducting this positive reserve fund balance, the capital costs included in the D.C. calculation total \$2.9 million.

The net growth-related costs for Roads and Related Services have been allocated between future residential and non-residential development on the basis of incremental population to employment growth over the forecast period (i.e. 84% residential, 16% non-residential).

5.1.2 Fire Services

The County currently has 65,097 sq.ft. of floor space contained within 11 fire stations. The County also maintains 1,345 items of fire fighting equipment and an inventory of 57 vehicles. In total, the inventory of Fire Services assets provides a historic average level of service of \$916 per capita. The historical level of investment in Fire Services provides for a maximum D.C. eligible amount over the forecast period of approximately \$1.9 million.

Over the 10-year forecast period the County anticipates replacing three fire stations (i.e. stations #1, #6, and #10), with larger buildings that can accommodate additional staff and equipment. Additionally, the County anticipates purchasing additional equipment and undertaking a fire master plan. These anticipated needs total approximately \$5.1 million. Of this amount, \$3.3 million has been deducted for benefits to existing development. Additionally, a deduction of \$656,752 has been made to reflect the

positive position of the D.C. reserve fund. The resultant net growth-related capital costs for inclusion in the D.C. calculation total \$1.1 million.

The allocation of net growth-related costs for Fire Services between residential, and non-residential development is 84% and 16% respectively, reflective of the incremental growth in population to employment over the forecast period.

5.1.3 Parking Services

The County currently maintains 2,317 parking spaces. The County's level of service over the historic 10-year period averaged \$136 per capita. In total, the maximum D.C. eligible amount for Parking Services over the 10-year forecast period is approximately \$282,000 based on the established level of service standard.

The 10-year capital needs for Parking Services have been estimated based on maintaining the historical service standard. Based on the historical level of investment per capita, as identified in the preceding paragraph, the County will need to invest approximately \$591,000 into additional parking spaces over the next ten years. Deducting the existing D.C. reserve fund balance of approximately \$309,000 results in a D.C. eligible amount of approximately \$223,000.

The Parking Services eligible costs have been allocated between residential (84%) and non-residential (16%) development based on the expected growth in population to employment over the 10-year forecast period.

5.1.4 Parks and Recreation Services

The County currently maintains approximately 388 acres of parkland, approximately 39 kilometers of paths and trails, 128 park amenities, 51 parks and recreation vehicles and equipment items, and 363,039 square feet of parks and recreation facilities. The County's level of service over the historic 10-year period averaged \$1,297 per capita. In total, the maximum D.C. eligible amount for Parks and Recreation Services over the 10-year forecast period is approximately \$2.7 million based on the established level of service standard.

The 10-year capital needs for Parks and Recreation Services to accommodate growth have a total gross capital cost of approximately \$66.4 million. These capital needs comprise future parkland and recreation trail development, additional indoor recreation facility and arena space needs, and needs for additional skate parks and dog parks. Capital needs providing benefits to growth beyond the 10-year forecast period, totalling \$9.2 million, have been deducted from the County's share of the Norplex Recreational

Hub. Approximately \$28.8 million has been deducted to reflect benefit to existing developments, and an additional \$24.2 million has been deducted for other contributions attributable to new development. These other contributions include anticipated senior-level government funding of the Norplex Recreational Hub, and anticipated donations towards the Delhi Skateboard Park. The statutory 10% deduction applicable for Parks and Recreation Services totals approximately \$429,000.

The existing D.C. reserve fund balance of \$1.6 million for Parks and Recreation Services has been deducted from the D.C. recoverable capital costs. This recognizes funds collected from previous development to meet part of the anticipated service needs. The resultant net growth-related capital costs included in the D.C. calculation total \$2.3 million.

As the predominant users of parks and recreation services tend to be residents of the County, and consistent with the County's historical practice, the forecast growth-related costs have been allocated 100% to residential development and 0% to non-residential development.

5.1.5 Library Services

Library services are provided by the County through the provision of 55,203 sq.ft. of facility space and approximately 304,000 library collection material items. The average level of service provided over the historical 10-year period based on this inventory is \$528 per capita. When applied to the anticipated development over the forecast period, the per capita level of service produces a maximum D.C. eligible amount for Library Services of approximately \$1.1 million.

The gross capital costs for Library Services included in the D.C. calculation for the 10-year forecast period total \$3.9 million. The capital cost estimates include an expansion at the Waterford library, property acquisition to facilitate future expansion of the Port Rowan library, and additional collection materials. A total deduction of \$1.0 million has been provided reflecting the benefits to development beyond the 10-year forecast period. A total of \$2.8 million has been deducted from the growth-related capital costs for benefits to existing development. Furthermore, deductions of \$8,000 for the required 10% statutory deduction have been applied. After including the current Library Services negative reserve fund balance of \$1.0 million, reflective of unfunded D.C. recoverable capital costs, the potential D.C. recoverable costs included in the calculation of the charge total \$1.1 million.

Similar to Parks and Recreation Services, the predominant users of library services tend to be residents of the County, and as such the forecast growth-related costs have been allocated 100% to residential development and 0% to non-residential development.

5.1.6 Administration Studies

The D.C.A. permits the inclusion of studies undertaken to facilitate the completion of the County's capital works program and the D.C. Background Study. The County has made provision for the inclusion of new studies undertaken to facilitate future D.C. processes, as well as other studies which benefit future growth. These studies include D.C. background studies, an official plan review, a secondary plan, and an economic development strategy.

The gross capital cost estimates for these studies total \$661,000 over the 10-year forecast period. Approximately \$281,000 has been deducted for the benefit to existing development, and \$38,000 has been deducted for the 10% statutory deduction. The current Administration Studies D.C. reserve fund is in a surplus position totalling \$198,000. Deducting this positive balance, the net growth-related capital costs included in the calculation of the charge total approximately \$145,000.

These costs have been allocated 84% to residential development and 16% to non-residential development based on the incremental growth in population to employment for the 10-year forecast period.

5.1.7 Ambulance Services

Ambulance services are provided by the County through the provision of approximately 14,000 sq.ft. of facility space, 18 vehicles, and 98 sets of equipment for uniformed emergency medical services officers. The average level of service provided over the historical 10-year period based on this inventory is \$105 per capita. When applied to the anticipated development over the forecast period, the per capita level of service produces a maximum D.C. eligible amount for Ambulance Services of approximately \$217,000.

The County expects to develop a new Waterford station, a new paramedic headquarters, and conduct a future needs assessment study over the 10-year forecast period, which have all been included in the Ambulance Services D.C. calculation. The gross capital cost for these projects totals \$2.9 million, of which \$1.2 million has been deducted for benefits to growth outside the 10-year forecast. Additionally, \$1.4 million has been deducted for benefits to existing development and \$29,000 has been deducted due to the statutory 10% deduction. Lastly, approximately \$70,000 has been

deducted to reflect the positive balance of the D.C. reserve fund. In total, approximately \$189,000 in net growth-related capital costs has been included in the calculation of the charge.

The Ambulance Services eligible costs have been allocated between residential (84%) and non-residential (16%) development based on the expected growth in population to employment over the 10-year forecast period.

5.1.8 Waste Diversion Services

Waste Diversion services are provided by the County through the provision of approximately 20,000 sq.ft. of facility space. The average level of service provided over the historical 10-year period based on this inventory is \$24 per capita. When applied to the anticipated development over the forecast period, the per capita level of service produces a maximum D.C. eligible amount for Waste Diversion Services of approximately \$50,000.

The County does not currently anticipate expanding the waste diversion facilities during the 10-year forecast period, or incurring other growth-related capital costs. As such, no capital costs have been identified for inclusion in the D.C. calculation, and resultantly the County will not be imposing a development charge for Waste Diversion Services at this time.

5.1.9 Marinas

The County maintains approximately 18,000 sq.ft. of marina facility space and 41 pieces of equipment and vehicles. The average level of service provided over the historical 10-year period based on this inventory is \$618 per capita. When applied to the anticipated development over the forecast period, the per capita level of service produces a maximum D.C. eligible amount for Marinas of approximately \$1.3 million.

The gross capital costs for Marinas included in the D.C. calculation for the 10-year forecast period total \$2.0 million. The capital cost estimates include several expansions at the Port Dover marina, and a washroom expansion at the Port Rowan marina. A deduction of \$1.0 million has been applied reflecting the benefits to development beyond the 10-year forecast period. Furthermore, deductions of \$99,000 for the required 10% statutory deduction and \$350,000 reflective of the positive D.C. reserve fund balance have been applied. In total, the potential D.C. recoverable costs included in the calculation of the charge net to \$544,000.

As the predominant users of marina services tend to be residents of the County, the forecast growth-related costs have been allocated 100% to residential development and 0% to non-residential development.

Infrastructure Costs Covered in the D.C. Calculation – Roads and Related Services

Norfolk County

Service: Roads and Related

Prj .No	Increased Service Needs Attributable to Anticipated Development 2018-2028	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential DC Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 84%	Non-Residential Share 16%
Infrastructure Reconstruction Program											
5531612	Second Ave - Norfolk St to Hunt St, Simcoe - Road Reconstruction	2019	684,866	-		684,866	616,380		68,487	57,529	10,958
5531828	South Drive - John St to Queen St, Simcoe	2019-2020	657,305	-		657,305	591,574		65,730	55,214	10,517
5532026	2020 King Street (Hwy 3) - James St. to Mill St., Delhi	2020-2021	1,276,019	-		1,276,019	1,148,417		127,602	107,186	20,416
5532207	2022 New Lakeshore Road - Watermain Upgrade / 2nd Feed to Tower, Port Dover	2022-2023	119,667	-		119,667	83,767		35,900	30,156	5,744
5532222	Evergreen Hill Road - Queen St to Norfolk St, Simcoe	2018-2022	1,814,776	-		1,814,776	1,633,299		181,478	152,441	29,036
5532302	2023 Colborne Street North - Windham to Queensway, Simcoe	2023-2024	328,806	-		328,806	295,925		32,881	27,620	5,261
5532501	2025 James Street - King to Argyle, Delhi	2025-2026	1,222,661	-		1,222,661	1,100,395		122,266	102,704	19,563
5532615	2026 Washington Street - Green St to Thompson Rd, Waterford	2026-2027	610,648	-		610,648	549,583		61,065	51,294	9,770
5532616	2026 South Drive - Oak to Head, Simcoe	2026-2027	963,700	-		963,700	867,330		96,370	80,951	15,419
Asphalt Resurfacing Program											
5531803	Asphalt Resurfacing - Thompson Road East	2018-2019	1,740,000	-		1,740,000	1,566,000		174,000	146,160	27,840
5531804	Asphalt Resurfacing - St. John's Road	2018	1,215,000	-		1,215,000	1,093,500		121,500	102,060	19,440
5531832	Asphalt Resurfacing - Old Highway 24	2018	1,500,000	-		1,500,000	1,350,000		150,000	126,000	24,000
5531833	Asphalt Resurfacing - Norfolk County Road 19 East	2018	730,000	-		730,000	657,000		73,000	61,320	11,680
5531901	2019 Asphalt Resurfacing - Highway 24	2019	3,771,000	-		3,771,000	3,393,900		377,100	316,764	60,336
5532002	2020 Asphalt Resurfacing - Norfolk County Road 21	2020	1,237,000	-		1,237,000	1,113,300		123,700	103,908	19,792
5532003	2020 Asphalt Resurfacing - Norfolk County Road 23	2020	1,428,000	-		1,428,000	1,285,200		142,800	119,952	22,848
5532004	2020 Asphalt Resurfacing - Norfolk County Road 45	2020	1,190,000	-		1,190,000	1,071,000		119,000	99,960	19,040
5532005	2020 Asphalt Resurfacing - Norfolk County Road 23	2020	1,190,000	-		1,190,000	1,071,000		119,000	99,960	19,040
5532101	2021 Asphalt Resurfacing - Indian Line	2021	1,114,000	-		1,114,000	1,002,600		111,400	93,576	17,824
5532102	2021 Asphalt Resurfacing - Forestry Farm Road	2021	1,671,000	-		1,671,000	1,503,900		167,100	140,364	26,736
5532119	2021 Asphalt Resurfacing - Norfolk County Road 21	2021	371,000	-		371,000	333,900		37,100	31,164	5,936
5532120	2021 Asphalt Resurfacing - Norfolk County Road 19	2021	919,000	-		919,000	827,100		91,900	77,196	14,704
5532121	2021 Asphalt Resurfacing - Norfolk County Road 19	2021	720,000	-		720,000	648,000		72,000	60,480	11,520
5532201	2022 Asphalt Resurfacing - County Line	2022	2,718,000	-		2,718,000	2,446,200		271,800	228,312	43,488
5532202	2022 Asphalt Resurfacing - Norfolk County Road 28	2022	2,401,000	-		2,401,000	2,160,900		240,100	201,684	38,416
5532225	2022 Asphalt Resurfacing - Old Highway 24	2022	951,000	-		951,000	855,900		95,100	79,884	15,216
5532301	2023 Asphalt Resurfacing - Blueline Road	2023	795,000	-		795,000	715,500		79,500	66,780	12,720
5532315	2023 Asphalt Resurfacing - Cockshutt Road	2023	1,812,000	-		1,812,000	1,630,800		181,200	152,208	28,992

Infrastructure Costs Covered in the D.C. Calculation – Roads and Related Services (cont.)

Prj .No	Increased Service Needs Attributable to Anticipated Development 2018-2028	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential DC Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 84%	Non-Residential Share 16%
5532316	2023 Asphalt Resurfacing - Highway 6	2023	703,000	-		703,000	632,700		70,300	59,052	11,248
5532401	2024 Asphalt Resurfacing - Elgin County Road 55	2024	1,854,000	-		1,854,000	1,668,600		185,400	155,736	29,664
5532419	2024 Asphalt Resurfacing - Windham Centre Road	2024	388,000	-		388,000	349,200		38,800	32,592	6,208
5532426	2024 Asphalt Resurfacing - Windham Centre Road	2024	474,000	-		474,000	426,600		47,400	39,816	7,584
5532510	2025 Asphalt Resurfacing - Norfolk County Road 45	2025	2,061,000	-		2,061,000	1,854,900		206,100	173,124	32,976
5532515	2025 Asphalt Resurfacing - Vittoria Road	2025	909,000	-		909,000	818,100		90,900	76,356	14,544
5532607	2026 Asphalt Resurfacing - McDowell Road East (Pine Grove)	2026	460,000	-		460,000	414,000		46,000	38,640	7,360
5532608	2026 Asphalt Resurfacing - McDowell Road East (Simcoe)	2026	1,026,000	-		1,026,000	923,400		102,600	86,184	16,416
5532610	2026 Asphalt Resurfacing - Norfolk County Highway 59 (Langton)	2026	431,000	-		431,000	387,900		43,100	36,204	6,896
5532611	2026 Asphalt Resurfacing - Norfolk County Highway 59 (Courtland)	2026	431,000	-		431,000	387,900		43,100	36,204	6,896
5532514	New Infrastructure Construction Program 2025 Argyle Ave Extension - Huggins Ave to Fertilizer Road, Delhi	2025-2026	764,736	378,166		386,570	191,184		195,386	164,124	31,262
5631814	Other Replacements With Enhancements Villa Nova Operations Facility Renovation	2018	60,000	-		60,000	54,000		6,000	5,040	960
5631812	Other New Capital Initiatives Storage Facility - Villa Nova Operations Yard	2018	30,000	-		30,000	27,000		3,000	2,520	480
	Other Projects										
C363.0007	New Traffic Signal Installation Only Dr @ Hwy 3	2020	200,000	-		200,000	-		200,000	168,000	32,000
C3020136	ISMP Update (road share)	2021	150,000	-		150,000	37,500		112,500	94,500	18,000
	ISMP Update (road share)	2026	150,000	-		150,000	37,500		112,500	94,500	18,000
	Reserve Fund Adjustment								(2,155,124)	(1,810,304)	(344,820)
	Total		45,243,185	378,166	-	44,865,019	39,822,855	-	2,887,040	2,425,114	461,926

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

Norfolk County
 Service: Fire Services

Prj .No	Increased Service Needs Attributable to Anticipated Development 2018-2028	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential DC Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 84%	Non-Residential Share 16%
Buildings, Land & Furnishings											
743 2003	Replace Fire Station #6 - Courtland										
	Research, Design and Land Acquisition	2020	275,000	-		275,000	200,875		74,125	62,265	11,860
	Construction	2021	1,275,000	-		1,275,000	931,330		343,670	288,683	54,987
743 1909	Replace Station #10 - St. Williams	2019	1,500,000	-		1,500,000	685,708		814,292	684,005	130,287
7432305	Replace Station #1 - Simcoe	2023	1,550,000	-		1,550,000	1,132,000		418,000	351,120	66,880
Vehicles & Equipment											
7431808	Radio Recording Device	2019	15,000	-		15,000	14,535		465	390	74
7431906	Washer Extractors / Dryers	2019	120,000	-		120,000	116,282		3,718	3,123	595
7431908	Radio Communication Paging Frequency	2019	250,000	-		250,000	242,255		7,745	6,506	1,239
Studies											
	Fire Master Plan	2019	80,000	-		80,000	20,000		60,000	50,400	9,600
	Reserve Fund Adjustment								(656,752)	(551,671)	(105,080)
	Total		5,065,000	0	0	5,065,000	3,342,985	0	1,065,263	894,821	170,442

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

Norfolk County
Service: Recreation

Prj.No	Increased Service Needs Attributable to Anticipated Development 2018-2028	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Subtotal	Less:	Potential DC Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share 100%	Non-Residential Share 0%
	Indoor Recreation Facilities												
	Norplex (Recreational Hub) - County share	2023-2024	60,000,000	9,176,929		50,823,071	23,925,928	24,049,381	2,847,761	284,776	2,562,985	2,562,985	-
	Park/Trail Development, Vehicles & Amenities												
7332212	Simcoe Youth Soccer Development	2022	100,000	-		100,000	10,000		90,000	9,000	81,000	81,000	-
7331810	Bush Chipper	2019	50,000	-		50,000	5,000		45,000	4,500	40,500	40,500	-
7331907	New Park Development - Location Unknown	2019-2028	500,000	-		500,000	50,000		450,000	45,000	405,000	405,000	-
7331927	Donly Drive Woodlot - Perimeter Tree Maintenance & Fencing	2018-2019	225,000	-		225,000	218,029		6,971	697	6,274	6,274	-
7331920	Dressing Room Construction - Port Dover Arena	2020	750,000	-		750,000	726,764		23,236	2,324	20,912	20,912	-
7332012	Dressing Room Construction - Talbot Gardens Arena	2021	750,000	-		750,000	726,764		23,236	2,324	20,912	20,912	-
7332110	Dressing Room Construction - Waterford Arena	2022	750,000	-		750,000	726,764		23,236	2,324	20,912	20,912	-
7332210	Dressing Room Construction - Delhi Arena	2023	750,000	-		750,000	726,764		23,236	2,324	20,912	20,912	-
7332308	Dressing Room Construction - Simcoe Rec Centre Arena	2024	750,000	-		750,000	726,764		23,236	2,324	20,912	20,912	-
7332406	Dressing Room Construction - Langton Arena	2025	750,000	-		750,000	726,764		23,236	2,324	20,912	20,912	-
7332016	Delhi Skateboard Park	2023	360,000	-		360,000	36,000	108,000	216,000	21,600	194,400	194,400	-
7332013	Dog Park - Port Rowan	2020	25,000	-		25,000	12,500		12,500	1,250	11,250	11,250	-
7332014	Dog Park - Port Dover	2020	25,000	-		25,000	12,500		12,500	1,250	11,250	11,250	-
7332015	Dog Park - Delhi	2020	25,000	-		25,000	12,500		12,500	1,250	11,250	11,250	-
7331857	2019 Vittoria District CC Parking Lot - Paving	2019	100,000	-		100,000	96,902		3,098	310	2,788	2,788	-
7332019	2020 Waterford - New Skateboard Park	2020	500,000			500,000	50,000		450,000	45,000	405,000	405,000	-
	Reserve Fund Adjustment								(1,600,707)		(1,600,707)	(1,600,707)	-
	Total		66,410,000	9,176,929	-	57,233,071	28,789,944	24,157,381	2,685,038	428,574	2,256,464	2,256,464	-

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

Norfolk County
 Service: Library Services

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Subtotal	Less:	Potential DC Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share	Non-Residential Share
	2018-2028										100%	0%	
	Building, Land & Furnishings												
9131804	Waterford Sunroom - Engineering	2021	50,000	-		50,000	-		50,000	5,000	45,000	45,000	-
9131801	Waterford Sunroom - Construction	2022	470,000	439,431		30,569	-		30,569	3,057	27,512	27,512	-
9132601	Port Rowan Library Expansion (property acquisition)	2026	350,000	350,000		-	-		-	-	-	-	-
	Material Acquisitions												
9131803	Library Materials	2018	292,000	22,412		269,588	269,588		-	-	-	-	-
9131901	Library Materials	2019	300,000	23,026		276,974	276,974		-	-	-	-	-
9132001	Library Materials	2020	300,000	23,026		276,974	276,974		-	-	-	-	-
9132101	Library Materials	2021	300,000	23,026		276,974	276,974		-	-	-	-	-
9132201	Library Materials	2022	300,000	23,026		276,974	276,974		-	-	-	-	-
9132301	Library Materials	2023	300,000	23,026		276,974	276,974		-	-	-	-	-
9132401	Library Materials	2024	300,000	23,026		276,974	276,974		-	-	-	-	-
9132501	Library Materials	2025	300,000	23,026		276,974	276,974		-	-	-	-	-
9132603	Library Materials	2026	300,000	23,026		276,974	276,974		-	-	-	-	-
9132701	Library Materials	2027	300,000	23,026		276,974	276,974		-	-	-	-	-
	Reserve Fund Adjustment								1,012,350		1,012,350	1,012,350	-
	Total		3,862,000	1,019,080	-	2,842,920	2,762,351	-	1,092,919	8,057	1,084,862	1,084,862	-

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

Norfolk County
 Service: Administration Studies

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Subtotal	Less:	Potential DC Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share	Non-Residential Share
	2018-2028											84%	16%
	Development Charges Study	2018	50,000	-		50,000	-		50,000	5,000	45,000	37,800	7,200
	Development Charges Study	2023	50,000	-		50,000	-		50,000	5,000	45,000	37,800	7,200
C820.0006	Economic Development Strategy	2021	77,800	-		77,800	38,900		38,900	3,890	35,010	29,408	5,602
	Official Plan Review	2023	133,300	-		133,300	66,650		66,650	6,665	59,985	50,387	9,598
	Port West Secondary Plan Study	2019	350,000	-		350,000	175,000		175,000	17,500	157,500	132,300	25,200
	Reserve Fund Adjustment								(197,645)		(197,645)	(166,021)	(31,623)
	Total		661,100	-	-	661,100	280,550	-	182,905	38,055	144,850	121,674	23,176

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

Norfolk County
 Service: Waste Diversion Services

Prj .No	Increased Service Needs Attributable to Anticipated Development 2018-2028	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Subtotal	Less:	Potential DC Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share 84%	Non-Residential Share 16%
1			-	-		-	-		-	-	-	-	-
2			-	-		-	-		-	-	-	-	-
3			-	-		-	-		-	-	-	-	-
4			-	-		-	-		-	-	-	-	-
5			-	-		-	-		-	-	-	-	-
6			-	-		-	-		-	-	-	-	-
7			-	-		-	-		-	-	-	-	-
8			-	-		-	-		-	-	-	-	-
9			-	-		-	-		-	-	-	-	-
10			-	-		-	-		-	-	-	-	-
11			-	-		-	-		-	-	-	-	-
12			-	-		-	-		-	-	-	-	-
13			-	-		-	-		-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-

5.2 Service Levels and 23-Year Capital Costs for County-wide D.C. Calculation

The County's current D.C. by-law imposes D.C.s for water and wastewater services uniformly over the municipally serviced area. This D.C. Background Study maintains that policy. The County's Integrated Sustainable Master Plan, with needs established based on the population and employment projects to 2041, has been considered in the preparation of this D.C. Background Study.

The anticipated development-related capital requirements for these services have been considered over a 23-year planning period (2018-2041). Correspondingly the D.C. for these services have been calculated over the same forecast period.

5.2.1 Water Services

The capital program for Water services includes the following:

- Debt servicing costs pertaining to previously completed growth-related capital projects;
- Water system upgrades and expansions;
- New vehicle and equipment costs;
- Portion of select road construction projects; and
- Future updates of the Integrated Sustainable Master Plan.

In total, the gross capital cost estimates amount to \$60.8 million. A benefit to existing deduction of \$34.6 million has been recognized, in addition to a deduction of approximately \$1.7 million reflective of the existing reserve fund balance. The net capital costs identified for inclusion in the calculation of the charge total approximately \$24.6 million.

These costs have been allocated 83% residential and 17% non-residential, based on incremental population to employment growth over the urban 23-year forecast period.

5.2.2 Wastewater Services

The capital program for Wastewater services includes the following:

- Debt servicing costs pertaining to previously completed growth-related capital projects;
- Expansions to the Port Dover, Simcoe, and Waterford wastewater treatment facilities;

- Wastewater system upgrades;
- New equipment costs;
- Portion of select road construction projects; and
- Future updates of the Integrated Sustainable Master Plan.

The gross capital costs are estimated at \$59.8 million with the applicable reduction for the benefit to existing constituents of \$42.5 million. Adjustments for reserve funds of \$2.9 million have been deducted. The net capital costs identified for inclusion in the calculation total \$14.3 million.

Similar to Water services, these costs have been allocated 83% to residential and 17% to non-residential development on the basis of incremental population to employment growth over the urban 23-year forecast period.

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

Norfolk County
Service: Water Services

Prj.No	Increased Service Needs Attributable to Anticipated Development 2018-2041 (Urban)	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential DC Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 83%	Non-Residential Share 17%
Delhi											
C462.9739	Main St from Power St to Imperial St Debt	2018-2020	9,427	-		9,427	7,541		1,885	1,565	321
Simcoe											
C465.9309	Simcoe New Water Source Study Debt	2018-2020	9,991	-		9,991	-		9,991	8,292	1,698
C465.9406	Simcoe Well Field Treatment Facility Debt	2018-2030	2,509,339	-		2,509,339	2,308,592		200,747	166,620	34,127
Port Rowan											
C464.9310	Watermain Reconstruction County Rd 42 Debt	2018-2020	12,886	-		12,886	6,443		6,443	5,348	1,095
Other Debt											
	OIPC Debt Payments (Debt#161) Debt	2018-2037	63,225	-		63,225	57,610		5,614	4,660	954
Water Equipment Replacements/Upgrades Program											
5831904	2019 Water Equipment Replacements & Upgrades	2019	306,000	-		306,000	275,400		30,600	25,398	5,202
5832004	2020 Water Equipment Replacements & Upgrades	2020	306,000	-		306,000	275,400		30,600	25,398	5,202
5832105	2021 Water Equipment Replacements & Upgrades	2021	306,000	-		306,000	275,400		30,600	25,398	5,202
5832203	2022 Water Equipment Replacements & Upgrades	2022	306,000	-		306,000	275,400		30,600	25,398	5,202
5832305	2023 Water Equipment Replacements & Upgrades	2023	306,000	-		306,000	275,400		30,600	25,398	5,202
5832404	2024 Water Equipment Replacements & Upgrades	2024	306,000	-		306,000	275,400		30,600	25,398	5,202
5832502	2025 Water Equipment Replacements & Upgrades	2025	306,000	-		306,000	275,400		30,600	25,398	5,202
5832603	2026 Water Equipment Replacements & Upgrades	2026	306,000	-		306,000	275,400		30,600	25,398	5,202
5832704	2027 Water Equipment Replacements & Upgrades	2027	306,000	-		306,000	275,400		30,600	25,398	5,202
	2028-2041 Water Equipment Replacements & Upgrades	2028-2041	4,284,000	-		4,284,000	3,855,600		428,400	355,572	72,828
Other Replacements With Enhancements											
5832209	2022 Simcoe Water Reservoir Capacity Increases	2022	3,979,000	-		3,979,000	2,984,250		994,750	825,643	169,108
Proposed Central Water System Program											
5832313	2023 Lake Erie Water Supply - Port Dover WTP	2023	21,163,000	-		21,163,000	10,581,500		10,581,500	8,782,645	1,798,855
5832408	2024 Watermain Interconnection Port Dover to Simcoe	2024	5,159,000	-		5,159,000	2,579,500		2,579,500	2,140,985	438,515
5832606	2606 Watermain Interconnection Simcoe to Waterford	2026	4,579,000	-		4,579,000	2,289,500		2,289,500	1,900,285	389,215
5832707	2027 Watermain Interconnection between Delhi and Simcoe	2027	3,190,000	-		3,190,000	1,595,000		1,595,000	1,323,850	271,150
Water Share of Roads Program											
5531612	Second Ave - Norfolk St to Hunt St, Simcoe - Road Reconstruction	2019	429,261	-		429,261	386,335		42,926	35,629	7,297
5531828	South Drive - John St to Queen St, Simcoe	2019-2020	332,474	-		332,474	299,226		33,247	27,595	5,652

Infrastructure Costs Covered in the D.C. Calculation – Water Services (cont.)

Prj.No	Increased Service Needs Attributable to Anticipated Development 2018-2041 (Urban)	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential DC Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 83%	Non-Residential Share 17%
5532026	2020 King Street (Hwy 3) - James St. to Mill St., Delhi	2020-2021	372,560	-		372,560	335,304		37,256	30,923	6,334
5532207	2022 New Lakeshore Road - Watermain Upgrade / 2nd Feed to Tower, Port Dover	2022-2023	119,667	-		119,667	83,767		35,900	29,797	6,103
5532222	Evergreen Hill Road - Queen St to Norfolk St, Simcoe	2018-2022	920,448	-		920,448	828,403		92,045	76,397	15,648
5532302	2023 Colborne Street North - Windham to Queensway, Simcoe	2023-2024	167,864	-		167,864	151,078		16,786	13,933	2,854
5532501	2025 James Street - King to Argyle, Delhi	2025-2026	329,336	-		329,336	296,403		32,934	27,335	5,599
5532615	2026 Washington Street - Green St to Thompson Rd, Waterford	2026-2027	307,734	-		307,734	276,961		30,773	25,542	5,231
5532616	2026 South Drive - Oak to Head, Simcoe	2026-2027	491,487	-		491,487	442,339		49,149	40,793	8,355
5532514	2025 Argyle Ave Extension - Huggins Ave to Fertilizer Road, Delhi	2025-2026	275,470	-		275,470	68,867		206,602	171,480	35,122
	Other New Capital Initiatives										
5831839	Water Modeling Software	2018	12,000	-		12,000	6,000		6,000	4,980	1,020
5832007	2020 Delhi Well Trunk Watermain	2020-2021	2,881,000	-		2,881,000	1,440,500		1,440,500	1,195,615	244,885
5832011	2020 Port Dover North West Booster Station	2020	2,853,000	-		2,853,000	285,300		2,567,700	2,131,191	436,509
5832112	2021 Water Distribution - New One Ton Truck with a Dump Box	2021	70,000	-		70,000	7,000		63,000	52,290	10,710
5832113	2021 Water & Wastewater Systems - Additional Pick up Truck	2021	26,000	-		26,000	2,600		23,400	19,422	3,978
5832510	2025 Waterford Water Storage	2025	2,516,000	-		2,516,000	503,200		2,012,800	1,670,624	342,176
	ISMP Update (water share)	2021	150,000	-		150,000	37,500		112,500	93,375	19,125
	ISMP Update (water share)	2026	150,000	-		150,000	37,500		112,500	93,375	19,125
	ISMP Update (water share)	2031	150,000	-		150,000	37,500		112,500	93,375	19,125
	ISMP Update (water share)	2036	150,000	-		150,000	37,500		112,500	93,375	19,125
	ISMP Update (water share)	2041	150,000	-		150,000	37,500		112,500	93,375	19,125
	Source Water Protection Study	2020?	250,000	-		250,000	235,129		14,871	12,343	2,528
	Reserve Fund Adjustment								(1,677,296)	(1,392,156)	(285,140)
	Total		60,817,168	-	-	60,817,168	34,580,048	-	24,559,824	20,384,654	4,175,170

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

Norfolk County
Service: Wastewater Services

Prj.No	Increased Service Needs Attributable to Anticipated Development 2018-2041 (Urban)	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential DC Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 83%	Non-Residential Share 17%
Port Dover											
C453.0002/ C453.0006	WPCP Expansion and Outfall Phase 1	2019	5,000,000	-		5,000,000	4,453,976		546,024	453,200	92,824
	Phase 2	2020	10,000,000	-		10,000,000	8,907,951		1,092,049	906,401	185,648
	Phase 3	2021	1,700,000	-		1,700,000	1,514,352		185,648	154,088	31,560
C453.8802	Pt Dover WW Outfall Engineering Review Debt	2018-2023	64,707	-		64,707	32,353		32,353	26,853	5,500
Simcoe											
C455.8704	Simcoe WPCP Expansion Debt	2018-2030	2,255,485	-		2,255,485	1,037,523		1,217,962	1,010,908	207,053
C455.8704	Simcoe WPCP Rehab Debt	2018-2023	64,707	-		64,707	29,765		34,942	29,002	5,940
Waterford											
C456.0008/ C456.0002	Wastewater Treatment Facility Engineering Services & Expansion	2019	16,000,000	-		16,000,000	11,491,971		4,508,029	3,741,664	766,365
Port Rowan											
C454.8829	WPCP Expansion Port Rowan Debt	2018-2020	7,152,725	-		7,152,725	3,179,099		3,973,626	3,298,109	675,516
Debt Repayment											
C450.0012	SCADA Debt	2018	12,929	-		12,929	11,781		1,148	953	195
5831408	Delhi WW Treatment Plant Upgrade Debt	2018-2035	2,935,972	-		2,935,972	-		2,935,972	2,436,857	499,115
Wastewater Equipment Replacements/Upgrades Program											
5831902	2019 Wastewater Equipment Replacements & Upgrades	2019	306,000	-		306,000	275,400		30,600	25,398	5,202
5832002	2020 Wastewater Equipment Replacements & Upgrades	2020	306,000	-		306,000	275,400		30,600	25,398	5,202
5832102	2021 Wastewater Equipment Replacements & Upgrades	2021	306,000	-		306,000	275,400		30,600	25,398	5,202
5832201	2022 Wastewater Equipment Replacements & Upgrades	2022	306,000	-		306,000	275,400		30,600	25,398	5,202
5832302	2023 Wastewater Equipment Replacements & Upgrades	2023	306,000	-		306,000	275,400		30,600	25,398	5,202
5832402	2024 Wastewater Equipment Replacements & Upgrades	2024	306,000	-		306,000	275,400		30,600	25,398	5,202
5832503	2025 Wastewater Equipment Replacements & Upgrades	2025	306,000	-		306,000	275,400		30,600	25,398	5,202
5832604	2026 Wastewater Equipment Replacements & Upgrades	2026	306,000	-		306,000	275,400		30,600	25,398	5,202
5832705	2027 Wastewater Equipment Replacements & Upgrades	2027	306,000	-		306,000	275,400		30,600	25,398	5,202
	2028-2041 Wastewater Equipment Replacements & Upgrades	2028-2041	4,284,000	-		4,284,000	3,855,600		428,400	355,572	72,828
Other Replacements With Enhancements											
5831720	Ryerse Sewage Pump Station Upgrades	2018	1,690,000	-		1,690,000	1,267,500		422,500	350,675	71,825
5832111	2021 Simcoe WWTF New Filtration Building	2021	1,855,000	-		1,855,000	1,391,250		463,750	384,913	78,838
5832312	2023 Port Rowan Mallard Walk SPS Capacity Increase	2023	88,000	-		88,000	66,000		22,000	18,260	3,740
5832608	2026 Waterford Blue Line Road SPS Capacity Increase	2026	82,000	-		82,000	41,000		41,000	34,030	6,970
5832709	2027 Waterford Deer Park East SPS Capacity Increase	2027	120,000	-		120,000	84,000		36,000	29,880	6,120

Infrastructure Costs Covered in the D.C. Calculation – Wastewater Services (cont.)

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential DC Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 83%	Non-Residential Share 17%
	2018-2041 (Urban)										
	Wastewater Share of Roads Program										
5531612	Second Ave - Norfolk St to Hunt St, Simcoe - Road Reconstruction	2019	324,873	-		324,873	292,385		32,487	26,964	5,523
5531828	South Drive - John St to Queen St, Simcoe	2019-2020	252,222	-		252,222	226,999		25,222	20,934	4,288
5532026	2020 King Street (Hwy 3) - James St. to Mill St., Delhi	2020-2021	279,420	-		279,420	251,478		27,942	23,192	4,750
5532207	2022 New Lakeshore Road - Watermain Upgrade / 2nd Feed to Tower, Port Dover	2022-2023	119,667	-		119,667	83,767		35,900	29,797	6,103
5532222	Evergreen Hill Road - Queen St to Norfolk St, Simcoe	2018-2022	764,776	-		764,776	688,299		76,478	63,476	13,001
5532302	2023 Colborne Street North - Windham to Queensway, Simcoe	2023-2024	126,331	-		126,331	113,698		12,633	10,485	2,148
5532501	2025 James Street - King to Argyle, Delhi	2025-2026	247,002	-		247,002	222,302		24,700	20,501	4,199
5532615	2026 Washington Street - Green St to Thompson Rd, Waterford	2026-2027	234,617	-		234,617	211,156		23,462	19,473	3,988
5532616	2026 South Drive - Oak to Head, Simcoe	2026-2027	367,812	-		367,812	331,031		36,781	30,528	6,253
5532514	2025 Argyle Ave Extension - Huggins Ave to Fertilizer Road, Delhi	2025-2026	176,794	-		176,794	44,198		132,595	110,054	22,541
	Other New Capital Initiatives										
5832509	2025 Main Street of Delhi SPS Capacity Increase	2025	84,000	-		84,000	42,000		42,000	34,860	7,140
	ISMP Update (wastewater share)	2021	150,000	-		150,000	37,500		112,500	93,375	19,125
	ISMP Update (wastewater share)	2026	150,000	-		150,000	37,500		112,500	93,375	19,125
	ISMP Update (wastewater share)	2031	150,000	-		150,000	37,500		112,500	93,375	19,125
	ISMP Update (wastewater share)	2036	150,000	-		150,000	37,500		112,500	93,375	19,125
	ISMP Update (wastewater share)	2041	150,000	-		150,000	37,500		112,500	93,375	19,125
	Reserve Fund Adjustment								(2,916,820)	(2,420,961)	(495,859)
	Total		59,787,038	-	-	59,787,038	42,537,534	-	14,332,683	11,896,127	2,436,556

6. D.C. Calculation

Two options of structuring the non-residential D.C.s have been discussed with County staff and have been included in this study for Council's consideration. This chapter presents the calculations of determining the charge for the first option, a uniform rate for all non-residential developments. Appendix D presents the supporting calculations for the second option of setting separate non-residential charges for Industrial and Non-Industrial developments. The impacts of implementing either option, relative to the County's current charges, are analyzed at the end of this chapter.

Tables 6-1 and 6-2 present the D.C. quantum calculation (pre-cash flow) for the growth-related capital costs identified in Chapter 5. Table 6-1 presents the area-specific D.C. calculation for water services and wastewater services over the 23-year period (i.e. 2018-2041). Table 6-2 presents the calculation of the D.C.s for County-wide services over the 10-year planning horizon (i.e. mid-2018 to mid-2028). Table 6-3 summarizes the schedule of charges reflecting the maximum D.C.s by residential dwelling type, and per square metre of G.F.A. for non-residential development.

The calculations of the maximum D.C.s that could be imposed by Council have been undertaken based on a cash flow analysis to account for the timing of revenues and expenditures and the resultant financing needs. The cash flow calculations have been undertaken by service for each forecast development type, i.e. residential and non-residential. D.C. cash flow calculations are provided in Appendix C.

The cash flow calculates interest paid/received on reserve fund balances to account for the differences in timing of projects and when development will occur. In-year transactions are reduced by $\frac{1}{2}$ to reflect D.C. contributions and expenditures occurring at different times throughout the year. For cashflow purposes, capital costs and D.C.s are indexed at 3% annually, the internal interest charged on borrowing is set to 4.5%, and investment return is set to 3%. Moreover, the cash flow calculations include the interest costs associated with existing internal and external D.C. debt payments. Table 6-4 provides the schedule of charges using the cashflow method.

For the residential calculations, charges are calculated on a single detached unit equivalent basis and converted to five forms of dwelling unit types (single and semi-detached, apartments 2 bedrooms and larger, bachelor and 1-bedroom apartments, and other multiples). The non-residential D.C. has been calculated uniformly on a per square metre of gross floor area (G.F.A.) basis. It should be noted that the growth forecast estimates for non-residential development as contained in Appendix A to this

report have been converted to square metres to denominate the charges consistent with County practice.

Table 6-5 compares the County's existing charges to the calculated charges for a single detached residential dwelling unit, a uniform charge per square metre of G.F.A. for non-residential development (Option 1), and a split charge per square metre of G.F.A. for industrial and non-industrial development (Option 2). The calculated charges for a single detached residential dwelling unit would be \$17,206, which represents an increase of \$3,154 per unit or an increase of 22% relative to current rates. Similarly, the calculated charge per square metre of non-residential G.F.A. under Option 1 would be \$111.15, which represents an increase of \$48.83 per square metre, or 78% relative to current rates. Under Option 2, the calculated charge for an industrial development would be \$74.71 per square metre, which represents an increase of \$12.39 per square metre, or 20% relative to current rates. Furthermore, the calculated charge for a non-industrial development would be \$144.22, which represents an increase of \$81.90 per square metre or an increase of 131% relative to current rates.

Table 6-1
Municipal-Wide Services D.C. Calculation
2018 – 2041 (Urban)

SERVICE	2018 \$ DC Eligible Cost		2018 \$ DC Eligible Cost	
	Residential	Non-Residential	SDU	per m ²
	\$	\$	\$	\$
1. Water Services	20,384,654	4,175,170	6,344	45.11
2. Wastewater Services	11,896,127	2,436,556	3,702	26.33
TOTAL	\$32,280,781	\$6,611,726	\$10,046	71.44
DC ELIGIBLE CAPITAL COST	\$32,280,781	\$6,611,726		
Build out Gross Population / GFA Growth (m ² .)	8,522	92,550		
Cost Per Capita / Non-Residential GFA (m ² .)	\$3,787.93	\$71.44		
<u>By Residential Unit Type</u>	<u>p.p.u</u>			
Single and Semi-Detached Dwelling	2.652	\$10,046		
Apartments - 2 Bedrooms +	1.698	\$6,432		
Apartments - Bachelor and 1 Bedroom	1.120	\$4,242		
Other Multiples	1.853	\$7,019		

Table 6-2
D.C. Calculation
Municipal-Wide Services D.C. Calculation
2018 – 2028

SERVICE	2018 \$ DC Eligible Cost		2018 \$ DC Eligible Cost	
	Residential	Non-Residential	SDU	per m ²
	\$	\$	\$	\$
3. Roads and Related Services	2,425,114	461,926	1,737	16.16
4. Fire Protection Services	894,821	170,442	641	5.96
5. Parking Services	187,219	35,661	134	1.25
6. Parks and Recreation Services	2,256,464	0	1,616	0.00
7. Library Services	1,084,862	0	777	0.00
8. Administration	121,674	23,176	87	0.81
9. Ambulance Services	158,366	30,165	113	1.06
10. Waste Diversion Services	0	0	0	0.00
11. Marinas	544,036	0	390	0.00
TOTAL	\$7,672,556	\$721,370	\$5,495	\$25.24
DC ELIGIBLE CAPITAL COST	\$7,672,556	\$721,370		
10 Year Gross Population / GFA Growth (m ² .)	3,703	28,577		
Cost Per Capita / Non-Residential GFA (m ² .)	\$2,071.98	\$25.24		
<u>By Residential Unit Type</u>	<u>p.p.u</u>			
Single and Semi-Detached Dwelling	2.652	\$5,495		
Apartments - 2 Bedrooms +	1.698	\$3,518		
Apartments - Bachelor and 1 Bedroom	1.120	\$2,321		
Other Multiples	1.853	\$3,839		

**Table 6-3
Calculated Schedule of Charges (Quantum)**

Service	RESIDENTIAL				NON-RESIDENTIAL
	Single and Semi-Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	(per m ² of Gross Floor Area)
Municipal Wide Services:					
Roads and Related Services	1,737	1,112	734	1,214	16.16
Fire Protection Services	641	410	271	448	5.96
Parking Services	134	86	57	94	1.25
Parks and Recreation Services	1,616	1,035	682	1,129	0.00
Library Services	777	497	328	543	0.00
Administration	87	56	37	61	0.81
Ambulance Services	113	72	48	79	1.06
Waste Diversion Services	-	-	-	-	0.00
Marinas	390	250	165	273	0.00
Total Municipal Wide Services	5,495	3,518	2,322	3,841	25.24
Urban Services					
Water Services	6,344	4,062	2,679	4,433	45.11
Wastewater Services	3,702	2,370	1,563	2,587	26.33
Total Urban Services	10,046	6,432	4,242	7,020	71.44

**Table 6-4
Calculated Schedule of Charges (Cash Flow)**

Service	RESIDENTIAL				NON-RESIDENTIAL
	Single and Semi-Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	(per m ² of Gross Floor Area)
Municipal Wide Services:					
Roads and Related Services	1,793	1,148	757	1,253	17.08
Fire Protection Services	645	413	272	451	6.28
Parking Services	142	91	60	99	1.33
Parks and Recreation Services	1,675	1,073	708	1,171	0.00
Library Services	898	575	379	627	0.00
Administration	86	55	37	60	0.84
Ambulance Services	127	81	53	89	1.19
Waste Diversion Services	-	-	-	-	0.00
Marinas	412	264	174	288	0.00
Total Municipal Wide Services	5,778	3,700	2,440	4,038	26.71
Urban Services					
Water Services	7,167	4,589	3,027	5,008	52.91
Wastewater Services	4,261	2,728	1,800	2,977	31.53
Total Urban Services	11,428	7,317	4,827	7,985	84.44

**Table 6-5
Comparison of Current and Calculated D.C.s**

Service	Residential (per SFD)		Non-Residential (per m ²)			
	Current	Calculated	Current	Calculated - Option 1 (Single Charge)	Calculated - Option 2 (Industrial Charge)	Calculated - Option 2 (Non-industrial)
Municipal Wide Services:						
Roads and Related Services	\$ 1,370	\$ 1,793	\$ 5.62	\$ 17.08	\$ 15.77	\$ 17.77
Fire Protection Services	\$ 1,093	\$ 645	\$ 5.44	\$ 6.28	\$ 5.78	\$ 6.54
Parking Services	\$ -	\$ 142	\$ -	\$ 1.33	\$ 1.23	\$ 1.38
Parks and Recreation Services	\$ 1,361	\$ 1,675	\$ -	\$ -	\$ -	\$ -
Library Services	\$ 452	\$ 898	\$ -	\$ -	\$ -	\$ -
Administration	\$ 143	\$ 86	\$ 0.72	\$ 0.84	\$ 0.77	\$ 0.87
Ambulance Services	\$ 64	\$ 127	\$ 0.33	\$ 1.19	\$ 1.10	\$ 1.24
Waste Diversion Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Marinas	\$ 397	\$ 412	\$ -	\$ -	\$ -	\$ -
Total Municipal Wide Services	\$ 4,880	\$ 5,778	\$ 12.11	\$ 26.71	\$ 24.65	\$ 27.80
Urban Services:						
Water Services	\$ 5,782	\$ 7,167	\$ 32.47	\$ 52.91	\$ 31.36	\$ 72.95
Wastewater Services	\$ 3,390	\$ 4,261	\$ 17.74	\$ 31.53	\$ 18.70	\$ 43.47
Total Urban Services	\$ 9,172	\$ 11,428	\$ 50.21	\$ 84.44	\$ 50.06	\$ 116.42
Grand Total - Rural Area	\$ 4,880	\$ 5,778	\$ 12.11	\$ 26.71	\$ 24.65	\$ 27.80
Grand Total - Urban Area	\$ 14,052	\$ 17,206	\$ 62.32	\$ 111.15	\$ 74.71	\$ 144.22

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

This chapter outlines the D.C. policy recommendations and by-law rules. The rules provided are based on the review of methodology and implementation polices with County staff.

s.s.5(1)9 states that rules must be developed:

“...to determine if a D.C. is payable in any particular case and to determine the amount of the charge, subject to the limitations set out in subsection 6.”

Paragraph 10 of subsection 5(1) goes on to state that the rules may provide for exemptions, phasing in and/or indexing of D.C.s.

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

1. 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;
2. 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;
3. if the rules provide for a type of development to have a lower D.C. than is allowed, the rules for determining D.C.s may not provide for any resulting shortfall to be made up via other development; and
4. with respect to “the rules,” subsection 6 states that a D.C. by-law must expressly address the matters referred to above re s.s.5(1) para. 9 and 10, as well as how the rules apply to the redevelopment of land.

7.1 D.C. By-law Structure

Chapter 6 presented the two non-residential D.C. rate options developed through discussions with County staff. The first option consists of a uniform charge for all non-residential development, while the second option consists of two separate non-residential charges; one for industrial development and another for non-industrial development. This second option was developed to reflect the varying characteristics inherent to industrial developments relative to other types of non-residential development. More specifically, the underlying density of industrial development,

requiring a greater floor space per employee, produces a lower charge per square metre of gross floor area as compared with non-industrial developments. These options will be considered by Council as part of the public process, prior to adoption of the new D.C. By-law.

It is recommended that:

- the County impose a uniform County-wide D.C. for all municipal services included herein;
- Council determine which Non-Residential D.C. Option (i.e. uniform non-residential charge or separate industrial and non-industrial charges) it would like to pursue; and
- one municipal D.C. by-law be approved for all services contained herein.

7.2 D.C. By-law Rules

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

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

7.2.1 Payment in any Particular Case

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

- a) the passing of a zoning by-law or of an amendment to a zoning by-law under Section 34 of the Planning Act;
- b) the approval of a minor variance under Section 45 of the Planning Act;
- c) a conveyance of land to which a by-law passed under Section 50(7) of the Planning Act applies;
- d) the approval of a plan of subdivision under Section 51 of the Planning Act;
- e) a consent under Section 53 of the Planning Act;
- f) the approval of a description under Section 50 of the Condominium Act; or
- g) the issuing of a building permit under the Building Code Act in relation to a building or structure.

7.2.2 Determination of the Amount of the Charge

The following conventions be adopted:

- 1) Costs allocated to residential uses will be assigned to different types of residential units based on the average occupancy for each housing type constructed during the previous decade. Costs allocated to non-residential development will be assigned on the basis of G.F.A. constructed.
- 2) Costs allocated to residential and non-residential uses are based upon a number of conventions, as may be suited to each municipal service circumstance. These are summarized in Chapter 5 herein.

7.2.3 Application to Redevelopment of Land (Demolition and Conversion)

If a development involves the demolition and replacement of a building or structure on the same site, or the conversion from one principal use to another, the developer shall be allowed a credit 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 total 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 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 10 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. Moreover, no credit will be granted if the type of development to be demolished or converted would be exempt from D.C.s.

7.2.4 Exemptions (full or partial)

a) Statutory exemptions

1. Industrial building additions of up to and including 50% of the existing G.F.A. (defined in O.Reg. 82/98, s.1) of the building; for industrial building additions which exceed 50% of the existing G.F.A., only the portion of the addition in excess of 50% is subject to D.C.s (s.4(3));
2. Buildings or structures owned by and used for the purposes of any municipality, local board or Board of Education (s.3); and

3. Residential development that results in only the enlargement of an existing dwelling unit, or that results only in the creation of up to two additional dwelling units (based on prescribed limits set out in s.2 of O.Reg. 82/98).

For clarity in applying the industrial buildings additions exemption described in section 4 of the D.C.A., the D.C. By-law will include provisions to reflect the following:

- existing industrial development means an industrial development that existed at the time of by-law passage.

b) Non-statutory exemptions from payment of the development charges include:

1. Industrial development;
2. Roof accommodation development;
3. Temporary structures;
4. Farm help house development;
5. Farming business development;
6. Affordable housing, provided the development charge liabilities of the affordable housing project are not eligible for funding by senior levels of government, and which receives funding from the County under its social housing program.;
7. Parking garage exclusively devoted to parking, including the construction of an outdoor parking lot at grade, or the construction of a parking garage above or below grade;
8. Places of worship;
9. Development within the “Central Business Districts” as defined in the County’s official plan, or official plans of any predecessor municipalities;
10. Brownfield development that has been approved by the County or any predecessor municipalities.
 - The amount of the exemption is equivalent the cost of remediation on, in, or under the property, as approved by the County, but not to exceed the amount of applicable development charges.

It should be noted that exemptions for payment of development charges produce a reduction in anticipated revenue from development charges. Moreover, the Development Charges Act requires that any exemption for the payment of development charges cannot be funded by a corresponding increase in D.C.s on other types of development. Hence, these exemptions must be funded from a non-D.C. source (e.g. property taxes, user fees). With respect to the industrial development, maintaining the full exemption for industrial development, and assuming annual development as per the

growth forecast estimates, the annual foregone revenue would equate to approximately \$560,000 under Option 1 and \$380,000 under Option 2.

7.2.5 Phase in Provision(s)

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

7.2.6 Timing of Collection

The D.C.s for all services 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 County and an owner under s.27 of the D.C.A., 1997.

7.2.7 Indexing

All D.C.s will be subject to mandatory indexing annually on July 1st in accordance with provisions under the D.C.A.

7.2.8 D.C. Spatial Applicability

In accordance with the D.C.A., the County gave consideration to the imposition of D.C.s on an area-specific basis, and is maintaining its current approach of imposing uniform County-wide D.C.s for all services.

7.3 Other D.C. By-law Provisions

7.3.1 Categories of Services for Reserve Fund and Credit Purposes

It is recommended that the County's D.C. collections be contributed into ten (10) separate reserve funds, including: Roads and Related Services, Fire Protection Services, Parking Services, Parks and Recreation Services, Library Services, Administration Studies Services, Ambulance Services, Marinas Services, Water Services, and Wastewater Services.

It is further recommended that all D.C. exemptions granted over the life of the By-law be contributed into the applicable D.C. reserve funds from non-D.C. sources.

7.3.2 By-law In-force Date

The proposed by-law under D.C.A., 1997 will come into force on July 1, 2018.

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

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

7.4 Other Recommendations

It is recommended that Council:

“Approve the capital project listing set out in Chapter 5 of the “Norfolk County 2018 Development Charges Background Study” dated December 21, 2018, subject to further annual review during the capital budget process;”

“Approve the “Norfolk County 2018 Development Charges Background Study” dated December 21, 2018;”

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

“Approve the Development Charges By-Law as set out in Appendix G.

8. Asset Management Plan

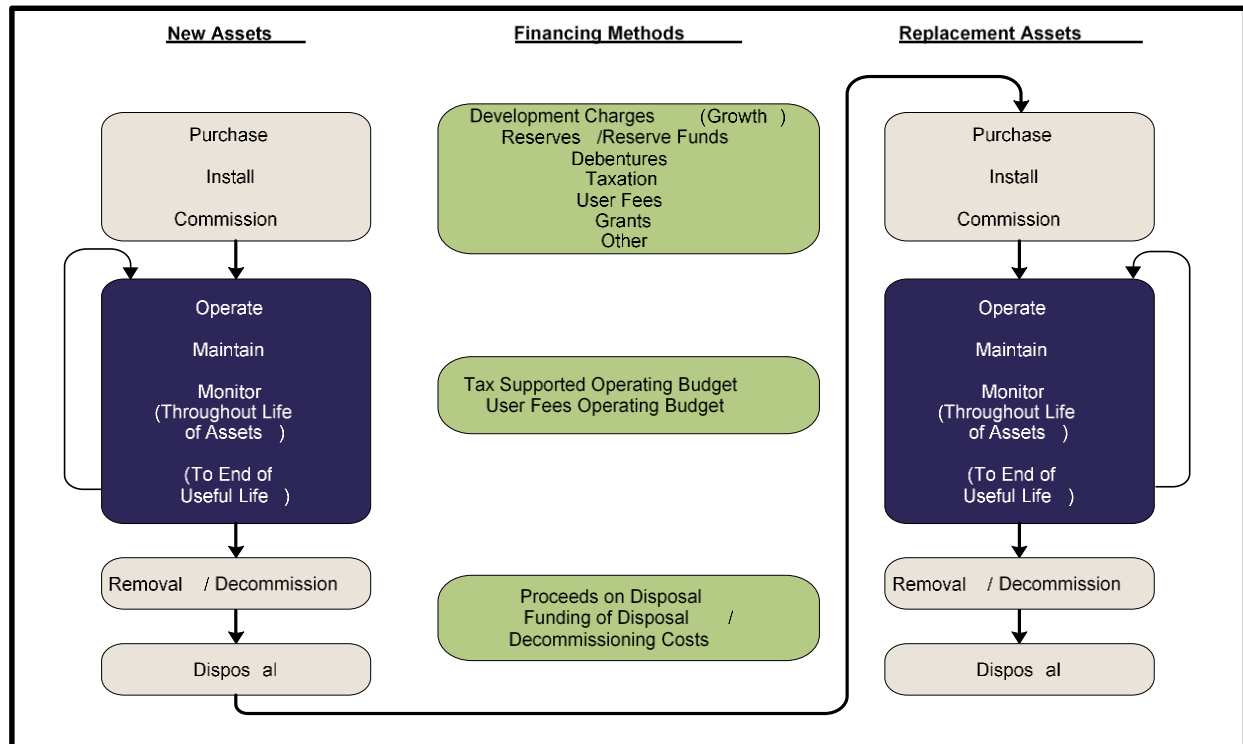
8.1 Introduction

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

The A.M.P. shall,

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

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



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

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

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

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

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

The above provides for the general approach to be considered by Ontario municipalities. At this time, there is not a mandated approach for municipalities hence leaving discretion to individual municipalities as to how they plan for the long-term

replacement of their assets. Norfolk County has undertaken several service-level A.M.P.s dated from 2014 through 2016. Although the A.M.P.s address most of the asset categories that are included in the capital forecast needs of the D.C. Background Study, the A.M.P.s identify the funding gap at a high level and do not include a detailed financing strategy. Furthermore, the A.M.P.s do not address the impact of growth-related assets. As a result, the asset management requirement for this D.C. Background Study must be undertaken in the absence of this information.

In recognition to the schematic in Section 8.1, the following table (presented in 2018\$) 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, 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 County financial resources (i.e. taxation, rates, fees, etc.). This amount has been presented on an annual debt charge amount based on 20-year financing, totaling \$11.6 million.
2. Lifecycle costs for the 2018 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. Total incremental costs attributable to the growth-related expenditures (i.e. annual lifecycle costs and incremental operating costs) total approximately \$1.5 million.
5. The resultant total annualized expenditures are \$13.0 million.
6. 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 identified above. The new operating revenues are \$8.2 million. This amount, totalled with the existing operating revenues of \$185.5 million, provide annual revenues of \$193.7 million by the end of the forecast period.

7. The incremental operating revenues of \$8.2 million will adequately cover the incremental growth-related expenditures of \$1.5 million. The remainder of the incremental operating revenues and the existing operating revenues of \$185.5 million can cover the \$11.6 million of non-D.C. recoverable expenditures.
8. In consideration of the above, the capital plan is deemed to be financially sustainable.

Table 8-1
Norfolk County
Asset Management – Future Expenditures and Associated Revenues (2018\$)

	Sub-Total	2041 (Total)
Expenditures (Annualized)		
Annual Debt Payment on Non-Growth Related Capital ¹		11,567,380
Annual Debt Payment on Post Period Capital ²		864,362
Lifecycle:		
Annual Lifecycle - Municipal Wide Services	\$581,408	
Annual Lifecycle - Urban Services	\$736,244	
Sub-Total - Annual Lifecycle	\$1,317,652	\$1,317,652
Incremental Operating Costs (for D.C. Services)		
		\$147,490
Total Expenditures		\$13,032,522
Revenue (Annualized)		
Total Existing Revenue ³		\$185,533,362
Incremental Tax and Non-Tax Revenue (User Fees, Fines, Licences, etc.)		\$8,188,632
Total Revenues		\$193,721,994

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

² Interim Debt Financing for Post Period Benefit

³ As per Sch. 10 of FIR

9. By-law Implementation

9.1 Public Consultation

This chapter addresses the mandatory, formal public consultation process (subsection 9.1.1), as well as the optional, informal consultation process (subsection 9.1.2). The latter is designed to seek the co-operation and involvement of those involved, in order to produce the most suitable policy. Section 9.2 addresses the anticipated impact of the D.C. on development, from a generic viewpoint.

9.1.1 Public Meeting of Council

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

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

If a proposed by-law is changed following such a meeting, the Council must determine whether a further meeting (under this section) is necessary. For example, if the by-law which is proposed for adoption has been changed in any respect, the Council should formally consider whether an additional public meeting is required, incorporating this determination as part of the final by-law or associated resolution. It is noted that Council's decision, once made, is final and not subject to review by a Court or the Local Planning Appeal Tribunal (L.P.A.T.). As of April 3, 2018, the Ontario Municipal Board has been replaced by the L.P.A.T. and all references to the O.M.B. in the D.C.A. and O.Reg. 82/98 should now refer to the L.P.A.T.

9.1.2 Other Consultation Activity

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

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

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

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

Throughout the preparation of this D.C. Background Study, the County has built into its process consultation with development industry stakeholders beyond what is statutorily required. The County is planning to meet with stakeholders on February 12, 2018 to present the draft findings and proposed D.C. policies identified in this report so that feedback could be received prior to Council considering a new D.C. by-law for adoption.

9.2 Anticipated Impact of the Charge on Development

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

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

9.3 Implementation Requirements

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

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

The following provides an overview of the requirements in each case.

9.3.1 Notice of Passage

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

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

1. 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;
2. s.s.10 (4) lists the persons/organizations who must be given notice; and
3. s.s.10 (5) lists the eight items which the notice must cover.

9.3.2 By-law Pamphlet

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

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

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

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

9.3.3 Appeals

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

9.3.4 Complaints

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

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

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

9.3.5 Credits

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

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

9.3.6 Front-Ending Agreements

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

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

9.3.7 Severance and Subdivision Agreement Conditions

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

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

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

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

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

The most effective way to ensure that purchasers are aware of this condition would be to require it as a provision in a registered subdivision agreement, so that any purchaser

of the property would be aware of the charges at the time the title was searched prior to closing a transaction conveying the lands.

Appendix A – Background Information on Residential and Non-residential Growth Forecast

**Schedule 1
Norfolk County
Residential Growth Forecast Summary**

	Year	Population (Including Census Undercount) ¹	Excluding Census Undercount			Housing Units					Person Per Unit (PPU): Total Population/ Total Households	Persons in Private Households/ Total Households
			Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi-Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households		
Historical	Mid 2006	64,090	62,563	1,118	61,445	20,710	1,110	2,085	340	24,245	2.580	2.534
	Mid 2011	64,720	63,175	1,815	61,360	21,630	1,190	2,070	160	25,050	2.522	2.450
	Mid 2016	65,610	64,044	1,614	62,430	22,355	1,320	2,085	260	26,020	2.461	2.399
Forecast	Mid 2018	67,090	65,488	1,654	63,834	22,940	1,320	2,286	260	26,806	2.443	2.381
	Mid 2028	69,210	67,558	1,700	65,858	24,180	1,414	2,422	260	28,276	2.389	2.329
	Mid 2036	70,910	69,221	1,744	67,477	25,076	1,511	2,549	260	29,396	2.355	2.295
	Mid 2041	71,280	69,583	1,754	67,829	25,882	1,618	2,710	260	30,471	2.284	2.284
Incremental	Mid 2006 - Mid 2011	630	612	697	-85	920	80	-15	-180	805		
	Mid 2011 - Mid 2016	890	869	-201	1,070	725	130	15	100	970		
	Mid 2016 - Mid 2018	1,480	1,444	40	1,404	585	0	201	0	786		
	Mid 2018 - Mid 2028	2,120	2,070	46	2,024	1,240	94	136	0	1,470		
	Mid 2018 - Mid 2036	3,820	3,733	90	3,643	2,136	191	263	0	2,590		
Mid 2018 - Mid 2041	4,190	4,095	100	3,995	2,942	298	424	0	3,665			

Source: Watson & Associates Economists Ltd., 2018. 2041 forecast based on Norfolk County Population Projection Study by Hemson Consulting, 2014.

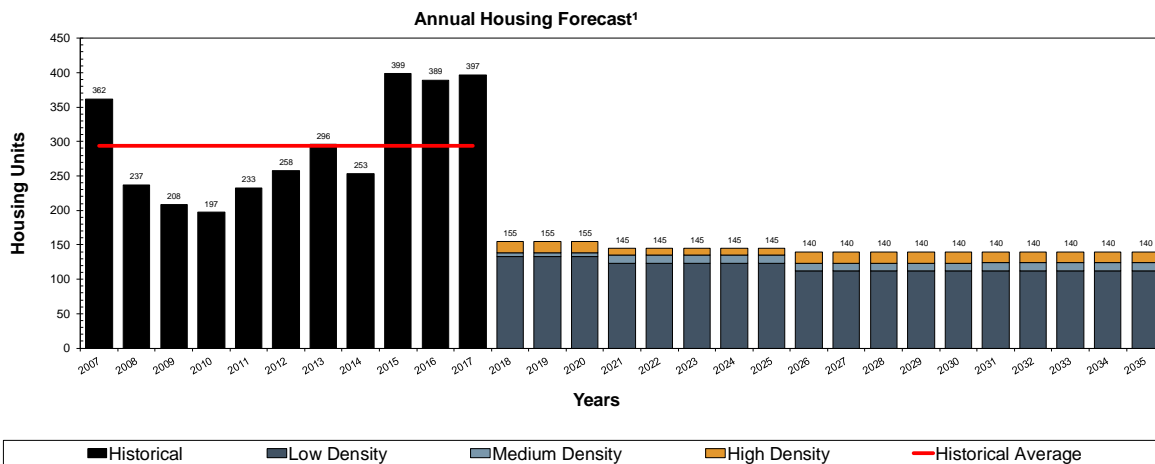
¹ Census undercount estimated at approximately 2.4%. Note: Population including the undercount has been rounded.

² Includes townhouses and apartments in duplexes.

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

Note: Numbers may not add up due to rounding.

Figure A-1



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

¹ Growth forecast represents calendar year.

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

Development Location	Timing	Single & Semi-Detached	Multiples ¹	Apartments ²	Total Residential Units	Gross Population in New Units	Existing Unit Population Change	Net Population Increase, Excluding Institutional	Institutional Population	Net Population Including Institutional
Courtland	2018 - 2028	14	-	-	14	36	(16)	20	0	20
	2018 - 2036	24	-	-	24	63	(33)	30	1	31
	2018 - 2041	31	-	-	31	83	(50)	33	1	34
Delhi	2018 - 2028	75	6	8	89	222	(115)	107	3	110
	2018 - 2036	130	12	16	157	389	(193)	196	5	201
	2018 - 2041	175	18	25	218	533	(349)	184	6	190
Port Dover	2018 - 2028	397	30	43	471	1,171	(190)	981	14	995
	2018 - 2036	683	61	84	828	2,045	(320)	1,725	28	1,753
	2018 - 2041	944	96	136	1,176	2,876	(578)	2,298	32	2,330
Port Rowan	2018 - 2028	103	8	11	123	305	(24)	281	4	285
	2018 - 2036	174	16	21	211	522	(41)	481	7	488
	2018 - 2041	241	24	35	301	735	(74)	661	8	669
Simcoe	2018 - 2028	395	38	54	486	1,194	(407)	787	15	802
	2018 - 2036	676	76	105	856	2,082	(686)	1,396	29	1,425
	2018 - 2041	936	119	169	1,224	2,945	(1,238)	1,707	33	1,740
Waterford	2018 - 2028	171	13	19	203	505	(22)	483	6	489
	2018 - 2036	300	27	37	364	898	(37)	861	13	874
	2018 - 2041	412	42	59	513	1,256	(66)	1,190	14	1,204
Rural	2018 - 2028	85	-	-	85	225	(859)	(634)	3	(631)
	2018 - 2036	150	-	-	150	397	(1,442)	(1,045)	6	(1,039)
	2018 - 2041	202	-	-	202	537	(2,615)	(2,078)	6	(2,072)
Norfolk County	2018 - 2028	1,240	94	136	1,470	3,658	(1,633)	2,025	45	2,070
	2018 - 2036	2,136	191	263	2,590	6,396	(2,752)	3,644	89	3,733
	2018 - 2041	2,942	298	424	3,665	8,965	(4,970)	3,995	100	4,095

Source: Watson & Associates Economists Ltd., 2018. 2041 forecast based on Norfolk County Population Projection Study by Hemson Consulting, 2014.

¹ Includes townhouses and apartments in duplexes.

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

Note: Numbers may not add up due to rounding.

**Schedule 3
Norfolk County
Current Year Growth Forecast
Mid 2016 to Mid 2018**

		Population
Mid 2016 Population		64,044
Occupants of New Housing Units, Mid 2016 to Mid 2018	<i>Units (2)</i>	786
	<i>multiplied by P.P.U. (3)</i>	2,000
	<i>gross population increase</i>	1,572
Occupants of New Equivalent Institutional Units, Mid 2016 to Mid 2018	<i>Units</i>	37
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	40
Decline in Housing Unit Occupancy, Mid 2016 to Mid 2018	<i>Units (4)</i>	26,020
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.006
	<i>total decline in population</i>	-168
Population Estimate to Mid 2018		65,488
<i>Net Population Increase, Mid 2016 to Mid 2018</i>		<i>1,444</i>

(1) 2016 population based on StatsCan Census unadjusted for Census Undercount.

(2) Estimated residential units constructed, Mid 2016 to the beginning of the growth period, assuming a six month lag between construction and occupancy.

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

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	2.688	74%	2.000
<i>Multiples (6)</i>	1.731	0%	0.000
<i>Apartments (7)</i>	0.000	26%	0.000
Total		100%	2.000

¹ Based on 2016 Census custom database

² Based on Building permit/completion activity

(4) 2016 households taken from StatsCan Census.

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

(6) Includes townhomes and apartments in duplexes.

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

**Schedule 4
Norfolk County
Ten Year Growth Forecast
Mid 2018 to Mid 2028**

		Population
Mid 2018 Population		65,488
Occupants of New Housing Units, Mid 2018 to Mid 2028	<i>Units (2)</i>	1,470
	<i>multiplied by persons per unit (3)</i>	2.488
	<i>gross population increase</i>	3,658
Occupants of New Equivalent Institutional Units, Mid 2018 to Mid 2028	<i>Units</i>	41
	<i>multiplied by persons per unit</i>	1.100
	<i>gross population increase</i>	45
Decline in Housing Unit Occupancy, Mid 2018 to Mid 2028	<i>Units (4)</i>	26,806
	<i>multiplied by ppu decline rate (5)</i>	-0.061
	<i>total decline in population</i>	-1,633
Population Estimate to Mid 2028		67,558
<i>Net Population Increase, Mid 2018 to Mid 2028</i>		<i>2,070</i>

(1) Mid 2018 Population based on:

2016 Population (64,044) + Mid 2016 to Mid 2018 estimated housing units to beginning of forecast period (786 x = 1,914) + (26,020 x -0.0181 = -470) = 65,488

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

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

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	2.652	84%	2.237
<i>Multiples (6)</i>	1.853	6%	0.119
<i>Apartments (7)</i>	1.433	9%	0.132
<i>one bedroom or less</i>	1.120		
<i>two bedrooms or more</i>	1.698		
Total		100%	2.488

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

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

(4) Mid 2018 households based upon 26,020 (2016 Census) + 786 (Mid 2016 to Mid 2018 unit estimate) = 26,806

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

(6) Includes townhomes and apartments in duplexes.

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

**Schedule 5
Norfolk County
Longer-Term Growth Forecast
Mid 2018 to Mid 2036**

		Population
Mid 2018 Population		65,488
Occupants of New Housing Units, Mid 2018 to Mid 2036	<i>Units (2)</i>	2,590
	<i>multiplied by persons per unit (3)</i>	2,469
	<i>gross population increase</i>	6,396
		6,396
Occupants of New Equivalent Institutional Units, Mid 2018 to Mid 2036	<i>Units</i>	81
	<i>multiplied by persons per unit</i>	1,100
	<i>gross population increase</i>	89
		89
Decline in Housing Unit Occupancy, Mid 2018 to Mid 2036	<i>Units (4)</i>	26,806
	<i>multiplied by ppu. decline rate (5)</i>	-0.103
	<i>total decline in population</i>	-2,752
		-2,752
Population Estimate to Mid 2036		69,221
<i>Net Population Increase, Mid 2018 to Mid 2036</i>		3,733

(1) Mid 2018 Population based on:

2016 Population (64,044) + Mid 2016 to Mid 2018 estimated housing units to beginning of forecast period (786 x 1,914) + (26,020 x -0.0181 = -470) = 65,488

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

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

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	2.652	82%	2.187
<i>Multiples (6)</i>	1.853	7%	0.137
<i>Apartments (7)</i>	1.433	10%	0.146
<i>one bedroom or less</i>	1.120		
<i>two bedrooms or more</i>	1.698		
Total		100%	2.469

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

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

(4) Mid 2018 households based upon 26,020 (2016 Census) + 786 (Mid 2016 to Mid 2018 unit estimate) = 26,806

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

(6) Includes townhomes and apartments in duplexes.

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

**Schedule 5b
Norfolk County
Longer-Term Growth Forecast
Mid 2018 to Mid 2041**

		Population
Mid 2018 Population		65,488
Occupants of New Housing Units, Mid 2018 to 2041	<i>Units (2)</i>	3,665
	<i>multiplied by persons per unit (3)</i>	2.446
	<i>gross population increase</i>	8,965
		8,965
Occupants of New Equivalent Institutional Units, Mid 2018 to 2041	<i>Units</i>	91
	<i>multiplied by persons per unit</i>	1.100
	<i>gross population increase</i>	100
		100
Decline in Housing Unit Occupancy, Mid 2018 to 2041	<i>Units (4)</i>	26,806
	<i>multiplied by ppu. decline rate (5)</i>	-0.185
	<i>total decline in population</i>	-4,970
		-4,970
Population Estimate to Mid 2041		69,583
<i>Net Population Increase, Mid 2018 to Mid 2041</i>		4,095

(1) Mid 2018 Population based on:

2016 Population (64,044) + Mid 2016 to Mid 2018 estimated housing units to beginning of forecast period (786 x = 1,914) + (26,020 x -0.0181 = -470) = 65,488

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

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

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	2.652	80%	2.129
<i>Multiples (6)</i>	1.853	8%	0.151
<i>Apartments (7)</i>	1.433	12%	0.166
<i>one bedroom or less</i>	1.120		
<i>two bedrooms or more</i>	1.698		
Total		100%	2.446

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

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

(4) Mid 2018 households based upon 26,020 (2016 Census) + 786 (Mid 2016 to Mid 2018 unit estimate) = 26,806

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

(6) Includes townhomes and apartments in duplexes.

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

Schedule 6a
Norfolk County
Summary of Units in the Development Process and Future Development

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Registered Not Built	160	84	63	307
<i>% Breakdown</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>1</i>
Draft Plans Approved	1,369	329	326	2,024
<i>% Breakdown</i>	<i>68%</i>	<i>16%</i>	<i>16%</i>	<i>100%</i>
Application Under Review	650	50	-	700
<i>% Breakdown</i>	<i>93%</i>	<i>7%</i>	<i>0%</i>	<i>100%</i>
*Future Development	248	35	-	283
<i>% Breakdown</i>	<i>88%</i>	<i>12%</i>	<i>0%</i>	<i>100%</i>
Total	2,427	498	390	3,314
<i>% Breakdown</i>	<i>73%</i>	<i>15%</i>	<i>12%</i>	<i>100%</i>

Source: Data provided by Norfolk County.

1. Includes townhomes and apartments in duplexes.

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

Schedule 6b
Courtland
Summary of Units in the Development Process and Future Development

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Registered Not Built	-	-	-	-
<i>% Breakdown</i>				
Draft Plans Approved	-	-	-	-
<i>% Breakdown</i>				
Application Under Review	-	-	-	-
<i>% Breakdown</i>				
Future Development	-	-	-	-
<i>% Breakdown</i>				
Total	-	-	-	-
<i>% Breakdown</i>				

Source: Data provided by Norfolk County.

1. Includes townhomes and apartments in duplexes.

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

Schedule 6c
Delhi
Summary of Units in the Development Process and Future Development

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Registered Not Built	-	-	-	-
<i>% Breakdown</i>				
Draft Plans Approved	239	26	62	328
<i>% Breakdown</i>	73%	8%	19%	100%
Application Under Review	-	-	-	-
<i>% Breakdown</i>				
Future Development	-	-	-	-
<i>% Breakdown</i>				
Total	239	26	62	328
<i>% Breakdown</i>	73%	8%	19%	100%

Source: Data provided by Norfolk County.

1. Includes townhomes and apartments in duplexes.

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

Schedule 6d
Port Dover
Summary of Units in the Development Process and Future Development

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Registered Not Built	149	41	50	240
<i>% Breakdown</i>	1	0	0	1
Draft Plans Approved	689	71	124	883
<i>% Breakdown</i>	78%	8%	14%	100%
Application Under Review	450	50	-	500
<i>% Breakdown</i>	90%	10%	0%	100%
Future Development	164	22	-	186
<i>% Breakdown</i>	88%	12%	0%	100%
Total	1,452	184	173	1,809
<i>% Breakdown</i>	80%	10%	10%	100%

Source: Data provided by Norfolk County.

1. Includes townhomes and apartments in duplexes.

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

Schedule 6e
Port Rowan
Summary of Units in the Development Process and Future Development

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Registered Not Built	-	-	-	-
<i>% Breakdown</i>				
Draft Plans Approved	95	45	76	216
<i>% Breakdown</i>	44%	21%	35%	100%
Application Under Review	-	-	-	-
<i>% Breakdown</i>				
Future Development	-	-	-	-
<i>% Breakdown</i>				
Total	95	45	76	216
<i>% Breakdown</i>	44%	21%	35%	100%

Source: Data provided by Norfolk County.

1. Includes townhomes and apartments in duplexes.

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

Schedule 6f
Simcoe
Summary of Units in the Development Process and Future Development

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Registered Not Built	-	-	-	-
<i>% Breakdown</i>				
Draft Plans Approved	157	160	65	382
<i>% Breakdown</i>	41%	42%	17%	100%
Application Under Review	85	-	-	85
<i>% Breakdown</i>	100%	0%	0%	100%
Future Development	-	-	-	-
<i>% Breakdown</i>				
Total	242	160	65	467
<i>% Breakdown</i>	52%	34%	14%	100%

Source: Data provided by Norfolk County.

1. Includes townhomes and apartments in duplexes.

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

Schedule 6g
Waterford
Summary of Units in the Development Process and Future Development

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Registered Not Built	-	28	-	28
<i>% Breakdown</i>	-	1	-	1
Draft Plans Approved	175	26	-	201
<i>% Breakdown</i>	87%	13%	0%	100%
Application Under Review	115	-	-	115
<i>% Breakdown</i>	100%	0%	0%	100%
Future Development	84	13	-	97
<i>% Breakdown</i>	87%	13%	0%	100%
Total	374	66	-	441
<i>% Breakdown</i>	85%	15%	0%	100%

Source: Data provided by Norfolk County.

1. Includes townhomes and apartments in duplexes.

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

Schedule 6h
Rural
Summary of Units in the Development Process and Future Development

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Registered Not Built	10	16	14	40
<i>% Breakdown</i>	0	0	0	1
Draft Plans Approved	14	-	-	14
<i>% Breakdown</i>	100%	0%	0%	100%
Application Under Review	-	-	-	-
<i>% Breakdown</i>				
Future Development	-	-	-	-
<i>% Breakdown</i>				
Total	24	16	14	54
<i>% Breakdown</i>	46%	29%	25%	100%

Source: Data provided by Norfolk County.

1. Includes townhomes and apartments in duplexes.

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

Schedule 7
Norfolk County
Historical Residential Building Permits
Years 2007 - 2016

Year	Residential Building Permits			
	Singles & Semi Detached	Multiples ¹	Apartments ²	Total
2007	316	0	46	362
2008	195	0	42	237
2009	174	0	34	208
2010	184	0	13	197
2011	177	0	56	233
Sub-total	1,046	0	191	1,237
Average (2007 - 2011)	209	0	38	247
% Breakdown	84.6%	0.0%	15.4%	100.0%
2012	177	0	81	258
2013	197	0	99	296
2014	189	0	64	253
2015	233	0	166	399
2016	278	0	111	389
Sub-total	1,074	0	521	1,595
Average (2012 - 2016)	215	0	104	319
% Breakdown	67.3%	0.0%	32.7%	100.0%
2007 - 2016				
Total	2,120	0	712	2,832
Average	212	0	71	283
% Breakdown	74.9%	0.0%	25.1%	100.0%

Source: Statistics Canada Publication, 64-001XIB

¹ Includes townhouses and apartments in duplexes.

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

Schedule 8a
Norfolk County
Persons Per Unit By Age And Type Of Dwelling
(2016 Census)

Age of Dwelling	Singles and Semi-Detached						Historical 20 Year Average	Forecast 20 Year Average ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	-	-	1,941	2,921	4,455	2,688		
6-10	-	-	1,890	2,747	4,154	2,576		
11-15	-	-	1,833	2,858	3,750	2,688		
16-20	-	-	1,730	2,753	4,000	2,657	2,652	2,652
20-25	-	-	1,793	2,706	3,333	2,629		
25-35	-	-	1,978	2,655	3,575	2,655		
35+	-	1,373	1,861	2,593	3,680	2,461		
Total	-	1,361	1,866	2,648	3,710	2,525		

Age of Dwelling	Multiples ¹					Total	Historical 20 Year Average	Forecast 20 Year Average ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR			
1-5	-	-	1,625	-	-	1,731		
6-10	-	-	1,875	2,091	-	1,839		
11-15	-	-	1,375	-	-	1,357		
16-20	-	-	1,538	-	-	1,667	1,648	1,853
20-25	-	-	-	-	-	2,083		
25-35	-	-	-	3,273	-	2,100		
35+	-	1,472	1,683	2,408	-	1,900		
Total	-	1,340	1,636	2,343	-	1,826		

Age of Dwelling	Apartments ²					Total	Historical 20 Year Average	Forecast 20 Year Average ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR			
1-5	-	-	-	-	-	-		
6-10	-	-	-	-	-	-		
11-15	-	-	-	-	-	1,917		
16-20	-	-	-	-	-	1,500	1,708	1,433
20-25	-	-	1,909	-	-	1,522		
25-35	-	1,067	1,406	-	-	1,306		
35+	-	1,151	1,583	3,053	-	1,488		
Total	0.818	1,161	1,587	2,800	-	1,484		

Age of Dwelling	All Density Types					
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total
1-5	-	1,182	1,874	2,872	-	2,561
6-10	-	-	1,913	2,674	4,231	2,483
11-15	-	-	1,734	2,773	3,688	2,533
16-20	-	-	1,603	2,724	4,071	2,463
20-25	-	1,429	1,841	2,650	3,450	2,498
25-35	-	1,132	1,750	2,662	3,575	2,475
35+	-	1,257	1,801	2,588	3,611	2,349
Total	-	1,256	1,799	2,632	3,702	2,401

¹ Includes townhouses and apartments in duplexes.

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

³ Adjusted based on 2001 and 2016 historical trends.

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

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

Schedule 8b
Province of Ontario
Persons Per Unit By Age And Type Of Dwelling
(2016 Census)

Age of Dwelling	Singles and Semi-Detached						Historical 20 Year Average
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	3.292	1.859	2.024	3.343	4.630	3.354	
6-10	2.769	1.828	1.995	3.378	4.595	3.412	
11-15	3.192	1.850	1.978	3.359	4.530	3.398	
16-20	2.438	1.780	1.922	3.174	4.317	3.201	3.341
20-25	2.538	1.694	1.967	3.044	4.123	3.096	
25-35	2.500	1.665	1.950	2.908	3.929	2.960	
35+	2.013	1.493	1.864	2.645	3.714	2.574	
Total	2.385	1.569	1.894	2.890	4.062	2.864	

Age of Dwelling	Multiples ¹						Historical 20 Year Average
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	2.182	1.521	1.935	2.814	4.438	2.591	
6-10	-	1.516	1.950	2.945	4.288	2.705	
11-15	2.368	1.639	1.957	2.975	4.696	2.773	
16-20	2.250	1.551	1.970	2.911	4.351	2.706	2.694
20-25	-	1.486	1.955	2.953	4.377	2.725	
25-35	0.133	1.452	2.004	2.962	-	2.773	
35+	1.427	1.337	1.973	2.873	3.830	2.565	
Total	0.697	1.407	1.968	2.909	4.369	2.655	

Age of Dwelling	Apartments ²						Historical 20 Year Average
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	1.262	1.403	1.955	2.843	3.429	1.701	
6-10	1.244	1.399	1.972	2.893	3.395	1.753	
11-15	1.285	1.412	1.968	3.070	3.405	1.817	
16-20	1.246	1.408	2.091	3.144	4.418	1.934	1.801
20-25	1.237	1.369	2.136	3.332	3.571	1.947	
25-35	1.182	1.353	2.057	3.189	3.840	1.896	
35+	1.129	1.335	2.122	3.015	3.562	1.886	
Total	1.161	1.357	2.079	3.048	3.604	1.865	

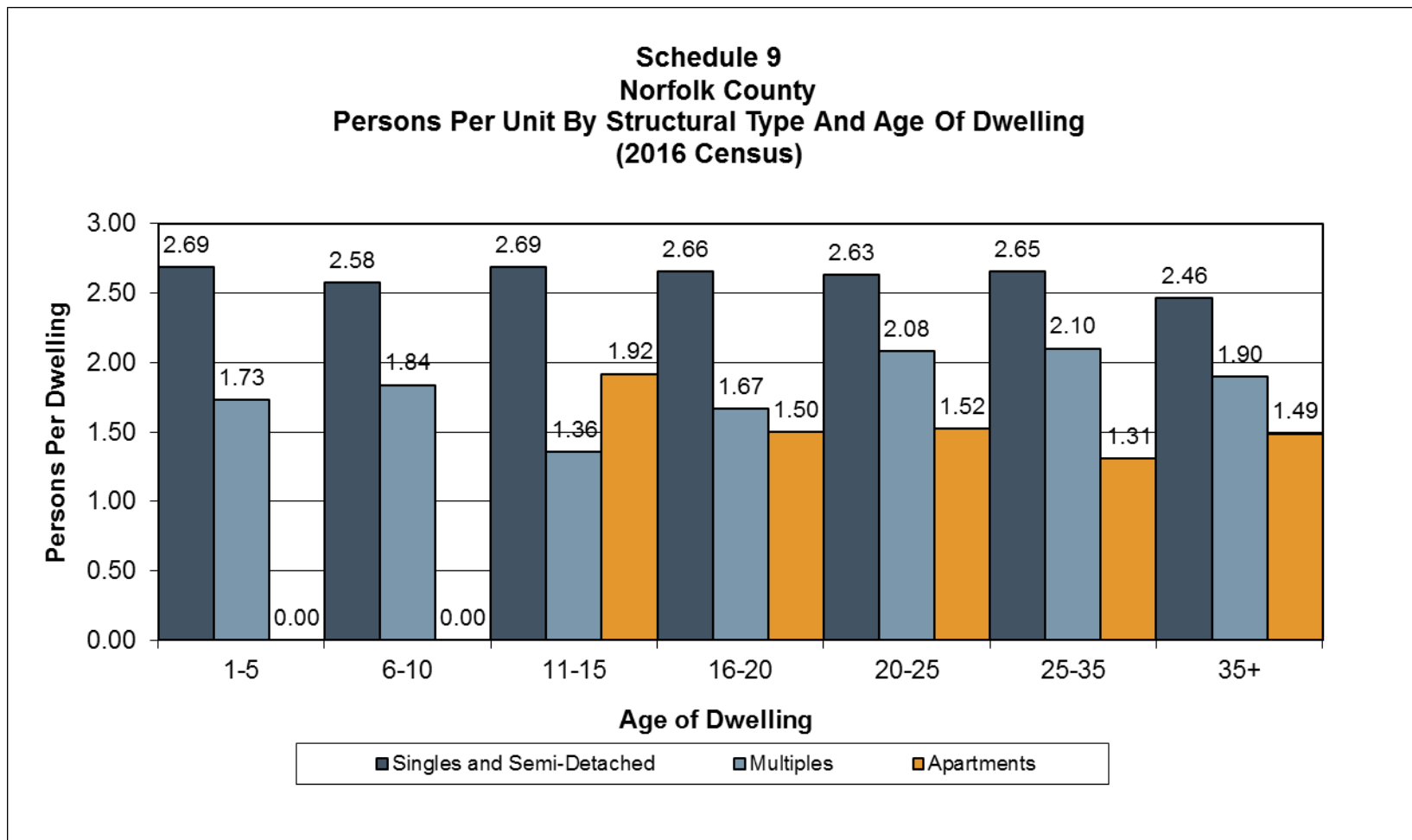
Age of Dwelling	All Density Types					
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total
1-5	1.401	1.420	1.965	3.200	4.613	2.635
6-10	1.413	1.425	1.973	3.275	4.576	2.867
11-15	1.582	1.458	1.968	3.280	4.533	3.008
16-20	1.374	1.449	2.020	3.121	4.320	2.874
20-25	1.278	1.394	2.071	3.039	4.137	2.724
25-35	1.246	1.372	2.027	2.927	3.958	2.651
35+	1.170	1.349	2.002	2.694	3.717	2.370
Total	1.230	1.375	2.003	2.900	4.051	2.562

¹ Includes townhouses and apartments in duplexes.

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

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 10a
Norfolk County
2018 Employment Forecast

Period	Population	Activity Rate								Employment								Employment Total (Excluding NFPOW and Work at Home)
		Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total	NFPOW ¹	Total Including NFPOW	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total	NFPOW ¹	Total Employment (Including NFPOW)	
Mid 2006	62,563	0.023	0.059	0.073	0.113	0.065	0.334	0.051	0.385	1,465	3,720	4,575	7,050	4,085	20,895	3,180	24,075	17,175
Mid 2011	63,175	0.021	0.045	0.057	0.116	0.070	0.311	0.051	0.362	1,355	2,850	3,621	7,356	4,440	19,621	3,235	22,856	16,771
Mid 2016	64,044	0.021	0.043	0.059	0.117	0.067	0.308	0.057	0.365	1,375	2,770	3,793	7,518	4,280	19,735	3,665	23,400	16,965
Mid 2018	65,488	0.021	0.042	0.058	0.116	0.066	0.304	0.056	0.360	1,379	2,774	3,802	7,622	4,326	19,903	3,667	23,570	17,129
Mid 2028	67,558	0.021	0.042	0.057	0.117	0.064	0.301	0.057	0.358	1,400	2,806	3,878	7,891	4,357	20,332	3,855	24,187	17,526
Mid 2036	69,221	0.021	0.041	0.057	0.118	0.064	0.300	0.058	0.358	1,433	2,804	3,929	8,146	4,444	20,756	3,995	24,751	17,952
Mid 2041	69,583	0.021	0.041	0.060	0.120	0.065	0.307	0.061	0.368	1,469	2,845	4,167	8,356	4,519	21,356	4,224	25,580	18,511
Incremental Change																		
Mid 2006 - Mid 2011	612	-0.002	-0.014	-0.016	0.004	0.005	-0.023	0.000	-0.023	-110	-870	-955	306	355	-1,274	55	-1,219	-404
Mid 2011 - Mid 2016	869	0.0000	-0.0019	0.0019	0.0009	-0.0035	-0.0024	0.0060	0.0036	20	-80	172	162	-160	114	430	544	194
Mid 2016 - Mid 2018	1,444	-0.0004	-0.0009	-0.0012	-0.0010	-0.0008	-0.0042	-0.0012	-0.0055	4	4	10	105	46	168	2	170	164
Mid 2018 - Mid 2028	2,070	-0.0003	-0.0008	-0.0007	0.0004	-0.0016	-0.0030	0.0011	-0.0019	21	32	76	269	31	429	188	617	397
Mid 2018 - Mid 2036	3,733	-0.0004	-0.0019	-0.0013	0.0013	-0.0019	-0.0041	0.0017	-0.0023	54	30	127	524	118	853	328	1,181	823
Mid 2018 - Mid 2041	4,095	0.0001	-0.0015	0.0018	0.0037	-0.0011	0.0030	0.0047	0.0077	90	71	365	734	193	1,453	557	2,010	1,382
Annual Average																		
Mid 2006 - Mid 2011	122	-0.0004	-0.0029	-0.0032	0.0007	0.0010	-0.0047	0.0001	-0.0046	-22	-174	-191	61	71	-255	11	-244	-81
Mid 2011 - Mid 2016	174	0.0000	-0.0004	0.0004	0.0002	-0.0007	-0.0005	0.0012	0.0007	4	-16	34	32	-32	23	86	109	39
Mid 2016 - Mid 2018	722	-0.0002	-0.0004	-0.0006	-0.0005	-0.0004	-0.0021	-0.0006	-0.0027	2	2	5	52	23	84	1	85	82
Mid 2018 - Mid 2028	207	0.0000	-0.0001	-0.0001	0.0000	-0.0002	-0.0003	0.0001	-0.0002	2	3	8	27	3	43	19	62	40
Mid 2018 - Mid 2036	207	0.0000	-0.0001	-0.0001	0.0001	-0.0001	-0.0002	0.0001	-0.0001	3	2	7	29	7	47	18	66	46
Mid 2018 - Mid 2041	178	0.0000	-0.0001	0.0001	0.0002	0.0000	0.0001	0.0002	0.0003	4	3	16	32	8	63	24	87	60

Source: Watson & Associates Economists Ltd., 2018. 2041 forecast based on Norfolk County Population Projection Study by Hemson Consulting, 2014.
¹ Statistics Canada defines no fixed place of work (N.F.P.O.W.) employees as "persons who do not go from home to the same work place location at the beginning of each shift." Such persons include building and landscape contractors, travelling salespersons, independent truck drivers, etc.

Schedule 10b
Norfolk County
Employment & Gross Floor Area (G.F.A.) Forecast, 2018 to 2041

Period	Population	Employment					Gross Floor Area in Square Feet (Estimated) ¹				
		Primary	Industrial	Commercial/ Population Related	Institutional	Total	Primary	Industrial	Commercial/ Population Related	Institutional	Total
Mid 2006	62,563	1,465	4,575	7,050	4,085	17,175					
Mid 2011	63,175	1,355	3,621	7,356	4,440	16,772					
Mid 2016	64,044	1,375	3,793	7,518	4,280	16,966					
Mid 2018	65,488	1,379	3,802	7,622	4,326	17,129					
Mid 2028	67,558	1,400	3,878	7,891	4,357	17,526					
Mid 2036	69,221	1,433	3,929	8,146	4,444	17,952					
Mid 2041	69,583	1,469	4,167	8,356	4,519	18,511					
Incremental Change											
Mid 2006 - Mid 2011	612	-110	-954	306	355	-403					
Mid 2011 - Mid 2016	869	20	172	162	-160	194					
Mid 2016 - Mid 2018	1,444	4	9	104	46	163	6,000	12,600	57,200	32,200	108,000
Mid 2018 - Mid 2028	2,070	21	76	269	31	397	31,500	106,400	148,000	21,700	307,600
Mid 2018 - Mid 2036	3,733	54	127	524	118	823	81,000	177,800	288,200	82,600	629,600
Mid 2018 - Mid 2041	4,095	90	365	734	193	1,382	135,000	511,000	403,700	135,100	1,184,800
Annual Average											
Mid 2006 - Mid 2011	122	-22	-191	61	71	-81					
Mid 2011 - Mid 2016	174	4	34	32	-32	39					
Mid 2016 - Mid 2018	722	2	5	52	23	82	3,000	6,300	28,600	16,100	54,000
Mid 2018 - Mid 2028	207	2	8	27	3	40	3,150	10,640	14,800	2,170	30,760
Mid 2018 - Mid 2036	207	3	7	29	7	46	4,500	9,878	16,011	4,589	34,978
Mid 2018 - Mid 2041	178	4	16	32	8	60	5,870	22,217	17,552	5,874	51,513

Source: Watson & Associates Economists Ltd., 2018. 2041 forecast based on Norfolk County Population Projection Study by Hemson Consulting, 2014.

¹ Square Foot Per Employee Assumptions

Primary	1,500
Industrial	1,400
Commercial/ Population Related	550
Institutional	700

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

Development Location	Timing	Primary G.F.A. (S.F.)	Industrial G.F.A. (S.F.)	Commercial G.F.A. (S.F.)	Institutional G.F.A. (S.F.)	Total Non-Res G.F.A. (S.F.)	Employment Increase ¹
Courtland	2018 - 2028	-	4,200	1,700	-	5,900	6
	2018 - 2036	-	7,000	2,800	700	10,500	11
	2018 - 2041	-	21,000	3,900	1,400	26,300	24
Delhi	2018 - 2028	-	22,400	8,800	1,400	32,600	34
	2018 - 2036	-	36,400	17,600	4,900	58,900	65
	2018 - 2041	-	105,000	24,200	7,700	136,900	130
Port Dover	2018 - 2028	-	8,400	47,300	7,000	62,700	102
	2018 - 2036	-	14,000	92,400	26,600	133,000	216
	2018 - 2041	-	42,000	129,300	43,400	214,700	327
Port Rowan	2018 - 2028	-	-	12,100	2,100	14,200	25
	2018 - 2036	-	-	23,700	7,000	30,700	53
	2018 - 2041	-	-	33,000	11,200	44,200	76
Simcoe	2018 - 2028	-	50,400	48,300	7,000	105,700	134
	2018 - 2036	-	85,400	92,800	26,600	204,800	268
	2018 - 2041	-	245,000	132,400	44,100	421,500	479
Waterford	2018 - 2028	-	15,400	20,400	2,800	38,600	52
	2018 - 2036	-	26,600	40,700	11,900	79,200	110
	2018 - 2041	-	77,000	56,700	18,900	152,600	185
Rural	2018 - 2028	31,500	5,600	9,400	1,400	47,900	44
	2018 - 2036	81,000	8,400	18,200	4,900	112,500	100
	2018 - 2041	135,000	21,000	24,200	8,400	188,600	161
Norfolk County	2018 - 2028	31,500	106,400	148,000	21,700	307,600	397
	2018 - 2036	81,000	177,800	288,200	82,600	629,600	823
	2018 - 2041	135,000	511,000	403,700	135,100	1,184,800	1,382

Source: Watson & Associates Economists Ltd., 2018

¹ Employment Increase does not include No Fixed Place of Work and Work at Home.

² Square feet per employee assumptions:

Primary	1,500
Industrial	1,400
Commercial	550
Institutional	700

Schedule 11
Norfolk County
Non-Residential Construction Value
Years 2007 - 2016
(000's 2018 \$)

YEAR	Industrial				Commercial				Institutional				Total			
	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total
2007	15,797	1,647	2,074	19,518	12,184	3,905	576	16,665	461	1,925	6,106	8,491	28,442	7,478	8,755	44,675
2008	5,509	1,341	0	6,850	3,794	3,587	0	7,381	655	3,912	1,728	6,296	9,958	8,840	1,728	20,526
2009	6,784	1,778	2,339	10,900	1,892	1,576	461	3,928	300	1,387	2,494	4,181	8,975	4,740	5,293	19,009
2010	16,534	264	2,097	18,894	14	3,110	1,302	4,426	0	1,719	3,283	5,002	16,547	5,093	6,682	28,322
2011	2,464	0	691	3,155	4,954	0	323	5,276	0	0	0	0	7,418	0	1,014	8,431
2012	3,602	407	749	4,758	3,168	3,951	0	7,119	0	0	357	357	6,770	4,358	1,106	12,234
2013	2,397	1,052	0	3,449	16,027	3,191	0	19,218	403	1,859	403	2,666	18,827	6,102	403	25,332
2014	16,509	6,125	1,325	23,959	5,232	2,278	0	7,510	295	1,478	3,283	5,056	22,037	9,881	4,608	36,525
2015	2,788	497	0	3,285	1,265	2,356	0	3,621	375	473	330	1,177	4,427	3,326	330	8,083
2016	10,102	758	0	10,860	985	644	0	1,629	249	1,526	1,485	3,260	11,336	2,928	1,485	15,748
Subtotal	82,487	13,868	9,274	105,628	49,513	24,599	2,661	76,773	2,738	14,279	19,469	36,485	134,737	52,746	31,404	218,887
Percent of Total	78%	13%	9%	100%	64%	32%	3%	100%	8%	39%	53%	100%	62%	24%	14%	100%
Average	8,249	1,387	927	10,563	4,951	2,460	266	7,677	274	1,428	1,947	3,649	13,474	5,275	3,140	21,889
2007 - 2011 Period Total				59,318				37,676				23,970				120,963
2007 - 2011 Average				11,864				7,535				4,794				24,193
% Breakdown				49.0%				31.1%				19.8%				100.0%
2012 - 2016 Period Total				46,311				39,097				12,516				97,923
2012 - 2016 Average				9,262				7,819				2,503				19,585
% Breakdown				47.3%				39.9%				12.8%				100.0%
2007 - 2016 Period Total				105,628				76,773				36,485				218,887
2007 - 2016 Average				10,563				7,677				3,649				21,889
% Breakdown				48.3%				35.1%				16.7%				100.0%

Source: Statistics Canada Publication, 64-001-XIB

Note: Inflated to year-end 2016 (January, 2018) dollars using Reed Construction Cost Index

Schedule 12
Norfolk County

Employment to Population Ratio by Major Employment Sector, 2006 to 2016

NAICS		Year			Change		Comments
		2006	2011	2016	06-11	11-16	
Employment by industry							
Primary Industry Employment							
11	<i>Agriculture, forestry, fishing and hunting</i>	3,475	2,420	2,490	-1,055	70	Categories which relate to local land-based resources.
21	<i>Mining and oil and gas extraction</i>	20	35	30	15	-5	
Sub-total		3,495	2,455	2,520	-1,040	65	
Industrial and Other Employment							
22	<i>Utilities</i>	120	145	105	25	-40	Categories which relate primarily to industrial land supply and demand.
23	<i>Construction</i>	545	700	650	155	-50	
31-33	<i>Manufacturing</i>	2,770	2,005	2,020	-765	15	
41	<i>Wholesale trade</i>	620	655	630	35	-25	
48-49	<i>Transportation and warehousing</i>	860	475	625	-385	150	
56	<i>Waste management and remediation services</i>	230	223	225	-7	2	
Sub-total		5,145	4,203	4,255	-942	52	
Population Related Employment							
44-45	<i>Retail trade</i>	2,865	2,995	3,170	130	175	Categories which relate primarily to population growth within the municipality.
51	<i>Information and cultural industries</i>	225	205	245	-20	40	
52	<i>Finance and insurance</i>	555	600	560	45	-40	
53	<i>Real estate and rental and leasing</i>	235	295	245	60	-50	
54	<i>Professional, scientific and technical services</i>	720	815	770	95	-45	
55	<i>Management of companies and enterprises</i>	10	0	10	-10	10	
56	<i>Administrative and support</i>	230	223	225	-7	2	
71	<i>Arts, entertainment and recreation</i>	290	400	395	110	-5	
72	<i>Accommodation and food services</i>	1,665	1,790	1,855	125	65	
81	<i>Other services (except public administration)</i>	1,190	1,010	980	-180	-30	
Sub-total		7,985	8,333	8,455	348	122	
Institutional							
61	<i>Educational services</i>	1,195	1,310	1,140	115	-170	
62	<i>Health care and social assistance</i>	2,265	2,325	2,550	60	225	
91	<i>Public administration</i>	810	995	815	185	-180	
Sub-total		4,270	4,630	4,505	360	-125	
Total Employment		20,895	19,621	19,735	-1,274	114	
Population		62,563	63,175	64,044	612	869	
Employment to Population Ratio							
Industrial and Other Employment		0.08	0.07	0.07	-0.02	0.00	
Population Related Employment		0.13	0.13	0.13	0.00	0.00	
Institutional Employment		0.07	0.07	0.07	0.01	0.00	
Primary Industry Employment		0.06	0.04	0.04	-0.02	0.00	
Total		0.33	0.31	0.31	-0.02	0.00	

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 – Level of Service

**Norfolk County
Service Standard Calculation Sheet**

Service: Roads
Unit Measure: km of roadways

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/km)
Collectors - Rural	12.6	12.6	12.6	12.6	12.6	12.6	13	13	13	13	\$744,977
Arterial - Rural	468.4	468.4	468.4	468.4	468.4	468.4	468	468	468	468	\$724,163
Collectors - Urban											
2 lane	26	26	26	26	26	26	26	26	26	26	\$1,229,215
4 lane	1	1	1	1	1	1	1	1	1	1	\$1,657,997
Arterials - Urban											
2 lane	59	59	59	59	59	59	59	59	59	59	\$1,149,263
4 lane	6	6	6	6	6	6	6	6	6	6	\$2,310,041
Total	573	573	573	573	573	573	573	573	573	573	

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Quantity Standard (per 1,000 population)	9.0581	9.0538	9.0596	9.0669	9.0586	9.0441	9.0169	9.0018	8.9439	8.8470

10 Year Average	2008-2017
Quantity Standard (per 1,000 population)	9.0151
Quality Standard	\$809,508
Service Standard	\$7,298

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$7,298
Eligible Amount	\$15,106,446

**Norfolk County
Service Standard Calculation Sheet**

Service: Bridges, Culverts & Structures
Unit Measure: Number of Bridges, Culverts & Structures

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/item)
Bridges	138	138	130	130	129	129	129	129	129	129	\$1,200,000
Culverts	103	103	111	111	110	110	110	110	110	110	\$500,000
Total	241	241	241	241	239	239	239	239	239	239	

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Quantity Standard (per 1,000 population)	3.8111	3.8093	3.8117	3.8148	3.7797	3.7736	3.7623	3.7560	3.7318	3.6914

10 Year Average	2008-2017
Quantity Standard (per 1,000 population)	3.7742
Quality Standard	\$882,439
Service Standard	\$3,331

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$3,331
Eligible Amount	\$6,894,135

Norfolk County
Service Standard Calculation Sheet

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/Vehicle)
Roads Ops.											
2004 Meltrail T12 trailer	1	1	1	1	1	1	1	1	1	1	\$3,000
Roads Central											
<u>Licensed</u>											
2010 Ford F150	-	-	1	1	1	1	1	1	1	1	\$20,000
2010 Ford F150	-	-	1	1	1	1	1	1	1	1	\$20,000
2012 Chev. Silverado	-	-	-	-	1	1	1	1	1	1	\$20,000
2008 Chev. Silverado	1	1	1	1	1	1	1	1	1	1	\$28,000
2015 Chev. Silverado WT 2WC	-	-	-	-	-	-	-	1	1	1	\$25,000
2016 Dodge Ram 1500 SLT	-	-	-	-	-	-	-	-	1	1	\$27,000
2010 International 7600 p&d	-	-	1	1	1	1	1	1	1	1	\$261,000
2011 Mack Granite p & d	-	-	-	1	1	1	1	1	1	1	\$256,000
2015 International 7600 p&d	-	-	-	-	-	-	-	1	1	1	\$239,000
2005 Sterling LT9513 p&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2006 Sterling LT9513 p&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2007 Sterling LT9513 2wp&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2007 Sterling LT9513 p&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2009 Sterling LT9511 p&d	-	1	1	1	1	1	1	1	1	1	\$251,000
2009 Sterling LT9511 p&d	-	1	1	1	1	1	1	1	1	1	\$251,000
2015 Ford F350 Super cab 4x4	-	-	-	-	-	-	-	1	1	1	\$70,000
2008 Dodge Ram 3500	1	1	1	1	1	1	1	1	1	1	\$48,000
1998 Meltrail F16 tandem trailer	1	1	1	1	1	1	1	1	1	1	\$16,000
<u>Unlicensed</u>											
2014 John Deere 770G grader	-	-	-	-	-	-	1	1	1	1	\$280,000
1984 Champion 730A grdr/chopper	1	1	1	1	1	1	1	1	1	-	\$314,000
2016 Deutz Fahr Tractor chpr	-	-	-	-	-	-	-	-	1	1	\$230,000
2012 Volvo L45GS loader	-	-	-	-	1	1	1	1	1	1	\$128,000
2014 Case 821FXR loader	-	-	-	-	-	-	1	1	1	1	\$236,000
2009 John Deere 644K ldr	-	1	1	1	1	1	1	1	1	1	\$278,000
2009 Terex 760B b/hoe	-	1	1	1	1	1	1	1	1	1	\$109,000
2005 Woodchuck chpr 19G	1	1	1	1	1	1	1	1	1	1	\$47,000

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/Vehicle)
Roads East											
<u>Licensed</u>											
2010 Ford F150	-	-	1	1	1	1	1	1	1	1	\$20,000
2010 Dodge Ram 1500	-	-	1	1	1	1	1	1	1	1	\$22,000
2013 GMC Sierra	-	-	-	-	-	1	1	1	1	1	\$28,000
2009 GMC Sierra	-	1	1	1	1	1	1	1	1	1	\$28,000
2009 GMC Sierra	-	1	1	1	1	1	1	1	1	1	\$28,000
2009 GMC Sierra	-	1	1	1	1	1	1	1	1	1	\$28,000
2009 Ford Ranger	-	1	1	1	1	1	1	1	1	1	\$22,000
2014 Chev. Silverado 1WT	-	-	-	-	-	-	1	1	1	1	\$24,000
2016 Dodge Ram 1500 SLT	-	-	-	-	-	-	-	-	1	1	\$27,000
2011 Mack Granite p & d	-	-	-	1	1	1	1	1	1	1	\$256,000
2011 Mack Granite p & d	-	-	-	1	1	1	1	1	1	1	\$256,000
2004 International 7600 p&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2004 International 7600 p&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2004 International 7600 p&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2005 Sterling LT9513 p&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2006 Sterling LT9513 p&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2016 International 7600 2wp&d	-	-	-	-	-	-	-	-	1	1	\$267,000
2007 Sterling LT9513 2wp&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2007 Sterling LT9513 2wp&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2013 Freightliner 108 SD	-	-	-	-	-	1	1	1	1	1	\$191,000
2013 Freightliner 108 SD	-	-	-	-	-	1	1	1	1	1	\$191,000
2004 International 7400 p&d	1	1	1	1	1	1	1	1	1	1	\$208,000
2004 International 7400 p&d	1	1	1	1	1	1	1	1	1	1	\$208,000
2007 Sterling L8513 sin. p&d.	1	1	1	1	1	1	1	1	1	1	\$208,000
2010 Dodge Ram 3500 4x4	-	-	1	1	1	1	1	1	1	1	\$60,000
2011 Dodge	-	-	-	1	1	1	1	1	1	1	\$48,000
2014 Ford F350 Super cab 4x4	-	-	-	-	-	-	1	1	1	1	\$68,000
2008 Dodge Ram 3500 4x4	1	1	1	1	1	1	1	1	1	1	\$66,000
2012 Cramero trl 20 ton	-	-	-	-	1	1	1	1	1	1	\$22,000
2016 Duratrail tandem	-	-	-	-	-	-	-	-	1	1	\$7,000
1988 Homemade trailer	1	1	1	1	1	1	1	1	1	1	\$3,000
2012 Freightliner/Elgin MV3423 D	-	-	-	-	1	1	1	1	1	1	\$214,000
2017 Isuzu N Elgin Broom B	-	-	-	-	-	-	-	-	-	1	\$251,000

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/Vehicle)
Unlicensed											
1996 Champion 740R grader	1	1	1	1	1	1	1	1	1	1	\$314,000
2002 New Holland brush chpr	1	1	1	1	1	1	1	1	1	1	\$89,000
1991 John Deere 644E loader	1	1	1	1	1	1	1	1	1	1	\$173,000
1991 John Deere 210C 4x4 ldr	1	1	1	1	1	1	1	1	-		\$99,000
2011 Case 621E loader	-	-	-	1	1	1	1	1	1	1	\$161,000
1996 Komatsu WA180-1 loader	1	1	1	1	1	1	1	1	1	1	\$117,000
2007 Terex TL160 ldr & swpr	1	1	1	1	1	1	1	1	1	1	\$115,000
2005 John Deere 410G bhoe	1	1	1	1	1	1	1	1	1	1	\$115,000
2016 John Deere 310SL bhoe	-	-	-	-	-	-	-	-	1	1	\$136,000
1993 Super Pac steel rlr 320	1	1	1	1	1	1	1	1	1	1	\$16,000
2009 Trackless MT6	-	1	1	1	1	1	1	1	1	1	\$161,000
2009 Carlton 2012 chpr	-	1	1	1	1	1	1	1	1	1	\$44,000
1985 Sullivan D1750Q cmprsr	1	1	1	1	1	1	1	1	1	1	\$16,000
Roads West											
Licensed											
2010 Ford F150	-	-	1	1	1	1	1	1	1	1	\$20,000
2012 Chev. Silverado	-	-	-	-	1	1	1	1	1	1	\$20,000
2008 Chev. Silverado	1	1	1	1	1	1	1	1	1	1	\$28,000
2015 Chev. Silverado WT 2WC	-	-	-	-	-	-	-	1	1	1	\$25,000
2016 Dodge Ram 1500 SLT	-	-	-	-	-	-	-	-	1	1	\$27,000
2012 International 7600 p&d	-	-	-	-	1	1	1	1	1	1	\$222,000
2015 International 7600 p&d	-	-	-	-	-	-	-	1	1	1	\$235,000
2005 Sterling LT9513 p&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2006 Sterling LT9513 p&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2006 Sterling LT9513 p&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2007 Sterling LT9513 p&d	1	1	1	1	1	1	1	1	1	1	\$251,000
2009 Sterling LT9511 p&d	-	1	1	1	1	1	1	1	1	1	\$251,000
2013 Int. 7400 SBA 6x4 Tar dist.	-	-	-	-	-	1	1	1	1	1	\$199,000
2015 Ford F350 4x4 p&d	-	-	-	-	-	-	-	1	1	1	\$72,000
2009 Dodge Ram 3500 4dc	-	1	1	1	1	1	1	1	1	1	\$46,000
1987 WPC tandem trailer	1	1	1	1	1	1	1	1	1	1	\$4,000
2008 JCTR tag trl 30t w/l axle	1	1	1	1	1	1	1	1	1	1	\$40,000

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/Vehicle)
Unlicensed											
2010 John Deere 770G grader	-	-	1	1	1	1	1	1	1	1	\$314,000
1996 Champion 740 grdr/brusher	1	1	1	1	1	1	1	1	1	1	\$314,000
2010 John Deere 644K ldr	-	-	1	1	1	1	1	1	1	1	\$278,000
1976 Hough 100 loader	1	1	1	1	1	1	1	1	1	1	\$409,000
2007 Terex TL160 loader	1	1	1	1	1	1	1	1	1	1	\$115,000
2005 John Deere 410G bhoe	1	1	1	1	1	1	1	1	1	1	\$115,000
2002 Hamm HD110 road roller	1	1	1	1	1	1	1	1	1	1	\$136,000
2015 Atlas Copco Dynapac CP142 RWR	-	-	-	-	-	-	-	1	1	1	\$110,000
2010 Etnyre chip spreader	-	-	1	1	1	1	1	1	1	1	\$184,000
2008 Bandit 150Xp chpr	1	1	1	1	1	1	1	1	1	1	\$47,000
1995 Midland road Widener WA	1	1	1	1	1	1	1	1	1	1	\$58,000
Total	45	57	67	72	78	82	86	93	99	99	

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Per Capita Standard (per 1,000 population)	0.71	0.90	1.06	1.14	1.23	1.29	1.35	1.46	1.55	1.53

10 Year Average	2008-2017
Quantity Standard (per 1,000 population)	1.2230
Quality Standard	\$147,833
Service Standard	\$181

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$181
Eligible Amount	\$374,256

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Bld'g Value (\$/ft ²)	Value/ft ² with land, site works, etc.
Roads Central Area Work Yard (Argyle)	8,027	8,027	8,027	8,027	8,027	8,027	8,027	8,027	8,027	8,027	\$91	\$104
Roads Simcoe Area Operations Yard (Schellburg)	17,506	17,506	17,506	17,506	17,506	17,506	17,506	17,506	17,506	17,506	\$147	\$165
Roads East Area Operations Yard (Villa Nova)	7,969	7,969	7,969	7,969	7,969	7,969	7,969	7,969	7,969	7,969	\$79	\$91
Roads West Area Operations Yard (Langton)	13,440	13,440	13,440	13,440	13,440	13,440	13,440	13,440	13,440	13,440	\$98	\$112
Roads West Area Operations Yard (Courtland)	4,587	4,587	4,587	4,587	4,587	4,587	4,587	4,587	4,587	4,587	\$92	\$105
Storage Domes-Central (Argyle)	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330	\$144	\$162
Storage Domes-Simcoe (Schellburg)	1,630	1,630	1,630	1,630	1,630	1,630	1,630	1,630	1,630	1,630	\$115	\$130
Storage Domes-East (Villa Nova)	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	\$59	\$69
Storage Domes-West (Courtland)	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480	\$141	\$159
Sand Dome-Simcoe (Queensway West)	700	700	700	700	700	700	700	700	700	700	\$291	\$325
Salt Dome-Simcoe (Queensway West)	225	225	225	225	225	225	225	225	225	225	\$501	\$556
Sand Dome-Simcoe (Norfolk South)	700	700	700	700	700	700	700	700	700	700	\$456	\$506
Salt Dome-Simcoe (Norfolk South)	700	700	700	700	700	700	700	700	700	700	\$456	\$506
Sand Dome-Langton (Highway 59)	450	450	450	450	450	450	450	450	450	450	\$431	\$479
Salt Dome-Langton (Highway 59)	225	225	225	225	225	225	225	225	225	225	\$545	\$605
Sand Dome-Walsh (Charlottesville)	450	450	450	450	450	450	450	450	450	450	\$481	\$479
Total	61,869	61,869	61,869	61,869	61,869	61,869	61,869	61,869	61,869	61,869		

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Per Capita Standard	0.9784	0.9779	0.9785	0.9793	0.9784	0.9769	0.9739	0.9723	0.9660	0.9556

10 Year Average	2008-2017
Quantity Standard	0.9737
Quality Standard	\$144
Service Standard	\$140

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$140
Eligible Amount	\$289,800

**Norfolk County
Service Standard Calculation Sheet**

Service: Fire Facilities
Unit Measure: ft² of building area

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Bld'g Value (\$/ft ²)	Value/ft ² with land, site works, etc.
Teeterville - 5 bays	6,595	6,595	6,595	6,595	6,595	6,595	6,595	6,595	6,595	6,595	\$280	\$327
Vittoria, Old 1956 - 4 bays	4,470	-	-	-	-	-	-	-	-	-	\$280	\$330
Vittoria, New 2009 - 5 bays	-	6,595	6,595	6,595	6,595	6,595	6,595	6,595	6,595	6,595	\$280	\$341
St. Williams, 1980 - 5 bays	3,045	3,045	3,045	3,045	3,045	3,045	3,045	3,045	3,045	3,045	\$280	\$336
Delhi, 1978 - 5 bays	6,642	6,642	6,642	6,642	6,642	6,642	6,642	6,642	6,642	6,642	\$280	\$338
Waterford, 1990 - 5 bays	6,520	6,520	6,520	6,520	6,520	6,520	6,520	6,520	6,520	6,520	\$280	\$332
Port Dover, 1991 - 5 bays	6,520	6,520	6,520	6,520	6,520	6,520	6,520	6,520	6,520	6,520	\$280	\$373
Langton, 1974 - 3 bays	3,356	3,356	3,356	3,356	3,356	3,356	3,356	3,356	3,356	3,356	\$280	\$344
Courtland, 1959 - 5 bays	4,466	4,466	4,466	4,466	4,466	4,466	4,466	4,466	4,466	4,466	\$280	\$334
Fairground New - 4 bays	7,287	7,287	7,287	7,287	7,287	7,287	7,287	7,287	7,287	7,287	\$280	\$330
Port Rowan, 1996 - 6 bays	6,958	6,958	6,958	6,958	6,958	6,958	6,958	6,958	6,958	6,958	\$280	\$336
Simcoe, 1973 - 6 bays	7,113	7,113	7,113	7,113	7,113	7,113	7,113	7,113	7,113	7,113	\$280	\$335
Total	62,972	65,097	65,097	65,097	65,097	65,097	65,097	65,097	65,097	65,097		

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Per Capita Standard	0.9958	1.0289	1.0296	1.0304	1.0295	1.0278	1.0247	1.0230	1.0164	1.0054

10 Year Average	2008-2017
Quantity Standard	1.0212
Quality Standard	\$339
Service Standard	\$346

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$346
Eligible Amount	\$715,558

**Norfolk County
Service Standard Calculation Sheet**

Service: Fire Vehicles
Unit Measure: No. of vehicles

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/Vehicle)
Delhi (Stn. 4,5,10,11)											
Pumper	5	5	5	5	5	5	5	5	5	3	\$875,000
Pumper/Rescue - Stn 5 & 10	-	2	2	2	2	2	2	2	2	2	\$950,000
Tanker	4	4	4	4	4	4	4	4	4	4	\$770,000
Rescue Vehicle	4	2	2	2	2	2	2	2	2	2	\$705,500
Rehab Vehicle/Tow Vehicle - Stn 5	-	1	1	1	1	1	1	1	1	1	\$44,400
Nanticoke (Stn. 2, 3)											
Pumper/Tanker	1	1	1	1	1	1	1	1	1	1	\$922,000
Pumpers	3	3	3	3	3	3	3	3	3	3	\$875,000
Rescue Vehicle	2	2	2	2	2	2	2	2	2	2	\$705,500
Tanker	1	1	1	1	1	1	1	1	1	1	\$770,000
Off-Road Vehicles - Stn 2-ERV x1; Stn 3-Ranger x1	1	1	2	2	2	2	2	2	2	2	\$38,900
Trailers - Stn 2 x1; Stn 3 x2	2	2	3	3	3	3	3	3	3	3	\$5,600
Boat - Stn 3	1	1	1	1	1	1	1	1	1	1	\$40,000
Norfolk Township (Stn. 6, 7, 8, 9)											
Pumper	3	4	4	4	4	4	4	4	4	4	\$875,000
Tanker	4	3	3	3	3	3	3	3	3	3	\$770,000
Pumper/Tanker	1	1	1	1	1	1	1	1	1	1	\$922,000
Rescue Vehicle	4	4	4	4	4	4	4	4	4	4	\$705,500
Off-Road Vehicles - Stn 6-Ranger x1; Stn 8-Argo x1	-	-	-	1	1	2	2	2	2	2	\$38,900
Water/Rescue Tow Vehicles - Stn 9	1	1	1	2	2	2	2	2	2	1	\$44,400
Trailers - Stn 6 x1; Stn9 x2	2	2	2	3	3	3	3	3	3	3	\$5,600
Specialty Trailer/Ice Rescue - Stn 8	-	-	-	-	-	1	1	1	1	1	\$7,800
Boat - Stn 9	1	1	1	2	2	2	2	2	2	2	\$40,000
Simcoe (Stn. 1) & Administration											
Staff Vehicles	5	5	5	5	5	5	5	5	5	5	\$55,600
Pumpers	2	2	2	2	2	2	2	2	2	2	\$875,000
Aerial Ladder	1	1	1	1	1	1	1	1	1	1	\$1,444,400
Rescue Vehicles	1	1	1	1	1	1	1	1	1	1	\$705,500
Tanker	1	1	1	1	1	1	1	1	1	1	\$770,000
Fire Safety Trailer Tow Vehicle	1	1	1	1	1	1	1	1	1	1	\$60,000
Total	51	52	54	58	58	60	60	60	60	57	

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Quantity Standard (per 1,000 population)	0.8065	0.8219	0.8541	0.9181	0.9172	0.9474	0.9445	0.9429	0.9369	0.8804

10 Year Average	2008-2017
Quantity Standard (per 1,000 population)	0.8970
Quality Standard	\$547,336
Service Standard	\$491

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$491
Eligible Amount	\$1,016,287

**Norfolk County
Service Standard Calculation Sheet**

Service: Fire Small Equipment and Gear
Unit Measure: No. of equipment and gear

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/item)
Emergency Management Generator	-	-	-	-	-	1.00	1.00	1.00	1.00	1.00	\$77,800
Extrication Equipment (1 per Station)	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	\$55,000
Thermal Imaging Cameras	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	\$10,000
Radio Towers (incl. equipment)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	\$77,392
Water Rescue Suits	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	\$1,000
Dry Hydrants	3.00	5.00	7.00	12.00	12.00	17.00	29.00	29.00	29.00	32.00	\$15,000
SCBA	180.00	180.00	180.00	180.00	180.00	180.00	180.00	180.00	180.00	190.00	\$10,000
SCBA Air Bottles (2 per pack)	360.00	360.00	360.00	360.00	360.00	360.00	360.00	360.00	360.00	380.00	\$1,100
PPE (Helmet, Coat, & Pants)	242.00	242.00	242.00	242.00	242.00	242.00	242.00	242.00	242.00	254.00	\$3,000
Pagers	242.00	242.00	242.00	242.00	242.00	242.00	242.00	242.00	242.00	254.00	\$625
Portable Radios	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	\$1,000
Air Filling Station - Stn 1, 2, 3, 4, 7, & 9	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	6.00	\$50,000
Total	1,260.00	1,262.00	1,264.00	1,269.00	1,269.00	1,275.00	1,287.00	1,287.00	1,287.00	1,345.00	

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Quantity Standard (per 1,000 population)	19.9254	19.9475	19.9918	20.0871	20.0686	20.1314	20.2597	20.2257	20.0956	20.7738

10 Year Average	2008-2017
Quantity Standard (per 1,000 population)	20.1507
Quality Standard	\$3,924
Service Standard	\$79

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$79
Eligible Amount	\$163,675

**Norfolk County
Service Standard Calculation Sheet**

Service: Parking Spaces
Unit Measure: No. of spaces

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/space)	Value / Space with Land
Port Rowan	62	62	62	62	62	62	62	62	62	62	\$8,300	\$8,336
Port Dover	93	93	93	93	93	93	93	103	103	103	\$8,300	\$14,686
Simcoe	475	475	475	475	475	475	475	475	475	475	\$8,300	\$10,686
Long Point	30	30	30	30	30	30	30	30	30	30	\$8,300	\$9,411
Delhi	75	75	75	75	75	75	75	75	75	75	\$8,300	\$9,627
Waterford	20	20	20	20	20	20	20	20	20	20	\$8,300	\$9,078
On Street Parking Spaces	1,552	1,552	1,552	1,552	1,552	1,552	1,552	1,552	1,552	1,552	\$300	\$300
Total	2,307	2,307	2,307	2,307	2,307	2,307	2,307	2,317	2,317	2,317		

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Quantity Standard (per 1,000 population)	36.4824	36.47	36.49	36.52	36.48	36.43	36.32	36.41	36.18	35.79

10 Year Average	2008-2017
Quantity Standard (per 1,000 population)	36.3557
Quality Standard	\$3,746
Service Standard	\$136

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$136
Eligible Amount	\$281,934

**Norfolk County
Service Standard Calculation Sheet**

Service: Parkland Development
Unit Measure: Acres of Parkland

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/Acre)
NEIGHBOURHOOD PARKS											
Delhi											
Ryerse Park, Port Dover	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	\$7,200
Oakwood Park	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	\$7,200
Block AA	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	\$7,200
Woodhouse Acres	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	\$7,200
Vaughn Survey park (east of Port Dover)	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	\$7,200
Murray Park (east of Port Dover)	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	\$7,200
Lingwood Park, Waterford	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	\$7,200
Ryerse Island Parkette, Port Dover	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	\$7,200
Heritage Parkette	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$7,200
Memorial Park (formerly water tower site)	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	\$7,200
Township of Norfolk											
St. Ladislaus	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$7,200
Simcoe											
AlligatorTug Waterway Park (Old Argyle)	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	\$7,200
Brooks Street (Woodlot)	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	\$900
Clifton Park (including Crescent Boulevard)	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	\$7,200
Hill Street	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	\$7,200
Holmewood Park	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	\$7,200
Lynnwood	8.87	8.87	8.87	8.87	8.87	8.87	8.87	8.87	8.87	8.87	\$7,200
Summit Circle	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	\$7,200
Wellington Park	10.70	10.70	10.70	10.70	10.70	10.70	10.70	10.70	10.70	10.70	\$7,200
COMMUNITY PARKS											
Nanticoke											
Powell park, Port Dover	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	\$7,200
Kinsmen Park, Port Dover (excludes hall land)	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	\$7,200
Hellyer Park, Waterford	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	\$7,200
Township of Norfolk											
Courland	13.52	13.52	13.52	13.52	13.52	13.52	13.52	13.52	13.52	13.52	\$7,200
Langton	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	\$7,200
Walsingham	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	\$7,200
Houghton	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	\$7,200
Port Rowan Optimist	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	\$7,200
Port Rowan Community	9.24	9.24	9.24	9.24	9.24	9.24	9.24	9.24	9.24	9.24	\$7,200

**Norfolk County
Service Standard Calculation Sheet**

Service: Parkland Development
Unit Measure: Acres of Parkland

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/Acre)
COUNTY-WIDE PARKS											
Delhi											
Wind Del Park	30.05	30.05	30.05	30.05	30.05	30.05	30.05	30.05	30.05	30.05	\$7,200
Women's Institute Grounds	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	\$7,200
Swimming Pool Road Parkland (woodlot)	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	\$900
Connaught Avenue Parkland	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	\$7,200
Gilbertville Parkland	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	\$7,200
Quance Park	9.46	9.46	9.46	9.46	9.46	9.46	9.46	9.46	9.46	9.46	\$7,200
Delhi Sports Park	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	\$7,200
Centennial Park	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65	\$7,200
Delcrest Park	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	\$7,200
Crosier Street Lions Park	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	\$7,200
Memorial Park	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	\$7,200
Big Creek Dr. Park (old Barnard)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$7,200
Library Park	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	\$7,200
Kinsmen Park	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	\$7,200
Sovereign Street Parkland	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	\$7,200
Saint Williams Lions Park	6.23	6.23	6.23	6.23	6.23	6.23	6.23	6.23	6.23	6.23	\$7,200
Turkey Point Park	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	\$7,200
Thompson Memorial Park	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	\$7,200
Lampport Park	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	\$7,200
Fairgrounds Walsh	5.81	5.81	5.81	5.81	5.81	5.81	5.81	5.81	5.81	5.81	\$7,200
Bill's Corners Park	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	\$7,200
Pinehurst Subdivision Park	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	\$7,200
Club House Road Parkland (woodlot)	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	\$900
Oakes Subdivision Parkland	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	\$7,200
Nanticoke											
Port Dover, lift bridge area Brant Hill Monument	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$7,200
Historic Wintering Site, Don Jon Blvd., Port Dover	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	\$7,200
Gulley Park (block 1), Port Dover (Woodlot)	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	\$900
Gulley Park (block B), Port Dover (Woodlot)	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	\$900
Green Belt (2 parts), St. George Street, Port Dover	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	\$7,200
Denby Road & Green belt, Port Dover	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	\$7,200
LynnPark Subdivision (nature trail) Port Dover (woodlot)	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	\$900

**Norfolk County
Service Standard Calculation Sheet**

Service: Parkland Development
Unit Measure: Acres of Parkland

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/Acre)
Township of Norfolk											
Port Rowan Lions	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	\$7,200
Bank Lot	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$7,200
Benson and Hedges Sports Park	7.98	7.98	7.98	7.98	7.98	7.98	7.98	7.98	7.98	7.98	\$7,200
Irrigation Upgrades - Benson and Hedges Sports Park	2.47	4.94	7.41	9.88	12.36	14.83	14.83	14.83	14.83	14.83	\$11,600
ADDITIONAL PARKS											
Fairview Heights Park	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	\$7,200
Port Rowan viewing area	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	\$7,200
Port Dover Baseball Diamond	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	\$7,200
Don Shay Park	12.48	12.48	12.48	12.48	12.48	12.48	12.48	12.48	12.48	12.48	\$7,200
Simcoe Bowling Green	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	\$7,200
Lions Ball Diamonds	13.42	13.42	13.42	13.42	13.42	13.42	13.42	13.42	13.42	13.42	\$7,200
Col Stalker Park Cedar St.	9.29	9.29	9.29	9.29	9.29	9.29	9.29	9.29	9.29	9.29	\$7,200
Kinsmen Park and Splash Pad	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68	\$7,200
Norfolk Soccer Park	38.99	38.99	38.99	38.99	38.99	38.99	38.99	38.99	38.99	38.99	\$7,200
Port Dover Lift Bridge Area	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	\$7,200
Percy Carter	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	\$7,200
Westwood Acres	4.99	4.99	4.99	4.99	4.99	4.99	4.99	4.99	4.99	4.99	\$7,200
Evergreen Heights	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	\$7,200
Golden Gardens	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	\$7,200
Simson (Price)	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	\$7,200
Freeman	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	\$7,200
CrestLynn	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	\$7,200
Briarwood	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	\$7,200
Ashton	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	\$7,200
Waterworks	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	\$7,200
Patterson Parkette	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	\$7,200
Memorial Ball Diamond	7.59	7.59	7.59	7.59	7.59	7.59	7.59	7.59	7.59	7.59	\$7,200
James St Horticulture Bed	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	\$7,200
Waterford Bridge Parkette	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	\$7,200
Waterford Downtown Parkette	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	\$7,200
Bloomsberg	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	\$7,200

**Norfolk County
Service Standard Calculation Sheet**

Service: Parkland Development
Unit Measure: Acres of Parkland

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/Acre)
Mill Pond Parkette	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	\$7,200
Waterford Lions Park	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	\$7,200
Waterford Centennial Park	4.03	4.03	4.03	4.03	4.03	4.03	4.03	4.03	4.03	4.03	\$7,200
Lynndale Heights Park	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	\$7,200
Port Rowan Comm Ctr Park	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	\$7,200
Caim Parkette Port Rowan	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	\$7,200
New Parkland Since 2004 DC Study											
Harvest Glen - 2004	5.96	5.96	5.96	5.96	5.96	5.96	5.96	5.96	5.96	5.96	\$7,200
Teeterville Sports Park - 2005	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	\$7,200
Yin Park	2.74	2.74	2.74	2.74	2.74	2.74	2.74	2.74	2.74	2.74	\$7,200
Sommerset Park Port Dover - 2005	9.24	9.24	9.24	9.24	9.24	9.24	9.24	9.24	9.24	9.24	\$7,200
Pleasant Trail Park - 2007	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	\$7,200
Inglewood Stormwater area - 2007	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	\$7,200
Port Dover Sportspark - 2012	-	-	-	-	1.56	1.56	1.56	1.56	1.56	1.56	\$89,900
Total	374.23	376.70	379.17	381.64	385.68	388.15	388.15	388.15	388.15	388.15	

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Quantity Standard (per 1,000 population)	5.9180	5.9542	5.9971	6.0410	6.0993	6.1286	6.1102	6.0999	6.0607	5.9951

10 Year Average	2008-2017
Quantity Standard (per 1,000 population)	6.0404
Quality Standard	\$7,420
Service Standard	\$45

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$45
Eligible Amount	\$92,777

Norfolk County
Service Standard Calculation Sheet

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/item)
DIAMONDS											
Softball Lit											
Wind-Del Community Park	1	1	1	1	1	1	1	1	1	1	\$106,700
Thompson Memorial Park, Vittoria	1	1	1	1	1	1	1	1	1	1	\$106,700
St. Williams Lions Park	1	1	1	1	1	1	1	1	1	1	\$106,700
Hellyer Ball Park (diamond #1), Waterford	1	1	1	1	1	1	1	1	1	1	\$156,700
Hellyer Ball Park (diamond #2), Waterford	1	1	1	1	1	1	1	1	1	1	\$103,300
Port Dover Ball Park	1	1	1	1	1	1	-	-	-	-	\$152,200
Port Dover Kinsmen Ball Park (diamond #1)	1	1	1	1	1	1	1	1	1	1	\$144,400
Lions Park	3	3	3	3	3	3	3	3	3	3	\$141,100
Stalker Park	1	1	1	1	1	1	1	1	1	1	\$213,300
Courtland Park	1	1	1	1	1	1	1	1	1	1	\$111,100
Langton Park	1	1	1	1	1	1	1	1	1	1	\$111,100
Memorial Park (baseball)	1	1	1	1	1	1	1	1	1	1	\$138,900
Walsingham (baseball)	1	1	1	1	1	1	1	1	1	1	\$138,900
Delhi Arena Diamond (baseball)	1	1	1	1	1	1	1	1	1	1	\$138,900
Softball Unlit											
Thompson Memorial Park, Vittoria	1	-	-	-	-	-	-	-	-	-	\$50,000
St. Williams Lions Park	1	-	-	-	-	-	-	-	-	-	\$50,000
Delcrest park, Delhi	1	-	-	-	-	-	-	-	-	-	\$50,000
Hellyer Ball Park (diamond #3), Waterford	1	-	-	-	-	-	-	-	-	-	\$35,600
Stalker Park, Simcoe	1	-	-	-	-	-	-	-	-	-	\$71,100
Kinsmen Park	2	-	-	-	-	-	-	-	-	-	\$71,100
Waterworks Park	1	-	-	-	-	-	-	-	-	-	\$71,100
Port Dover Ball Park, Kinsmen Park	-	-	-	-	1	1	1	1	1	1	\$111,100
T-Ball											
Port Dover Kinsmen Park (diamond #2)	1	-	-	-	-	-	-	-	-	-	\$43,300
SKATEBOARD PARKS											
Simcoe Skateboard Park	1	1	1	1	1	1	1	1	1	1	\$143,300
Port Rowan Skateboard Park	-	-	-	-	1	1	1	1	1	1	\$500,000
Port Dover Skateboard Park	-	-	-	-	1	1	1	1	1	1	\$500,000

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/item)
PLAYGROUNDS											
Wind-Del Community Park	1	1	1	1	1	1	1	1	1	1	\$57,800
Delcrest Park, Delhi	1	1	1	1	1	1	1	1	1	1	\$57,800
Delhi Lion's Park	1	1	1	1	1	1	1	1	1	1	\$57,800
Pinehurst Park	1	1	1	1	1	1	1	1	1	1	\$57,800
Turkey Point Park	1	1	1	1	1	1	1	1	1	1	\$57,800
Thompson Memorial Park, Vittoria	1	1	1	1	1	1	1	1	1	1	\$57,800
Fairview Heights Park	1	1	1	1	1	1	1	1	1	1	\$57,800
Lynndale Heights Park	1	1	1	1	1	1	1	1	1	1	\$143,300
Kinsmen Park	1	1	1	1	1	1	1	1	1	1	\$143,300
Golden Gardens	1	1	1	1	1	1	1	1	1	1	\$143,300
Stalker Park	1	1	1	1	1	1	1	1	1	1	\$143,300
Crestlynn Park	1	1	1	1	1	1	1	1	1	1	\$143,300
Thorncliffe Park	1	1	1	1	1	1	1	1	1	1	\$143,300
Teeterville Community Park	1	1	1	1	1	1	1	1	1	1	\$27,800
Bills Corners	1	1	1	1	1	1	1	1	1	1	\$38,900
Courtland Lions	1	1	1	1	1	1	1	1	1	1	\$38,900
Kinsmen Park Port Dover	1	1	1	1	1	1	1	1	1	1	\$83,300
St. Williams Lions	1	1	1	1	1	1	1	1	1	1	\$22,200
Lakeview Park Port Dover	1	1	1	1	1	1	1	1	1	1	\$38,900
Oakwood Port Dover	1	1	1	1	1	1	1	1	1	1	\$27,800
Powell Park Port Dover	1	1	1	1	1	1	1	1	1	1	\$11,100
St. Cecilia Port Dover	1	1	1	1	1	1	1	1	1	1	\$77,800
Woodhouse Acres Port Dover	1	1	1	1	1	1	1	1	1	1	\$11,100
Waterford Lions	1	1	1	1	1	1	1	1	1	1	\$38,900
Water Tower Port Rowan	1	1	1	1	1	1	1	1	1	1	\$27,800
Ashton Simcoe	1	1	1	1	1	1	1	1	1	1	\$22,200
Briarwood Simcoe	1	1	1	1	1	1	1	1	1	1	\$27,800
Evergreen Heights Simcoe	1	1	1	1	1	1	1	1	1	1	\$16,700
Patterson Simcoe	1	1	1	1	1	1	1	1	1	1	\$5,600
Simson Simcoe	1	1	1	1	1	1	1	1	1	1	\$33,300
Waterworks Simcoe	1	1	1	1	1	1	1	1	1	1	\$27,800
Wellington Simcoe	1	1	1	1	1	1	1	1	1	1	\$16,700
Westwood Acres Simcoe	1	1	1	1	1	1	1	1	1	1	\$55,600
Yin Park Waterford	1	1	1	1	1	1	1	1	1	1	\$27,800
Freeman Crescent Simcoe	1	1	1	1	1	1	1	1	1	1	\$27,800
Simcoe Lions Park	1	1	1	1	1	1	1	1	1	1	\$66,700

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/item)
COURTS											
Lit Tennis											
Thompson Memorial Park, Vittoria	2	2	2	2	2	2	2	2	2	2	\$64,400
Waterford (50/50 with high school single court)	1	1	1	1	1	1	1	1	1	1	\$42,200
Langton	3	3	3	3	3	3	3	3	3	3	\$35,600
Courtland	3	3	3	3	3	3	3	3	3	3	\$35,600
Port Rowan	2	2	2	2	2	2	2	2	2	2	\$35,600
Talbot	2	2	2	2	2	2	2	2	2	2	\$56,700
Port Dover Sports Park				4	4	4	4	4	4	4	\$83,300
Unlit Tennis											
Wind-Del Community Park	2	2	2	2	2	2	2	2	2	2	\$42,200
St. Williams Lions Park	1	1	1	1	1	1	1	1	1	1	\$50,000
Pinehurst Park	1	1	1	1	1	1	1	1	1	1	\$50,000
Stalker Park	2	2	2	2	2	2	-	-	-	-	\$42,200
Westwood Acres	1	1	1	1	1	1	1	1	1	1	\$50,000
Crestlynn Park	1	1	1	1	1	1	1	1	1	1	\$50,000
Basketball											
Lynndale Heights	1	1	1	1	1	1	1	1	1	1	\$56,700
Thorcliffe Park	1	1	1	1	1	1	1	1	1	1	\$56,700
Percy Carter Park	1	1	1	1	1	1	1	1	1	1	\$42,200
Fairview Park Delhi	-	-	-	-	1	1	1	1	1	1	\$24,400
Delcrest Park	1	1	1	1	1	1	1	1	1	1	\$16,700
WATER PLAY FACILITIES											
Delhi Kinsmen Pool and Splash Pad	1	1	1	1	1	1	1	1	1	1	\$747,700
Kinsmen Splash Pad	1	1	1	1	1	1	1	1	1	1	\$277,800
SPECIAL FACILITIES											
Delhi											
Picnic Pavilion, Quance Property	1	1	1	1	1	1	1	1	1	1	\$26,000
Storage Building, Quance Property	1	1	1	1	1	1	1	1	1	1	\$47,600
Storage Building McLaughlin Sports Park	1	1	1	1	1	1	1	1	1	1	\$50,100
Refreshment Booth, S/S Queens Highway 3	1	1	1	1	1	1	1	1	1	1	\$23,900

Norfolk County
Service Standard Calculation Sheet

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/item)
Refreshment Booth/Comfort Station, Vittoria	1	1	1	1	1	1	1	1	1	1	\$92,800
Dressing Rooms, McLaughlin Sports Park	0.2	1	1	1	1	1	1	1	1	1	\$875,500
Storage Building, Thompson Park, Vittoria	1	1	1	1	1	1	1	1	1	1	\$38,300
Picnic Pavilion, Vittoria Park	1	1	1	1	1	1	1	1	1	1	\$43,300
Dressing Rooms, Win'dell Park, Windham Centre	1	1	1	1	1	1	1	1	1	1	\$298,500
Storage Building, Win'dell Park, Windham Centre	1	1	1	1	1	1	1	1	1	1	\$46,000
Picnic Pavilion, S/S Highway 3, Delhi	1	1	1	1	1	1	1	1	1	1	\$173,800
Storage and P.A. Booth, Win'dell Park, Windham Centre	1	1	1	1	1	1	1	1	1	1	\$33,700
Storage/Washrooms/Pavilion/Refreshment Booth, St. Williams Park	1	1	1	1	1	1	1	1	1	1	\$142,200
Baseball Scoreboards all parks	1	1	1	1	1	1	1	1	1	1	\$150,100
Fieldhouse, Vittoria	1	1	1	1	1	1	1	1	1	1	\$92,800
Picnic Pavillion Turkey Point (1998)	1	1	1	1	1	1	1	1	1	1	\$128,500
Norfolk											
Workshop/Daycare, Langton	1	1	1	1	1	1	1	1	1	1	\$820,200
Changeroom, Langton	1	1	1	1	1	1	1	1	1	1	\$108,100
Picnic Pavilion, Langton	1	1	1	1	1	1	1	1	1	1	\$40,600
Washrooms/Changeroom, Courtland	1	1	1	1	1	1	1	1	1	1	\$79,300
Pavilion, Courtland	1	1	1	1	1	1	1	1	1	1	\$102,900
Picnic Pavilion, Port Rowan	1	1	1	1	1	1	1	1	1	1	\$27,100
Washrooms, Lion's Park, Port Rowan	1	1	1	1	1	1	1	1	1	1	\$36,900
Washrooms/Changeroom, Walsingham	1	1	1	1	1	1	1	1	1	1	\$81,000
Nanticoke											
Beach Washrooms, Port Dover	1	1	1	1	1	1	1	1	1	1	\$132,500
Storage Building, Arena Park, Port Dover	1	1	1	1	1	1	-	-	-	-	\$41,200
Batting Cage, Kinsmen Park, Port Dover	1	1	1	1	1	1	1	1	1	1	\$18,200
Parks Department Storage Building, Waterford	1	1	1	1	1	1	1	1	1	1	\$128,200
Gazebo Lions Park, Waterford	1	1	1	1	1	1	1	1	1	1	\$15,000
Bandshell Powell Park, Port Dover	1	1	1	1	1	1	1	1	1	1	\$70,800
Elmer Lewis Parkette Port Dover	1	1	1	1	1	1	1	1	1	1	\$129,800

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/item)
Simcoe											
Lighthouse, Norfolk Street	1	1	1	1	1	1	1	1	1	1	\$22,700
Storage Building, Colborne Street	1	1	1	1	1	1	1	1	1	1	\$24,000
Fountain, Wellington Park	1	1	1	1	1	1	-	-	-	-	\$22,200
Equipment Storage, Pond Street	1	1	1	1	1	1	1	1	1	1	\$267,300
Fieldhouse, Owen Street	1	1	1	1	1	1	1	1	1	1	\$102,800
Fieldhouse, Lion's Park, Davis Street	1	1	1	1	1	1	1	1	1	1	\$173,100
Storage/Bleachers (2), Lion's Park, Davis Street	1	1	1	1	1	1	1	1	1	1	\$234,100
Picnic Pavilion, Lion's Park, Davis Street	1	1	1	1	1	1	1	1	1	1	\$58,700
Chapel	1	1	1	1	1	1	1	1	1	1	\$26,900
Windmill	1	1	1	1	1	1	1	1	1	1	\$13,700
Picnic Pavilion, Kinsmen Park, Talbot Street North	1	1	1	1	1	1	1	1	1	1	\$35,900
Lawn Bowling Clubhouse and Storage	1	1	1	1	1	1	1	1	1	1	\$119,200
Batting Cage Simcoe Lion's Park	1	1	1	1	1	1	1	1	1	1	\$38,900
Batting Cage Simcoe Memorial Park	-	-	-	1	1	1	1	1	1	1	\$38,900
Total	132	124	124	129	133	133	128	128	128	128	

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Quantity Standard (per 1,000 population)	2.0907	1.9600	1.9612	2.0419	2.1033	2.1000	2.0150	2.0116	1.9986	1.9770

10 Year Average	2008-2017
Quantity Standard (per 1,000 population)	2.0259
Quality Standard	\$97,142
Service Standard	\$197

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$197
Eligible Amount	\$407,376

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/ Lin. km)
Total Trail Network	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	\$22,200
Total	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Quantity Standard (per 1,000 population)	0.6199	0.6196	0.6200	0.6205	0.6199	0.6189	0.6171	0.6160	0.6121	0.6055

10 Year Average	2008-2017
Quantity Standard (per 1,000 population)	0.6170
Quality Standard	\$22,204
Service Standard	\$14

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$14
Eligible Amount	\$28,359

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/item)
Parks Administration											
2010 Ford Ranger	1	1	1	1	1	1	1	1	1	1	\$25,600
2010 Ford Ranger	1	1	1	1	1	1	1	1	1	1	\$25,600
2010 Dodge Ram 4x4	1	1	1	1	1	1	1	1	1	1	\$27,800
1997 EECO Generator Trailer	-	-	1	1	1	1	-	-	-	-	\$3,300
Delhi Arena/Parks											
2005 GMC Sierra	1	1	1	1	1	1	1	1	1	1	\$30,000
91 Hudson Trailer	1	1	1	1	1	1	1	1	1	1	\$3,300
88 Utility Trailer	1	1	1	1	1	1	-	-	-	-	\$3,300
88 Utility Trailer	1	1	1	1	1	1	-	-	-	-	\$3,300
20ft Special Events Trailer	-	-	-	-	-	-	-	1	1	2	\$15,000
2005 Kubota B7800 4x4	1	1	1	1	1	1	1	-	-	-	\$35,600
2015 Kubota B2650 HSD Tractor	-	-	-	-	-	-	-	1	1	1	\$36,000
2008 Kubota L3940	1	1	1	1	1	1	1	1	1	1	\$30,000
2009 Kubota F3680	1	1	1	1	1	1	1	1	1	1	\$27,800
Other	1	1	1	1	1	1	-	-	-	-	\$45,600
2014 Kubota RTV-X1120D UTV	-	-	-	-	-	-	1	1	1	1	\$17,500
Langton Arena/Parks											
2009 GMC Sierra 3500 HD	1	1	1	1	1	1	1	1	1	1	\$41,600
2007 Ford F350 1 Ton	1	1	1	1	1	1	1	1	1	1	\$56,700
2006 Hyland Tandem Trailer	1	1	1	1	1	1	1	1	1	1	\$5,600
2011 Kubota F3680	1	1	1	1	1	1	1	1	1	1	\$26,100
2005 Kubota GF 1800 4x4	1	1	1	1	1	1	-	-	-	-	\$22,200
2014 Kubota F3990 V1505	-	-	-	-	-	-	1	1	1	1	\$27,400
2005 Kubota B7800 4x4	1	1	1	1	1	1	1	1	-	-	\$35,600
2016 Kioti Tractor NX4510	-	-	-	-	-	-	-	-	1	1	\$39,700
Simcoe Rec Centre											
2012 Chev Orlando 1LT	-	-	-	-	1	1	1	1	1	1	\$27,800
2004 GMC Sierra	-	1	1	1	1	1	-	-	-	-	\$30,000
2013 GMC Sierra	-	-	-	-	-	-	1	1	1	1	\$30,000
Previous 2004 GMC Sierra	1	-	-	-	-	-	-	-	-	-	\$30,000

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/item)
Port Dover Arena/Parks											
2009 GMC Sierra	1	1	1	1	1	1	1	1	1	1	\$30,000
93 Cram Lan Trailer	1	1	1	1	1	1	1	1	1	1	\$7,200
2010 Kubota B3200 HSD	1	1	1	1	1	1	1	1	1	1	\$22,200
2003 Kubota 4 wheel drive F3060	1	1	1	1	1	1	1	-	-	-	\$22,200
2015 Kubota F3990	-	-	-	-	-	-	-	1	1	1	\$21,900
Talbot Rec											
2005 GMC Savana 2500	1	1	1	1	1	1	1	1	1	1	\$38,900
2006 Ford F150 Triton	1	1	1	1	1	1	1	1	1	1	\$30,000
Simcoe Parks and Cemetery											
2006 Dodge Ram 1500 ST	1	1	1	1	1	1	1	1	1	1	\$30,000
2009 Dodge Ram 3500 4 dr	1	1	1	1	1	1	1	1	1	1	\$45,600
2004 Meltrail TY1 Trailer	1	1	1	1	1	1	1	1	1	1	\$2,800
2007 Hyland Tandem Trailer	1	1	1	1	1	1	1	1	1	1	\$7,300
2010 Kubota GF 1800 4x4	1	1	1	1	1	1	1	1	1	1	\$17,700
2010 Kubota GF 1800 4x4	1	1	1	1	1	1	1	1	1	1	\$17,700
2006 Smithco Sweep star 60	1	1	1	1	1	1	1	1	1	1	\$55,600
2010 New Holland G6030 4x4	1	1	1	1	1	1	1	1	1	1	\$22,400
2011 Kubota F3680	1	1	1	1	1	1	1	1	1	1	\$25,000
2013 Kubota B3200 HSD	1	1	1	1	1	1	1	1	1	1	\$28,000
2006 Kubota B7800 HST 4x4	1	1	1	1	1	1	1	1	1	1	\$36,700
2003 JCB 212S Backhoe	1	1	1	1	1	1	1	1	1	1	\$100,000
2007 Kubota L3940 HST tra	1	1	1	1	1	1	1	1	1	1	\$33,300
1998 Kubota 4x4 Tractor	1	1	1	1	1	1	1	1	1	-	\$24,400
2017 Kioto Tractor CK4010	-	-	-	-	-	-	-	-	-	1	\$33,700
2017 JCB 3CX Compact Backhoe	-	-	-	-	-	-	-	-	-	1	\$111,200

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/item)
Waterford Arena/Parks											
2008 Chev Silverado	1	1	1	1	1	1	1	1	1	1	\$30,000
2006 Hytrail Tandem 16 ft Trailer	1	1	1	1	1	1	1	1	1	1	\$4,300
2005 Kubota B2910 HSD	1	1	1	1	1	1	-	-	-	-	\$37,200
2014 Kubota B2620 HSD	-	-	-	-	-	-	1	1	1	1	\$32,900
2008 Kubota F3680	1	1	1	1	1	1	1	1	1	1	\$28,900
2011 Kubota ZD323	-	-	-	-	-	-	1	1	1	1	\$14,200
Ice Resurfacers	6	6	6	6	6	6	6	6	6	6	\$91,100
Total	48	48	49	49	50	50	48	49	49	51	

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Quantity Standard (per 1,000 population)	0.7591	0.7587	0.7750	0.7756	0.7907	0.7895	0.7556	0.7701	0.7651	0.7877

10 Year Average	2008-2017
Quantity Standard (per 1,000 population)	0.7727
Quality Standard	\$35,369
Service Standard	\$27

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$27
Eligible Amount	\$56,573

Norfolk County
Service Standard Calculation Sheet

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Bld'g Value (\$/ft ²)	Value/ft ² with land, site works, etc.
Delhi												
Delhi Community Centre and Arena, 1987	37,549	37,549	37,549	37,549	37,549	37,549	37,549	37,549	37,549	37,549	\$150	\$169
Vittoria & District Community Centre, 1988	10,904	10,904	10,904	10,904	10,904	10,904	10,904	10,904	10,904	10,904	\$127	\$142
Vittoria & District Community Centre, 2009 Expansion	-	673	673	673	673	673	673	673	673	673	\$146	\$161
Vittoria Town Hall, 1870	2,527	2,527	2,527	2,527	2,527	2,527	2,527	2,527	2,527	2,527	\$264	\$296
Walsh Community Hall, 1865	4,718	4,718	4,718	4,718	4,718	4,718	4,718	4,718	4,718	4,718	\$92	\$105
St. Williams and Area Community Centre, reconstructed 1997	4,277	4,277	4,277	4,277	4,277	4,277	4,277	4,277	4,277	4,277	\$138	\$155
Delhi Senior Citizens Centre	3,969	3,969	3,969	3,969	3,969	3,969	3,969	3,969	3,969	3,969	\$138	\$155
Women's Institute Hall Teeterville	4,399	4,399	4,399	4,399	4,399	4,399	4,399	4,399	4,399	4,399	\$69	\$79
Nanticoke												
Arena Tricenturena Waterford Church St., rebuilt 2003	39,344	39,344	39,344	39,344	39,344	39,344	39,344	39,344	39,344	39,344	\$138	\$159
Arena Port Dover St. George St.	35,023	35,023	35,023	35,023	35,023	35,023	35,023	35,023	35,023	35,023	\$150	\$219
Community Centre - Waterford Lions Church St.	6,712	6,712	6,712	6,712	6,712	6,712	6,712	6,712	6,712	6,712	\$103	\$135
Community Centre - P.D. Lions St. George St. hall/kitchen/common space	14,905	14,905	14,905	14,905	14,905	14,905	14,905	14,905	14,905	14,905	\$150	\$173
Community Centre - P.D. Kinsmen Scout hall/kitchenette	1,559	1,599	1,599	1,599	1,599	1,599	1,599	1,599	1,599	1,599	\$103	\$230
Community Centre - P.D. Kinsmen clubhouse meeting room/kitchennete	1,468	1,468	1,468	1,468	1,468	1,468	1,468	1,468	1,468	1,468	\$69	\$203
Township of Norfolk												
Arena, Langton	33,662	33,662	33,662	33,662	33,662	33,662	33,662	33,662	33,662	33,662	\$161	\$186
Community Centre - Langton, 1965, 1967, 1993	8,967	8,967	8,967	8,967	8,967	8,967	8,967	8,967	8,967	8,967	\$161	\$178
Community Centre - Walsingham, 1863	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	\$161	\$238
Community Centre - Port Rowan, 1955	11,168	11,168	11,168	11,168	11,168	11,168	11,168	11,168	11,168	11,168	\$127	\$165
Community Centre - Courtland, 1994	6,580	6,580	6,580	6,580	6,580	6,580	6,580	6,580	6,580	6,580	\$127	\$208

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Bld'g Value (\$/ft ²)	Value/ft ² with land, site works, etc.
Simcoe												
Recreation Centre, 1972, 1978, 2012	64,850	64,850	64,850	64,850	65,314	65,314	65,314	65,314	65,314	65,314	\$138	\$163
Adult Community Centre	24,999	24,999	24,999	24,999	24,999	24,999	24,999	24,999	24,999	24,999	\$150	\$194
Talbot Gardens, 1947, 1993	41,940	41,940	41,940	41,940	41,940	41,940	41,940	41,940	41,940	41,940	\$172	\$201
Total	361,862	362,575	362,575	362,575	363,039	363,039	363,039	363,039	363,039	363,039		

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Per Capita Standard	5.7224	5.7310	5.7346	5.7392	5.7413	5.7321	5.7149	5.7053	5.6686	5.6072

10 Year Average	2008-2017
Quantity Standard	5.7097
Quality Standard	\$178
Service Standard	\$1,014

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$1,014
Eligible Amount	\$2,099,953

**Norfolk County
Service Standard Calculation Sheet**

Service: Library Facilities
Unit Measure: ft² of building area

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Bld'g Value (\$/ft ²)	Value/ft ² with land, site works, etc.
Delhi	6,172	6,172	6,172	6,172	6,172	6,172	6,172	6,172	6,172	9,212	\$383	\$467
Waterford	6,982	6,982	6,982	6,982	6,982	6,982	6,982	6,982	6,982	6,982	\$383	\$482
Port Dover	4,320	4,320	4,320	4,320	4,320	4,320	8,800	8,800	8,800	8,800	\$383	\$484
Port Rowan	4,073	4,073	4,073	4,073	4,073	4,073	4,073	4,073	4,073	4,073	\$383	\$468
Simcoe	26,136	26,136	26,136	26,136	26,136	26,136	26,136	26,136	26,136	26,136	\$383	\$467
Total	47,683	47,683	47,683	47,683	47,683	47,683	52,163	52,163	52,163	55,203		

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Per Capita Standard	0.7540	0.7537	0.7542	0.7548	0.7541	0.7529	0.8211	0.8198	0.8145	0.8526

10 Year Average	2008-2017
Quantity Standard	0.7832
Quality Standard	\$471
Service Standard	\$369

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$369
Eligible Amount	\$763,996

**Norfolk County
Service Standard Calculation Sheet**

Service: Ambulance Facilities
Unit Measure: ft² of building area

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Bld'g Value (\$/ft ²)	Value/ft ² with land, site works, etc.
Culver Street, Simcoe	3,432	3,432	3,432	3,432	3,432	3,432	3,432	3,432	3,432	3,432	\$280	\$322
New Station, Delhi (County owned)	2,340	2,340	2,340	2,340	2,340	2,340	2,340	2,340	2,340	2,340	\$280	\$336
Port Rowan - Hwy #59 - NEW	2,969	2,969	2,969	2,969	2,969	2,969	2,969	2,969	2,969	2,969	\$280	\$320
Firehall, Langton	1,327	1,327	1,327	1,327	1,327	1,327	1,327	1,327	1,327	1,327	\$280	\$325
Port Dover Base - NEW	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	\$280	\$324
Firehall, Waterford	911	911	911	911	911	911	911	911	911	911	\$280	\$316
Total	13,939	13,939	13,939	13,939	13,939	13,939	13,939	13,939	13,939	13,939		

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Per Capita Standard	0.2204	0.2203	0.2205	0.2206	0.2204	0.2201	0.2194	0.2191	0.2176	0.2153

10 Year Average	2008-2017
Quantity Standard	0.2194
Quality Standard	\$324
Service Standard	\$71

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$71
Eligible Amount	\$147,239

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/item)
Ambulances											
Type 3	11	11	11	11	11	11	11	11	11	11	\$158,000
2008 Suburban Disaster Unit (ESU) - Simcoe	1	1	1	1	1	1	1	1	1	1	\$100,000
Other Vehicles											
2009 Ford Expedition EFR Unit - Simcoe	1	1	1	1	1	1	1	1	1	1	\$90,000
2010 Ford Expedition EFR Unit - Simcoe	1	1	1	1	1	1	1	1	1	1	\$90,000
2013 Dodge Caravan - EFR Unit - Simcoe	-	-	-	-	-	1	1	1	1	1	\$50,000
2013 John Deere Gator - Delhi	1	1	1	1	1	1	1	1	1	1	\$35,000
2013 Trailer - Delhi (for Gator/RAV)	1	1	1	1	1	1	1	1	1	1	\$5,000
2017 Ford Taurus - Command - Simcoe	-	-	-	-	-	-	-	-	-	1	\$35,000
Equipment											
Equipment (per Uniformed EMS Officer)	67	70	74	77	81	84	88	91	95	98	\$750
Total	83	86	90	93	97	101	105	108	112	116	

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Quantity Standard (per 1,000 population)	1.3125	1.3593	1.4235	1.4721	1.5340	1.5947	1.6529	1.6973	1.7488	1.7916

10 Year Average	2008-2017
Quantity Standard (per 1,000 population)	1.5587
Quality Standard	\$21,691
Service Standard	\$34

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$34
Eligible Amount	\$69,987

**Norfolk County
Service Standard Calculation Sheet**

Service: Marina Facilities
Unit Measure: ft² of building area

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Bld'g Value (\$/ft ²)	Value/ft ² with land, site works, etc.
PDHM-Office/Washrooms/Laundry Room	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	\$194	\$1,820
PDHM-Pavillion	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	\$111	\$1,650
PDHM-Gazebo 1	225	225	225	225	225	225	225	225	225	225	\$222	\$1,761
PDHM-Gazebo 2	225	225	225	225	225	225	225	225	225	225	\$56	\$1,595
PDHM-Gazebo 3	225	225	225	225	225	225	225	225	225	225	\$56	\$1,595
PDHM-Gazebo 4	225	225	225	225	225	225	225	225	225	225	\$56	\$1,595
PDHM-Gazebo 5	225	225	225	225	225	225	225	225	225	225	\$56	\$1,595
PDHM-Gazebo 6	225	225	225	225	225	225	225	225	225	225	\$56	\$1,595
PDHM-Gazebo 7	-	-	-	-	-	-	-	-	-	225	\$56	\$1,595
PDHM-Storage Shed	-	-	-	-	-	-	-	-	-	150	\$89	\$1,628
PDHM-Gas Dock Kiosk	400	400	400	400	400	400	400	400	400	450	\$56	\$1,595
PDHM-Lighthouse	100	100	100	100	100	100	100	100	100	100	\$222	\$1,761
PRHM-Office/Washrooms	290	290	290	290	290	290	290	290	290	290	\$194	\$739
PRHM-Pavillion	865	865	865	865	865	865	865	865	865	865	\$111	\$620
PRHM-Sun Shelter	-	-	-	-	20	20	20	20	20	20	\$56	\$565
PRHM-Storage Shed	-	-	-	-	100	100	100	100	100	100	\$89	\$598
Total	17,190	17,190	17,190	17,190	17,310	17,310	17,310	17,310	17,310	17,735		

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Per Capita Standard	0.2718	0.2717	0.2719	0.2721	0.2737	0.2733	0.2725	0.2720	0.2703	0.2739

10 Year Average	2008-2017
Quantity Standard	0.2723
Quality Standard	\$1,656
Service Standard	\$451

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$451
Eligible Amount	\$933,280

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/item)
Equipment											
PDHM-Dock 1	1	1	1	1	1	1	1	1	1	1	\$666,600
PDHM-Dock 2	1	1	1	1	1	1	1	1	1	1	\$777,700
PDHM-Dock 3	1	1	1	1	1	1	1	1	1	1	\$666,600
PDHM-Dock 4	1	1	1	1	1	1	1	1	1	1	\$666,600
PDHM-Dock 5	1	1	1	1	1	1	1	1	1	1	\$555,500
PDHM-Dock 6	1	1	1	1	1	1	1	1	1	1	\$444,400
PDHM-Gas Dock	1	1	1	1	1	1	1	1	1	1	\$666,600
PDHM-Boat Launch	1	1	1	1	1	1	1	1	1	1	\$444,400
PDHM-Breakwall	1	1	1	1	1	1	1	1	1	1	\$1,111,100
PDHM-Transient Docks	1	1	1	1	1	1	1	1	1	1	\$222,200
PDHM-Wet Hydrants	-	1	1	1	1	1	1	1	1	1	\$83,300
PDHM-Misc Office Equipment	1	1	1	1	1	1	1	1	1	1	\$22,200
PDHM-Misc Marina Equipment	1	1	1	1	1	1	1	1	1	1	\$55,600
PDHM-Laundry Facilities-Commercial Washer/Dryer	1	1	1	1	1	1	1	1	1	1	\$3,900
PDHM-Hydro Transformers (4)*	1	1	1	1	1	1	1	1	1	1	\$55,600
PDHM-Fencing	1	1	1	1	1	1	1	1	1	1	\$111,100
PDHM-Security Gate	1	1	1	1	1	1	1	1	1	1	\$22,200
PDHM-Gas Tanks - 4500L each	4	4	4	4	4	4	4	4	4	4	\$11,000
PDHM-Diesel Fuel Tanks - 4500L (1)*	1	1	1	1	1	1	1	1	1	1	\$33,300
PDHM-Dual Gas Pumps (2)*	1	1	1	1	1	1	1	1	1	1	\$15,600
PDHM-Single Diesel Pump (1)*	1	1	1	1	1	1	1	1	1	1	\$3,900
PDHM-Pump Out Machines (2)*	1	1	1	1	1	1	1	1	1	1	\$22,200
PDHM-Bicycles (3)*	-	-	-	-	-	-	-	-	-	1	\$1,000
PRHM-Main Pier	1	1	1	1	1	1	1	1	1	1	\$2,777,600
PRHM-East Slips	1	1	1	1	1	1	1	1	1	1	\$111,100
PRHM-West Slips (Old)	1	1	1	1	1	1	1	1	1	-	\$27,800
PRHM-West Slips (New)	-	-	-	-	-	-	-	-	-	1	\$34,385
PRHM-East Breakwall	1	1	1	1	1	1	1	1	1	1	\$500,000
PRHM-Transient Slips	-	1	1	1	1	1	1	1	1	1	\$11,100
PRHM-Boat Launch	1	1	1	1	1	1	1	1	1	1	\$222,200
PRHM-Misc Office Equipment	1	1	1	1	1	1	1	1	1	1	\$2,200
PRHM-Misc Marina Equipment	1	1	1	1	1	1	1	1	1	1	\$1,100

**Norfolk County
Service Standard Calculation Sheet**

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

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Value (\$/item)
Vehicles											
PDHM/PRHM-Jon Boat, Motor & Trailer	-	-	-	2	2	2	2	2	2	2	\$5,600
Weed Harvester & Conveyor	1	1	1	1	1	1	1	1	1	1	\$138,900
PDHM Utility Vehicle	1	1	1	1	1	1	1	1	1	1	\$16,700
PDHM Forklift	1	1	1	1	1	1	1	1	1	-	\$83,300
PDHM Forklift (2017)	-	-	-	-	-	-	-	-	-	1	\$90,900
PDHM Front End Diesel Tractor	1	1	1	1	1	1	1	1	1	1	\$27,800
PDHM John Deere Riding Mower	1	1	1	1	1	1	1	1	1	1	\$24,400
Total	36	38	38	40	40	40	40	40	40	41	

Population	63,236	63,266	63,226	63,175	63,233	63,334	63,525	63,632	64,044	64,745
Quantity Standard (per 1,000 population)	0.5693	0.6006	0.6010	0.6332	0.6326	0.6316	0.6297	0.6286	0.6246	0.6333

10 Year Average	2008-2017
Quantity Standard (per 1,000 population)	0.6185
Quality Standard	\$270,719
Service Standard	\$167

DC Amount (before deductions)	10 Year
Forecast Population	2,070
\$ per Capita	\$167
Eligible Amount	\$346,601

Appendix C – D.C. Cash Flow Calculation Tables

**Table C-1
Roads and Related Services
Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		SDE per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 1,810,304	\$ (400,508)	\$ (400,508)	69.8	\$ 1,370.00	\$ 95,647	\$ (304,861)	\$ 49,736	\$ 1,555,179
2019	\$ 1,555,179	\$ (505,468)	\$ (520,632)	139.6	\$ 1,793.20	\$ 250,386	\$ (270,246)	\$ 42,602	\$ 1,327,534
2020	\$ 1,327,534	\$ (703,468)	\$ (746,309)	139.6	\$ 1,847.00	\$ 257,897	\$ (488,412)	\$ 32,500	\$ 871,623
2021	\$ 871,623	\$ (581,361)	\$ (635,269)	139.6	\$ 1,902.41	\$ 265,634	\$ (369,635)	\$ 20,604	\$ 522,592
2022	\$ 522,592	\$ (555,446)	\$ (625,160)	139.6	\$ 1,959.48	\$ 273,603	\$ (351,556)	\$ 10,404	\$ 181,440
2023	\$ 181,440	\$ (306,928)	\$ (355,813)	139.6	\$ 2,018.27	\$ 281,811	\$ (74,002)	\$ 4,333	\$ 111,771
2024	\$ 111,771	\$ (241,954)	\$ (288,906)	139.6	\$ 2,078.81	\$ 290,266	\$ 1,360	\$ 3,374	\$ 116,505
2025	\$ 116,505	\$ (382,894)	\$ (470,911)	139.6	\$ 2,141.18	\$ 298,974	\$ (171,937)	\$ 500	\$ (54,932)
2026	\$ (54,932)	\$ (491,269)	\$ (622,324)	139.6	\$ 2,205.41	\$ 307,943	\$ (314,381)	\$ (9,546)	\$ (378,859)
2027	\$ (378,859)	\$ (66,123)	\$ (86,275)	139.6	\$ 2,271.58	\$ 317,181	\$ 230,906	\$ (11,853)	\$ (159,806)
2028	\$ (159,806)	\$ -	\$ -	69.8	\$ 2,339.72	\$ 163,348	\$ 163,348	\$ (3,542)	\$ 0

**Table C-2
Roads and Related Services
Non-Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 344,820	\$ (76,287)	\$ (76,287)	1,429	\$ 5.62	\$ 8,030	\$ (68,257)	\$ 9,321	\$ 285,883
2019	\$ 285,883	\$ (96,280)	\$ (99,168)	2,858	\$ 17.08	\$ 48,805	\$ (50,363)	\$ 7,821	\$ 243,341
2020	\$ 243,341	\$ (133,994)	\$ (142,154)	2,858	\$ 17.59	\$ 50,269	\$ (91,885)	\$ 5,922	\$ 157,378
2021	\$ 157,378	\$ (110,735)	\$ (121,004)	2,858	\$ 18.12	\$ 51,777	\$ (69,227)	\$ 3,683	\$ 91,834
2022	\$ 91,834	\$ (105,799)	\$ (119,078)	2,858	\$ 18.66	\$ 53,330	\$ (65,748)	\$ 1,769	\$ 27,855
2023	\$ 27,855	\$ (58,462)	\$ (67,774)	2,858	\$ 19.22	\$ 54,930	\$ (12,844)	\$ 643	\$ 15,654
2024	\$ 15,654	\$ (46,086)	\$ (55,030)	2,858	\$ 19.80	\$ 56,578	\$ 1,548	\$ 493	\$ 17,695
2025	\$ 17,695	\$ (72,932)	\$ (89,697)	2,858	\$ 20.39	\$ 58,275	\$ (31,422)	\$ (43)	\$ (13,771)
2026	\$ (13,771)	\$ (93,575)	\$ (118,538)	2,858	\$ 21.00	\$ 60,024	\$ (58,514)	\$ (1,936)	\$ (74,221)
2027	\$ (74,221)	\$ (12,595)	\$ (16,433)	2,858	\$ 21.63	\$ 61,824	\$ 45,391	\$ (2,319)	\$ (31,149)
2028	\$ (31,149)	\$ -	\$ -	1,429	\$ 22.28	\$ 31,839	\$ 31,839	\$ (690)	\$ 0

**Table C-3
Fire Services
Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		SDE per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 551,671	\$ -	\$ -	69.8	\$ 1,093.00	\$ 76,308	\$ 76,308	\$ 17,695	\$ 645,674
2019	\$ 645,674	\$ (744,425)	\$ (766,757)	139.6	\$ 645.01	\$ 90,063	\$ (676,694)	\$ 8,987	\$ (22,033)
2020	\$ (22,033)	\$ (62,265)	\$ (66,057)	139.6	\$ 664.36	\$ 92,765	\$ 26,708	\$ (426)	\$ 4,250
2021	\$ 4,250	\$ (288,683)	\$ (315,451)	139.6	\$ 684.29	\$ 95,548	\$ (219,904)	\$ (4,788)	\$ (220,442)
2022	\$ (220,442)	\$ -	\$ -	139.6	\$ 704.82	\$ 98,414	\$ 98,414	\$ (7,706)	\$ (129,734)
2023	\$ (129,734)	\$ (351,120)	\$ (407,044)	139.6	\$ 725.97	\$ 101,367	\$ (305,677)	\$ (12,716)	\$ (448,127)
2024	\$ (448,127)	\$ -	\$ -	139.6	\$ 747.74	\$ 104,408	\$ 104,408	\$ (17,817)	\$ (361,535)
2025	\$ (361,535)	\$ -	\$ -	139.6	\$ 770.18	\$ 107,540	\$ 107,540	\$ (13,849)	\$ (267,845)
2026	\$ (267,845)	\$ -	\$ -	139.6	\$ 793.28	\$ 110,766	\$ 110,766	\$ (9,561)	\$ (166,639)
2027	\$ (166,639)	\$ -	\$ -	139.6	\$ 817.08	\$ 114,089	\$ 114,089	\$ (4,932)	\$ (57,482)
2028	\$ (57,482)	\$ -	\$ -	69.8	\$ 841.59	\$ 58,756	\$ 58,756	\$ (1,274)	\$ -

**Table C-4
Fire Services
Non-Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 105,080	\$ -	\$ -	1,429	\$ 5.44	\$ 7,773	\$ 7,773	\$ 3,269	\$ 116,122
2019	\$ 116,122	\$ (141,795)	\$ (146,049)	2,858	\$ 6.28	\$ 17,933	\$ (128,116)	\$ 1,472	\$ (10,522)
2020	\$ (10,522)	\$ (11,860)	\$ (12,582)	2,858	\$ 6.46	\$ 18,471	\$ 5,888	\$ (341)	\$ (4,975)
2021	\$ (4,975)	\$ (54,987)	\$ (60,086)	2,858	\$ 6.66	\$ 19,025	\$ (41,061)	\$ (1,148)	\$ (47,184)
2022	\$ (47,184)	\$ -	\$ -	2,858	\$ 6.86	\$ 19,595	\$ 19,595	\$ (1,682)	\$ (29,271)
2023	\$ (29,271)	\$ (66,880)	\$ (77,532)	2,858	\$ 7.06	\$ 20,183	\$ (57,349)	\$ (2,608)	\$ (89,227)
2024	\$ (89,227)	\$ -	\$ -	2,858	\$ 7.27	\$ 20,789	\$ 20,789	\$ (3,547)	\$ (71,986)
2025	\$ (71,986)	\$ -	\$ -	2,858	\$ 7.49	\$ 21,412	\$ 21,412	\$ (2,758)	\$ (53,331)
2026	\$ (53,331)	\$ -	\$ -	2,858	\$ 7.72	\$ 22,055	\$ 22,055	\$ (1,904)	\$ (33,180)
2027	\$ (33,180)	\$ -	\$ -	2,858	\$ 7.95	\$ 22,717	\$ 22,717	\$ (982)	\$ (11,445)
2028	\$ (11,445)	\$ -	\$ -	1,429	\$ 8.19	\$ 11,699	\$ 11,699	\$ (254)	\$ 0

**Table C-5
Parking Services
Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		SDE per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 259,226	\$ (40,586)	\$ (40,586)	69.8	\$ -	\$ -	\$ (40,586)	\$ 7,168	\$ 225,808
2019	\$ 225,808	\$ (40,586)	\$ (41,804)	139.6	\$ 142.40	\$ 19,884	\$ (21,920)	\$ 6,445	\$ 210,334
2020	\$ 210,334	\$ (40,586)	\$ (43,058)	139.6	\$ 146.67	\$ 20,480	\$ (22,578)	\$ 5,971	\$ 193,727
2021	\$ 193,727	\$ (40,586)	\$ (44,349)	139.6	\$ 151.07	\$ 21,094	\$ (23,255)	\$ 5,463	\$ 175,935
2022	\$ 175,935	\$ (40,586)	\$ (45,680)	139.6	\$ 155.61	\$ 21,727	\$ (23,953)	\$ 4,919	\$ 156,902
2023	\$ 156,902	\$ (40,586)	\$ (47,050)	139.6	\$ 160.27	\$ 22,379	\$ (24,671)	\$ 4,337	\$ 136,567
2024	\$ 136,567	\$ (40,586)	\$ (48,462)	139.6	\$ 165.08	\$ 23,050	\$ (25,411)	\$ 3,716	\$ 114,872
2025	\$ 114,872	\$ (40,586)	\$ (49,916)	139.6	\$ 170.03	\$ 23,742	\$ (26,174)	\$ 3,054	\$ 91,752
2026	\$ 91,752	\$ (40,586)	\$ (51,413)	139.6	\$ 175.14	\$ 24,454	\$ (26,959)	\$ 2,348	\$ 67,141
2027	\$ 67,141	\$ (40,586)	\$ (52,955)	139.6	\$ 180.39	\$ 25,188	\$ (27,768)	\$ 1,598	\$ 40,971
2028	\$ 40,971	\$ (40,586)	\$ (54,544)	69.8	\$ 185.80	\$ 12,972	\$ (41,572)	\$ 601	\$ -

**Table C-6
Parking Services
Non-Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 49,376	\$ (7,731)	\$ (7,731)	1,429	\$ -	\$ -	\$ (7,731)	\$ 1,365	\$ 43,011
2019	\$ 43,011	\$ (7,731)	\$ (7,963)	2,858	\$ 1.33	\$ 3,787	\$ (4,175)	\$ 1,228	\$ 40,064
2020	\$ 40,064	\$ (7,731)	\$ (8,201)	2,858	\$ 1.37	\$ 3,901	\$ (4,300)	\$ 1,137	\$ 36,900
2021	\$ 36,900	\$ (7,731)	\$ (8,448)	2,858	\$ 1.41	\$ 4,018	\$ (4,430)	\$ 1,041	\$ 33,512
2022	\$ 33,512	\$ (7,731)	\$ (8,701)	2,858	\$ 1.45	\$ 4,139	\$ (4,562)	\$ 937	\$ 29,886
2023	\$ 29,886	\$ (7,731)	\$ (8,962)	2,858	\$ 1.49	\$ 4,263	\$ (4,699)	\$ 826	\$ 26,013
2024	\$ 26,013	\$ (7,731)	\$ (9,231)	2,858	\$ 1.54	\$ 4,391	\$ (4,840)	\$ 708	\$ 21,880
2025	\$ 21,880	\$ (7,731)	\$ (9,508)	2,858	\$ 1.58	\$ 4,522	\$ (4,985)	\$ 582	\$ 17,477
2026	\$ 17,477	\$ (7,731)	\$ (9,793)	2,858	\$ 1.63	\$ 4,658	\$ (5,135)	\$ 447	\$ 12,789
2027	\$ 12,789	\$ (7,731)	\$ (10,087)	2,858	\$ 1.68	\$ 4,798	\$ (5,289)	\$ 304	\$ 7,804
2028	\$ 7,804	\$ (7,731)	\$ (10,389)	1,429	\$ 1.73	\$ 2,471	\$ (7,919)	\$ 114	\$ (0)

**Table C-7
Parks and Recreation Services
Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		SDE per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 1,600,707	\$ (3,137)	\$ (3,137)	69.8	\$ 1,361.00	\$ 95,019	\$ 91,882	\$ 49,399	\$ 1,741,988
2019	\$ 1,741,988	\$ (86,925)	\$ (89,533)	139.6	\$ 1,675.33	\$ 233,927	\$ 144,394	\$ 54,426	\$ 1,940,807
2020	\$ 1,940,807	\$ (500,162)	\$ (530,622)	139.6	\$ 1,725.59	\$ 240,945	\$ (289,677)	\$ 53,879	\$ 1,705,009
2021	\$ 1,705,009	\$ (61,412)	\$ (67,107)	139.6	\$ 1,777.36	\$ 248,173	\$ 181,066	\$ 53,866	\$ 1,939,942
2022	\$ 1,939,942	\$ (142,412)	\$ (160,286)	139.6	\$ 1,830.68	\$ 255,618	\$ 95,332	\$ 59,628	\$ 2,094,903
2023	\$ 2,094,903	\$ (1,537,305)	\$ (1,782,158)	139.6	\$ 1,885.60	\$ 263,287	\$ (1,518,871)	\$ 40,064	\$ 616,096
2024	\$ 616,096	\$ (1,342,905)	\$ (1,603,499)	139.6	\$ 1,942.17	\$ 271,186	\$ (1,332,313)	\$ (6,873)	\$ (723,090)
2025	\$ (723,090)	\$ (61,412)	\$ (75,529)	139.6	\$ 2,000.43	\$ 279,321	\$ 203,792	\$ (27,954)	\$ (547,252)
2026	\$ (547,252)	\$ (40,500)	\$ (51,304)	139.6	\$ 2,060.44	\$ 287,701	\$ 236,397	\$ (19,307)	\$ (330,163)
2027	\$ (330,163)	\$ (40,500)	\$ (52,843)	139.6	\$ 2,122.26	\$ 296,332	\$ 243,489	\$ (9,379)	\$ (96,053)
2028	\$ (96,053)	\$ (40,500)	\$ (54,429)	69.8	\$ 2,185.93	\$ 152,611	\$ 98,182	\$ (2,129)	\$ (0)

**Table C-8
Parks and Recreation Services
Non-Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ -	\$ -	\$ -	15,380	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2021	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2022	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2023	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2024	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2025	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2026	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2027	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2028	\$ -	\$ -	\$ -	15,380	\$ -	\$ -	\$ -	\$ -	\$ -

**Table C-9
Library Services
Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		SDE per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ (1,012,350)	\$ -	\$ -	69.8	\$ 452.00	\$ 31,556	\$ 31,556	\$ (44,846)	\$ (1,025,639)
2019	\$ (1,025,639)	\$ -	\$ -	139.6	\$ 897.61	\$ 125,334	\$ 125,334	\$ (43,334)	\$ (943,639)
2020	\$ (943,639)	\$ -	\$ -	139.6	\$ 924.54	\$ 129,094	\$ 129,094	\$ (39,559)	\$ (854,105)
2021	\$ (854,105)	\$ (45,000)	\$ (49,173)	139.6	\$ 952.27	\$ 132,966	\$ 83,794	\$ (36,549)	\$ (806,861)
2022	\$ (806,861)	\$ (27,512)	\$ (30,965)	139.6	\$ 980.84	\$ 136,955	\$ 105,991	\$ (33,924)	\$ (734,794)
2023	\$ (734,794)	\$ -	\$ -	139.6	\$ 1,010.27	\$ 141,064	\$ 141,064	\$ (29,892)	\$ (623,622)
2024	\$ (623,622)	\$ -	\$ -	139.6	\$ 1,040.57	\$ 145,296	\$ 145,296	\$ (24,794)	\$ (503,120)
2025	\$ (503,120)	\$ -	\$ -	139.6	\$ 1,071.79	\$ 149,655	\$ 149,655	\$ (19,273)	\$ (372,738)
2026	\$ (372,738)	\$ -	\$ -	139.6	\$ 1,103.95	\$ 154,144	\$ 154,144	\$ (13,305)	\$ (231,898)
2027	\$ (231,898)	\$ -	\$ -	139.6	\$ 1,137.06	\$ 158,769	\$ 158,769	\$ (6,863)	\$ (79,993)
2028	\$ (79,993)	\$ -	\$ -	69.8	\$ 1,171.18	\$ 81,766	\$ 81,766	\$ (1,773)	\$ 0

**Table C-10
Library Services
Non-Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ -	\$ -	\$ -	15,380	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2021	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2022	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2023	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2024	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2025	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2026	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2027	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2028	\$ -	\$ -	\$ -	15,380	\$ -	\$ -	\$ -	\$ -	\$ -

**Table C-11
Administration
Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		SDE per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 166,021	\$ (37,800)	\$ (37,800)	69.8	\$ 143.00	\$ 9,984	\$ (27,816)	\$ 4,563	\$ 142,768
2019	\$ 142,768	\$ (132,300)	\$ (136,269)	139.6	\$ 86.43	\$ 12,068	\$ (124,201)	\$ 2,420	\$ 20,988
2020	\$ 20,988	\$ -	\$ -	139.6	\$ 89.02	\$ 12,430	\$ 12,430	\$ 816	\$ 34,234
2021	\$ 34,234	\$ (29,408)	\$ (32,135)	139.6	\$ 91.69	\$ 12,803	\$ (19,332)	\$ 737	\$ 15,638
2022	\$ 15,638	\$ -	\$ -	139.6	\$ 94.44	\$ 13,187	\$ 13,187	\$ 667	\$ 29,492
2023	\$ 29,492	\$ (88,187)	\$ (102,233)	139.6	\$ 97.28	\$ 13,583	\$ (88,651)	\$ (889)	\$ (60,047)
2024	\$ (60,047)	\$ -	\$ -	139.6	\$ 100.19	\$ 13,990	\$ 13,990	\$ (2,387)	\$ (48,444)
2025	\$ (48,444)	\$ -	\$ -	139.6	\$ 103.20	\$ 14,410	\$ 14,410	\$ (1,856)	\$ (35,890)
2026	\$ (35,890)	\$ -	\$ -	139.6	\$ 106.30	\$ 14,842	\$ 14,842	\$ (1,281)	\$ (22,329)
2027	\$ (22,329)	\$ -	\$ -	139.6	\$ 109.49	\$ 15,287	\$ 15,287	\$ (661)	\$ (7,702)
2028	\$ (7,702)	\$ -	\$ -	69.8	\$ 112.77	\$ 7,873	\$ 7,873	\$ (171)	\$ 0

**Table C-12
Administration
Non-Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 31,623	\$ (7,200)	\$ (7,200)	1,429	\$ 0.72	\$ 1,029	\$ (6,171)	\$ 856	\$ 26,308
2019	\$ 26,308	\$ (25,200)	\$ (25,956)	2,858	\$ 0.84	\$ 2,395	\$ (23,561)	\$ 436	\$ 3,183
2020	\$ 3,183	\$ -	\$ -	2,858	\$ 0.86	\$ 2,467	\$ 2,467	\$ 132	\$ 5,782
2021	\$ 5,782	\$ (5,602)	\$ (6,121)	2,858	\$ 0.89	\$ 2,541	\$ (3,580)	\$ 120	\$ 2,322
2022	\$ 2,322	\$ -	\$ -	2,858	\$ 0.92	\$ 2,617	\$ 2,617	\$ 109	\$ 5,048
2023	\$ 5,048	\$ (16,798)	\$ (19,473)	2,858	\$ 0.94	\$ 2,696	\$ (16,777)	\$ (188)	\$ (11,917)
2024	\$ (11,917)	\$ -	\$ -	2,858	\$ 0.97	\$ 2,777	\$ 2,777	\$ (474)	\$ (9,615)
2025	\$ (9,615)	\$ -	\$ -	2,858	\$ 1.00	\$ 2,860	\$ 2,860	\$ (368)	\$ (7,123)
2026	\$ (7,123)	\$ -	\$ -	2,858	\$ 1.03	\$ 2,946	\$ 2,946	\$ (254)	\$ (4,432)
2027	\$ (4,432)	\$ -	\$ -	2,858	\$ 1.06	\$ 3,034	\$ 3,034	\$ (131)	\$ (1,529)
2028	\$ (1,529)	\$ -	\$ -	1,429	\$ 1.09	\$ 1,563	\$ 1,563	\$ (34)	\$ (0)

**Table C-13
Ambulance Services
Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		SDE per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 58,565	\$ (95,743)	\$ (95,743)	69.8	\$ 64.00	\$ 4,468	\$ (91,274)	\$ 143	\$ (32,567)
2019	\$ (32,567)	\$ (121,188)	\$ (124,824)	139.6	\$ 126.67	\$ 17,687	\$ (107,137)	\$ (3,876)	\$ (143,580)
2020	\$ (143,580)	\$ -	\$ -	139.6	\$ 130.47	\$ 18,218	\$ 18,218	\$ (6,051)	\$ (131,414)
2021	\$ (131,414)	\$ -	\$ -	139.6	\$ 134.39	\$ 18,764	\$ 18,764	\$ (5,491)	\$ (118,141)
2022	\$ (118,141)	\$ -	\$ -	139.6	\$ 138.42	\$ 19,327	\$ 19,327	\$ (4,881)	\$ (103,695)
2023	\$ (103,695)	\$ -	\$ -	139.6	\$ 142.57	\$ 19,907	\$ 19,907	\$ (4,218)	\$ (88,006)
2024	\$ (88,006)	\$ -	\$ -	139.6	\$ 146.85	\$ 20,504	\$ 20,504	\$ (3,499)	\$ (71,001)
2025	\$ (71,001)	\$ -	\$ -	139.6	\$ 151.25	\$ 21,119	\$ 21,119	\$ (2,720)	\$ (52,601)
2026	\$ (52,601)	\$ -	\$ -	139.6	\$ 155.79	\$ 21,753	\$ 21,753	\$ (1,878)	\$ (32,726)
2027	\$ (32,726)	\$ -	\$ -	139.6	\$ 160.46	\$ 22,406	\$ 22,406	\$ (969)	\$ (11,289)
2028	\$ (11,289)	\$ -	\$ -	69.8	\$ 165.28	\$ 11,539	\$ 11,539	\$ (250)	\$ (0)

**Table C-14
Ambulance Services
Non-Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 11,155	\$ (18,237)	\$ (18,237)	1,429	\$ 0.33	\$ 472	\$ (17,765)	\$ 19	\$ (6,591)
2019	\$ (6,591)	\$ (23,083)	\$ (23,776)	2,858	\$ 1.19	\$ 3,413	\$ (20,363)	\$ (755)	\$ (27,709)
2020	\$ (27,709)	\$ -	\$ -	2,858	\$ 1.23	\$ 3,516	\$ 3,516	\$ (1,168)	\$ (25,361)
2021	\$ (25,361)	\$ -	\$ -	2,858	\$ 1.27	\$ 3,621	\$ 3,621	\$ (1,060)	\$ (22,799)
2022	\$ (22,799)	\$ -	\$ -	2,858	\$ 1.31	\$ 3,730	\$ 3,730	\$ (942)	\$ (20,012)
2023	\$ (20,012)	\$ -	\$ -	2,858	\$ 1.34	\$ 3,842	\$ 3,842	\$ (814)	\$ (16,984)
2024	\$ (16,984)	\$ -	\$ -	2,858	\$ 1.38	\$ 3,957	\$ 3,957	\$ (675)	\$ (13,702)
2025	\$ (13,702)	\$ -	\$ -	2,858	\$ 1.43	\$ 4,076	\$ 4,076	\$ (525)	\$ (10,151)
2026	\$ (10,151)	\$ -	\$ -	2,858	\$ 1.47	\$ 4,198	\$ 4,198	\$ (362)	\$ (6,316)
2027	\$ (6,316)	\$ -	\$ -	2,858	\$ 1.51	\$ 4,324	\$ 4,324	\$ (187)	\$ (2,179)
2028	\$ (2,179)	\$ -	\$ -	1,429	\$ 1.56	\$ 2,227	\$ 2,227	\$ (48)	\$ (0)

**Table C-15
Marinas
Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		SDE per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 349,956	\$ (128,250)	\$ (128,250)	69.8	\$ 397.00	\$ 27,717	\$ (100,533)	\$ 8,991	\$ 258,413
2019	\$ 258,413	\$ (742)	\$ (764)	139.6	\$ 411.78	\$ 57,496	\$ 56,732	\$ 8,603	\$ 323,749
2020	\$ 323,749	\$ -	\$ -	139.6	\$ 424.13	\$ 59,221	\$ 59,221	\$ 10,601	\$ 393,571
2021	\$ 393,571	\$ (765,000)	\$ (835,936)	139.6	\$ 436.85	\$ 60,998	\$ (774,938)	\$ (2,677)	\$ (384,044)
2022	\$ (384,044)	\$ -	\$ -	139.6	\$ 449.96	\$ 62,828	\$ 62,828	\$ (15,868)	\$ (337,085)
2023	\$ (337,085)	\$ -	\$ -	139.6	\$ 463.46	\$ 64,713	\$ 64,713	\$ (13,713)	\$ (286,085)
2024	\$ (286,085)	\$ -	\$ -	139.6	\$ 477.36	\$ 66,654	\$ 66,654	\$ (11,374)	\$ (230,805)
2025	\$ (230,805)	\$ -	\$ -	139.6	\$ 491.68	\$ 68,654	\$ 68,654	\$ (8,842)	\$ (170,993)
2026	\$ (170,993)	\$ -	\$ -	139.6	\$ 506.43	\$ 70,713	\$ 70,713	\$ (6,104)	\$ (106,383)
2027	\$ (106,383)	\$ -	\$ -	139.6	\$ 521.63	\$ 72,835	\$ 72,835	\$ (3,148)	\$ (36,696)
2028	\$ (36,696)	\$ -	\$ -	69.8	\$ 537.27	\$ 37,510	\$ 37,510	\$ (813)	\$ -

**Table C-16
Marinas
Non-Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ -	\$ -	\$ -	15,380	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2021	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2022	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2023	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2024	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2025	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2026	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2027	\$ -	\$ -	\$ -	30,760	\$ -	\$ -	\$ -	\$ -	\$ -
2028	\$ -	\$ -	\$ -	15,380	\$ -	\$ -	\$ -	\$ -	\$ -

Table C-17
Water Services
Residential Cashflow

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		Debt Carrying Costs (P&I) 4.5%; 20 Yr Term	SDE per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Debenture Financing Requirement	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)								
2018	\$ 1,392,156	\$ (38,378)	\$ (38,378)	\$ -	65.5	\$ 5,782.00	\$ 378,817	\$ 340,439		\$ 46,871	\$ 1,779,467
2019	\$ 1,779,467	\$ (108,222)	\$ (111,469)	\$ -	131.0	\$ 7,166.72	\$ 939,078	\$ 827,610		\$ 65,798	\$ 2,672,875
2020	\$ 2,672,875	\$ (2,829,396)	\$ (3,001,707)	\$ -	131.0	\$ 7,381.72	\$ 967,251	\$ (2,034,456)		\$ 49,669	\$ 688,088
2021	\$ 688,088	\$ (832,083)	\$ (909,240)	\$ -	131.0	\$ 7,603.18	\$ 996,268	\$ 87,029		\$ 21,948	\$ 797,065
2022	\$ 797,065	\$ (894,268)	\$ (1,006,507)	\$ -	131.0	\$ 7,831.27	\$ 1,026,156	\$ 19,649		\$ 24,207	\$ 840,921
2023	\$ 840,921	\$ (8,842,958)	\$ (10,251,412)	\$ -	131.0	\$ 8,066.21	\$ 1,056,941	\$ (9,194,471)		\$ (175,341)	\$ (8,528,891)
2024	\$ (8,528,891)	\$ (2,186,399)	\$ (2,610,675)	\$ -	131.0	\$ 8,308.20	\$ 1,088,649	\$ (1,522,026)		\$ (418,046)	\$ (10,468,962)
2025	\$ (10,468,962)	\$ (1,808,479)	\$ (2,224,201)	\$ -	131.0	\$ 8,557.44	\$ 1,121,309	\$ (1,102,893)		\$ (495,918)	\$ (12,067,773)
2026	\$ (12,067,773)	\$ (2,164,683)	\$ (2,742,156)	\$ -	131.0	\$ 8,814.16	\$ 1,154,948	\$ (1,587,208)		\$ (578,762)	\$ (14,233,743)
2027	\$ (14,233,743)	\$ (1,395,466)	\$ (1,820,766)	\$ -	131.0	\$ 9,078.59	\$ 1,189,596	\$ (631,170)		\$ (654,720)	\$ (15,519,632)
2028	\$ (15,519,632)	\$ (38,448)	\$ (51,671)	\$ -	127.0	\$ 9,350.95	\$ 1,187,159	\$ 1,135,489		\$ (672,835)	\$ (15,056,979)
2029	\$ (15,056,979)	\$ (38,448)	\$ (53,221)	\$ -	122.9	\$ 9,631.48	\$ 1,183,506	\$ 1,130,285		\$ (652,133)	\$ (14,578,826)
2030	\$ (14,578,826)	\$ (38,448)	\$ (54,818)	\$ -	122.9	\$ 9,920.42	\$ 1,219,011	\$ 1,164,193		\$ (629,853)	\$ (14,044,486)
2031	\$ (14,044,486)	\$ (119,006)	\$ (174,764)	\$ -	122.9	\$ 10,218.03	\$ 1,255,581	\$ 1,080,817		\$ (607,683)	\$ (13,571,353)
2032	\$ (13,571,353)	\$ (25,631)	\$ (38,769)	\$ -	122.9	\$ 10,524.57	\$ 1,293,249	\$ 1,254,479		\$ (582,485)	\$ (12,899,358)
2033	\$ (12,899,358)	\$ (25,631)	\$ (39,932)	\$ -	122.9	\$ 10,840.31	\$ 1,332,046	\$ 1,292,114		\$ (551,399)	\$ (12,158,643)
2034	\$ (12,158,643)	\$ (25,631)	\$ (41,130)	\$ -	122.9	\$ 11,165.52	\$ 1,372,007	\$ 1,330,877		\$ (517,194)	\$ (11,344,960)
2035	\$ (11,344,960)	\$ (25,631)	\$ (42,364)	\$ -	122.9	\$ 11,500.49	\$ 1,413,168	\$ 1,370,804		\$ (479,680)	\$ (10,453,837)
2036	\$ (10,453,837)	\$ (119,006)	\$ (202,600)	\$ -	153.4	\$ 11,845.50	\$ 1,817,639	\$ 1,615,039		\$ (434,084)	\$ (9,272,882)
2037	\$ (9,272,882)	\$ (25,631)	\$ (44,944)	\$ -	184.0	\$ 12,200.86	\$ 2,245,106	\$ 2,200,162		\$ (367,776)	\$ (7,440,495)
2038	\$ (7,440,495)	\$ (25,398)	\$ (45,872)	\$ -	184.0	\$ 12,566.89	\$ 2,312,460	\$ 2,266,588		\$ (283,824)	\$ (5,457,732)
2039	\$ (5,457,732)	\$ (25,398)	\$ (47,248)	\$ -	184.0	\$ 12,943.90	\$ 2,381,833	\$ 2,334,586		\$ (193,070)	\$ (3,316,216)
2040	\$ (3,316,216)	\$ (25,398)	\$ (48,665)	\$ -	184.0	\$ 13,332.21	\$ 2,453,288	\$ 2,404,623		\$ (95,126)	\$ (1,006,718)
2041	\$ (1,006,718)	\$ (118,773)	\$ (234,409)	\$ -	92.0	\$ 13,732.18	\$ 1,263,444	\$ 1,029,035		\$ (22,316)	\$ (0)

**Table C-18
Water Services
Non-Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 285,140	\$ (7,860)	\$ (7,860)	1,206	\$ 32.47	\$ 39,170	\$ 31,310	\$ 9,024	\$ 325,474
2019	\$ 325,474	\$ (22,166)	\$ (22,831)	2,413	\$ 52.91	\$ 127,645	\$ 104,814	\$ 11,336	\$ 441,625
2020	\$ 441,625	\$ (579,515)	\$ (614,807)	2,413	\$ 54.49	\$ 131,475	\$ (483,333)	\$ 5,686	\$ (36,022)
2021	\$ (36,022)	\$ (170,427)	\$ (186,230)	2,413	\$ 56.13	\$ 135,419	\$ (50,811)	\$ (2,764)	\$ (89,598)
2022	\$ (89,598)	\$ (183,163)	\$ (206,152)	2,413	\$ 57.81	\$ 139,481	\$ (66,671)	\$ (5,532)	\$ (161,800)
2023	\$ (161,800)	\$ (1,811,208)	\$ (2,099,687)	2,413	\$ 59.55	\$ 143,666	\$ (1,956,021)	\$ (51,291)	\$ (2,169,113)
2024	\$ (2,169,113)	\$ (447,817)	\$ (534,717)	2,413	\$ 61.33	\$ 147,976	\$ (386,741)	\$ (106,312)	\$ (2,662,165)
2025	\$ (2,662,165)	\$ (370,411)	\$ (455,559)	2,413	\$ 63.17	\$ 152,415	\$ (303,144)	\$ (126,618)	\$ (3,091,928)
2026	\$ (3,091,928)	\$ (443,369)	\$ (561,646)	2,413	\$ 65.07	\$ 156,987	\$ (404,659)	\$ (148,242)	\$ (3,644,828)
2027	\$ (3,644,828)	\$ (285,818)	\$ (372,928)	2,413	\$ 67.02	\$ 161,697	\$ (211,231)	\$ (168,770)	\$ (4,024,829)
2028	\$ (4,024,829)	\$ (7,875)	\$ (10,583)	2,701	\$ 69.03	\$ 186,445	\$ 175,861	\$ (177,160)	\$ (4,026,128)
2029	\$ (4,026,128)	\$ (7,875)	\$ (10,901)	2,989	\$ 71.10	\$ 212,531	\$ 201,631	\$ (176,639)	\$ (4,001,136)
2030	\$ (4,001,136)	\$ (7,875)	\$ (11,228)	2,989	\$ 73.23	\$ 218,907	\$ 207,680	\$ (175,378)	\$ (3,968,835)
2031	\$ (3,968,835)	\$ (24,375)	\$ (35,795)	2,989	\$ 75.43	\$ 225,475	\$ 189,680	\$ (174,330)	\$ (3,953,485)
2032	\$ (3,953,485)	\$ (5,250)	\$ (7,941)	2,989	\$ 77.69	\$ 232,239	\$ 224,298	\$ (172,860)	\$ (3,902,047)
2033	\$ (3,902,047)	\$ (5,250)	\$ (8,179)	2,989	\$ 80.02	\$ 239,206	\$ 231,027	\$ (170,394)	\$ (3,841,414)
2034	\$ (3,841,414)	\$ (5,250)	\$ (8,424)	2,989	\$ 82.43	\$ 246,382	\$ 237,958	\$ (167,510)	\$ (3,770,965)
2035	\$ (3,770,965)	\$ (5,250)	\$ (8,677)	2,989	\$ 84.90	\$ 253,774	\$ 245,097	\$ (164,179)	\$ (3,690,048)
2036	\$ (3,690,048)	\$ (24,375)	\$ (41,496)	5,946	\$ 87.45	\$ 519,910	\$ 478,414	\$ (155,288)	\$ (3,366,922)
2037	\$ (3,366,922)	\$ (5,250)	\$ (9,205)	8,902	\$ 90.07	\$ 801,786	\$ 792,581	\$ (133,678)	\$ (2,708,019)
2038	\$ (2,708,019)	\$ (5,202)	\$ (9,395)	8,902	\$ 92.77	\$ 825,840	\$ 816,445	\$ (103,491)	\$ (1,995,065)
2039	\$ (1,995,065)	\$ (5,202)	\$ (9,677)	8,902	\$ 95.55	\$ 850,615	\$ 840,938	\$ (70,857)	\$ (1,224,984)
2040	\$ (1,224,984)	\$ (5,202)	\$ (9,968)	8,902	\$ 98.42	\$ 876,134	\$ 866,166	\$ (35,636)	\$ (394,453)
2041	\$ (394,453)	\$ (24,327)	\$ (48,011)	4,451	\$ 101.37	\$ 451,209	\$ 403,197	\$ (8,744)	\$ (0)

**Table C-19
Wastewater Services
Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		SDE per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 2,420,961	\$ (1,686,145)	\$ (1,686,145)	65.5	\$ 3,390.00	\$ 222,101	\$ (1,464,044)	\$ 50,668	\$ 1,007,585
2019	\$ 1,007,585	\$ (5,592,211)	\$ (5,759,978)	131.0	\$ 4,261.03	\$ 558,337	\$ (5,201,641)	\$ (79,252)	\$ (4,273,308)
2020	\$ (4,273,308)	\$ (2,288,379)	\$ (2,427,741)	131.0	\$ 4,388.87	\$ 575,087	\$ (1,852,654)	\$ (233,984)	\$ (6,359,946)
2021	\$ (6,359,946)	\$ (904,517)	\$ (988,390)	131.0	\$ 4,520.53	\$ 592,340	\$ (396,051)	\$ (295,109)	\$ (7,051,105)
2022	\$ (7,051,105)	\$ (275,444)	\$ (310,015)	131.0	\$ 4,656.15	\$ 610,110	\$ 300,095	\$ (310,548)	\$ (7,061,558)
2023	\$ (7,061,558)	\$ (286,251)	\$ (331,844)	131.0	\$ 4,795.83	\$ 628,413	\$ 296,569	\$ (311,097)	\$ (7,076,086)
2024	\$ (7,076,086)	\$ (243,784)	\$ (291,091)	131.0	\$ 4,939.71	\$ 647,265	\$ 356,175	\$ (310,410)	\$ (7,030,321)
2025	\$ (7,030,321)	\$ (338,679)	\$ (416,532)	131.0	\$ 5,087.90	\$ 666,683	\$ 250,151	\$ (310,736)	\$ (7,090,906)
2026	\$ (7,090,906)	\$ (456,225)	\$ (577,932)	131.0	\$ 5,240.53	\$ 686,684	\$ 108,752	\$ (316,644)	\$ (7,298,797)
2027	\$ (7,298,797)	\$ (293,422)	\$ (382,849)	131.0	\$ 5,397.75	\$ 707,284	\$ 324,435	\$ (321,146)	\$ (7,295,508)
2028	\$ (7,295,508)	\$ (238,541)	\$ (320,579)	127.0	\$ 5,559.68	\$ 705,836	\$ 385,256	\$ (319,630)	\$ (7,229,881)
2029	\$ (7,229,881)	\$ (238,541)	\$ (330,197)	122.9	\$ 5,726.47	\$ 703,663	\$ 373,466	\$ (316,942)	\$ (7,173,357)
2030	\$ (7,173,357)	\$ (238,541)	\$ (340,103)	122.9	\$ 5,898.27	\$ 724,773	\$ 384,670	\$ (314,146)	\$ (7,102,832)
2031	\$ (7,102,832)	\$ (254,154)	\$ (373,234)	122.9	\$ 6,075.22	\$ 746,516	\$ 373,283	\$ (311,229)	\$ (7,040,778)
2032	\$ (7,040,778)	\$ (160,779)	\$ (243,193)	122.9	\$ 6,257.47	\$ 768,912	\$ 525,719	\$ (305,006)	\$ (6,820,065)
2033	\$ (6,820,065)	\$ (160,779)	\$ (250,488)	122.9	\$ 6,445.20	\$ 791,979	\$ 541,491	\$ (294,719)	\$ (6,573,294)
2034	\$ (6,573,294)	\$ (160,779)	\$ (258,003)	122.9	\$ 6,638.55	\$ 815,738	\$ 557,735	\$ (283,249)	\$ (6,298,808)
2035	\$ (6,298,808)	\$ (160,779)	\$ (265,743)	122.9	\$ 6,837.71	\$ 840,211	\$ 574,468	\$ (270,521)	\$ (5,994,861)
2036	\$ (5,994,861)	\$ (118,773)	\$ (202,203)	153.4	\$ 7,042.84	\$ 1,080,692	\$ 878,489	\$ (250,003)	\$ (5,366,375)
2037	\$ (5,366,375)	\$ (25,398)	\$ (44,536)	184.0	\$ 7,254.13	\$ 1,334,847	\$ 1,290,311	\$ (212,455)	\$ (4,288,518)
2038	\$ (4,288,518)	\$ (25,398)	\$ (45,872)	184.0	\$ 7,471.75	\$ 1,374,892	\$ 1,329,020	\$ (163,080)	\$ (3,122,578)
2039	\$ (3,122,578)	\$ (25,398)	\$ (47,248)	184.0	\$ 7,695.90	\$ 1,416,139	\$ 1,368,891	\$ (109,716)	\$ (1,863,403)
2040	\$ (1,863,403)	\$ (25,398)	\$ (48,665)	184.0	\$ 7,926.78	\$ 1,458,623	\$ 1,409,958	\$ (52,129)	\$ (505,575)
2041	\$ (505,575)	\$ (118,773)	\$ (234,409)	92.0	\$ 8,164.58	\$ 751,191	\$ 516,782	\$ (11,207)	\$ 0

**Table C-20
Wastewater Services
Non-Residential Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 495,859	\$ (345,355)	\$ (345,355)	1,206	\$ 17.74	\$ 21,401	\$ (323,954)	\$ 10,016	\$ 181,921
2019	\$ 181,921	\$ (1,145,393)	\$ (1,179,754)	2,413	\$ 31.53	\$ 76,080	\$ (1,103,675)	\$ (18,011)	\$ (939,764)
2020	\$ (939,764)	\$ (468,704)	\$ (497,248)	2,413	\$ 32.48	\$ 78,362	\$ (418,886)	\$ (51,714)	\$ (1,410,365)
2021	\$ (1,410,365)	\$ (185,263)	\$ (202,441)	2,413	\$ 33.45	\$ 80,713	\$ (121,729)	\$ (66,205)	\$ (1,598,298)
2022	\$ (1,598,298)	\$ (56,416)	\$ (63,497)	2,413	\$ 34.46	\$ 83,134	\$ 19,637	\$ (71,482)	\$ (1,650,143)
2023	\$ (1,650,143)	\$ (58,630)	\$ (67,968)	2,413	\$ 35.49	\$ 85,628	\$ 17,660	\$ (73,859)	\$ (1,706,341)
2024	\$ (1,706,341)	\$ (49,932)	\$ (59,621)	2,413	\$ 36.56	\$ 88,197	\$ 28,576	\$ (76,142)	\$ (1,753,908)
2025	\$ (1,753,908)	\$ (69,368)	\$ (85,314)	2,413	\$ 37.65	\$ 90,843	\$ 5,529	\$ (78,801)	\$ (1,827,180)
2026	\$ (1,827,180)	\$ (93,444)	\$ (118,372)	2,413	\$ 38.78	\$ 93,568	\$ (24,803)	\$ (82,781)	\$ (1,934,764)
2027	\$ (1,934,764)	\$ (60,098)	\$ (78,415)	2,413	\$ 39.95	\$ 96,375	\$ 17,961	\$ (86,660)	\$ (2,003,464)
2028	\$ (2,003,464)	\$ (48,858)	\$ (65,661)	2,701	\$ 41.14	\$ 111,126	\$ 45,465	\$ (89,133)	\$ (2,047,132)
2029	\$ (2,047,132)	\$ (48,858)	\$ (67,631)	2,989	\$ 42.38	\$ 126,674	\$ 59,043	\$ (90,792)	\$ (2,078,882)
2030	\$ (2,078,882)	\$ (48,858)	\$ (69,660)	2,989	\$ 43.65	\$ 130,474	\$ 60,815	\$ (92,181)	\$ (2,110,248)
2031	\$ (2,110,248)	\$ (52,056)	\$ (76,445)	2,989	\$ 44.96	\$ 134,388	\$ 57,943	\$ (93,657)	\$ (2,145,963)
2032	\$ (2,145,963)	\$ (32,931)	\$ (49,811)	2,989	\$ 46.31	\$ 138,420	\$ 88,609	\$ (94,575)	\$ (2,151,928)
2033	\$ (2,151,928)	\$ (32,931)	\$ (51,305)	2,989	\$ 47.70	\$ 142,573	\$ 91,268	\$ (94,783)	\$ (2,155,444)
2034	\$ (2,155,444)	\$ (32,931)	\$ (52,844)	2,989	\$ 49.13	\$ 146,850	\$ 94,006	\$ (94,880)	\$ (2,156,318)
2035	\$ (2,156,318)	\$ (32,931)	\$ (54,429)	2,989	\$ 50.60	\$ 151,255	\$ 96,826	\$ (94,856)	\$ (2,154,347)
2036	\$ (2,154,347)	\$ (24,327)	\$ (41,415)	5,946	\$ 52.12	\$ 309,879	\$ 268,464	\$ (90,905)	\$ (1,976,789)
2037	\$ (1,976,789)	\$ (5,202)	\$ (9,122)	8,902	\$ 53.68	\$ 477,884	\$ 468,762	\$ (78,408)	\$ (1,586,435)
2038	\$ (1,586,435)	\$ (5,202)	\$ (9,395)	8,902	\$ 55.29	\$ 492,221	\$ 482,825	\$ (60,526)	\$ (1,164,136)
2039	\$ (1,164,136)	\$ (5,202)	\$ (9,677)	8,902	\$ 56.95	\$ 506,987	\$ 497,310	\$ (41,197)	\$ (708,022)
2040	\$ (708,022)	\$ (5,202)	\$ (9,968)	8,902	\$ 58.66	\$ 522,197	\$ 512,229	\$ (20,336)	\$ (216,129)
2041	\$ (216,129)	\$ (24,327)	\$ (48,011)	4,451	\$ 60.42	\$ 268,931	\$ 220,920	\$ (4,791)	\$ 0

Appendix D – Industrial/Non-Industrial D.C. Calculations and Cash Flow

As presented herein, two options of structuring the non-residential D.C.s have been discussed with County staff and have been included in this study for Council's consideration. This chapter presents the calculations of determining the charge for the second option, differentiating rates for industrial and non-industrial developments.

Tables D-1 and D-2 present the D.C. quantum calculation (pre-cash flow) for the growth-related capital costs identified in Chapter 5. Table D-1 presents the D.C. calculation for Water Services and Wastewater Services provided on a County-wide basis over the 23-year period (i.e. 2018-2041). Table D-2 presents the calculation of the D.C.s for County-wide services over the 10-year planning horizon (i.e. mid-2018 to mid-2028). Table D-3 summarizes the schedule of charges reflecting the maximum D.C.s by residential dwelling type, and per square metre of G.F.A. for industrial and non-industrial development.

The calculations of the maximum D.C.s that could be imposed by Council have been undertaken based on a cash flow analysis to account for the timing of revenues and expenditures and the resultant financing needs. The cash flow calculations have been undertaken by service for each forecast development type, i.e. residential, industrial and non-industrial. D.C. cash flow calculations for residential are provided in Appendix C, and for industrial and non-industrial in tables D-5 to D-24 below.

The cash flow calculates interest paid/received on reserve fund balances to account for the differences in timing of projects and when development will occur. In-year transactions are reduced by $\frac{1}{2}$ to reflect D.C. contributions and expenditures occurring at different times throughout the year. For cashflow purposes, capital costs and D.C.s are indexed at 3% annually, the internal interest charged on borrowing is set to 4.5%, and investment return is set to 3%. Moreover, the cash flow calculations include the interest costs associated with existing internal and external D.C. debt payments. Table D-4 provides the schedule of charges using the cashflow method.

For the residential calculations, charges are calculated on a single detached unit equivalent basis and converted to five forms of dwelling unit types (single and semi-detached, apartments 2 bedrooms and larger, bachelor and 1-bedroom apartments, and other multiples). The non-residential D.C. has been calculated separately on a per square metre of G.F.A. basis for industrial and non-industrial developments.

Table D-1
Municipal-Wide Services D.C. Calculation
2018 – 2041 (Urban)

SERVICE	2018 \$ DC Eligible Cost			2018 \$ DC Eligible Cost		
	Residential	Non-residential		SDU	per m ²	
		Industrial	Non-industrial		Industrial	Non-industrial
1. Water Services	\$ 20,384,654	\$ 1,196,814	\$ 2,978,356	\$ 6,344	\$ 26.29	\$ 63.33
2. Wastewater Services	\$ 11,896,127	\$ 698,440	\$ 1,738,117	\$ 3,702	\$ 15.34	\$ 36.96
TOTAL	\$ 32,280,781	\$ 1,895,254	\$ 4,716,473	\$ 10,046	\$ 41.63	\$ 100.29
DC ELIGIBLE CAPITAL COST	\$ 32,280,781	\$ 1,895,254	\$ 4,716,473			
Build out Gross Population / GFA Growth (m ² .)	8,522	45,522	47,028			
Cost Per Capita / Non-Residential GFA (m ² .)	\$ 3,787.93	\$ 41.63	\$ 100.29			
By Residential Unit Type	p.p.u					
Single and Semi-Detached Dwelling	2.652	\$10,046				
Apartments - 2 Bedrooms +	1.698	\$6,432				
Apartments - Bachelor and 1 Bedroom	1.120	\$4,242				
Other Multiples	1.853	\$7,019				

Table D-2
D.C. Calculation
Municipal-Wide Services D.C. Calculation
2018 – 2028

SERVICE	2018 \$ DC Eligible Cost			2018 \$ DC Eligible Cost		
	Residential	Non-residential		SDU	per m ²	
		Industrial	Non-industrial		Industrial	Non-industrial
3. Roads and Related Services	\$ 2,425,114	\$ 147,770	\$ 314,157	\$ 1,737	\$ 14.95	\$ 16.81
4. Fire Protection Services	\$ 894,821	\$ 54,524	\$ 115,918	\$ 641	\$ 5.52	\$ 6.20
5. Parking Services	\$ 187,219	\$ 11,408	\$ 24,253	\$ 134	\$ 1.15	\$ 1.30
6. Parks and Recreation Services	\$ 2,256,464	\$ -	\$ -	\$ 1,616	\$ -	\$ -
7. Library Services	\$ 1,084,862	\$ -	\$ -	\$ 777	\$ -	\$ -
8. Administration	\$ 121,674	\$ 7,414	\$ 15,762	\$ 87	\$ 0.75	\$ 0.84
9. Ambulance Services	\$ 158,366	\$ 9,650	\$ 20,515	\$ 113	\$ 0.98	\$ 1.10
10. Waste Diversion Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11. Marinas	\$ 544,036	\$ -	\$ -	\$ 390	\$ -	\$ -
TOTAL	\$ 7,672,556	\$ 230,766	\$ 490,605	\$5,495	\$ 23.35	\$ 26.25
DC ELIGIBLE CAPITAL COST	\$ 7,672,556	\$ 230,766	\$ 490,605			
10 Year Gross Population / GFA Growth (m ² .)	3,703	9,885	18,692			
Cost Per Capita / Non-Residential GFA (m ² .)	\$ 2,071.98	\$ 23.35	\$ 26.25			
By Residential Unit Type	p.p.u					
Single and Semi-Detached Dwelling	2.652	\$5,495				
Apartments - 2 Bedrooms +	1.698	\$3,518				
Apartments - Bachelor and 1 Bedroom	1.120	\$2,321				
Other Multiples	1.853	\$3,839				

**Table D-3
Calculated Schedule of Charges (Quantum)**

Service	RESIDENTIAL				NON-RESIDENTIAL (per m ² of Gross Floor Area)	
	Single and Semi-Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	Industrial	Non-Industrial
Municipal Wide Services:						
Roads and Related Services	1,737	1,112	734	1,214	14.95	16.81
Fire Protection Services	641	410	271	448	5.52	6.20
Parking Services	134	86	57	94	1.15	1.30
Parks and Recreation Services	1,616	1,035	682	1,129	0.00	0.00
Library Services	777	497	328	543	0.00	0.00
Administration	87	56	37	61	0.75	0.84
Ambulance Services	113	72	48	79	0.98	1.10
Waste Diversion Services	-	-	-	-	0.00	0.00
Marinas	390	250	165	273	0.00	0.00
Total Municipal Wide Services	5,495	3,518	2,322	3,841	23.35	26.25
Urban Services						
Water Services	6,344	4,062	2,679	4,433	26.29	63.33
Wastewater Services	3,702	2,370	1,563	2,587	15.34	36.96
Total Urban Services	10,046	6,432	4,242	7,020	41.63	100.29

**Table D-4
Calculated Schedule of Charges (Cash Flow)**

Service	RESIDENTIAL				NON-RESIDENTIAL (per m ² of Gross Floor Area)	
	Single and Semi-Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	Industrial	Non-Industrial
Municipal Wide Services:						
Roads and Related Services	1,793	1,148	757	1,253	15.77	17.77
Fire Protection Services	645	413	272	451	5.78	6.54
Parking Services	142	91	60	99	1.23	1.38
Parks and Recreation Services	1,675	1,072	707	1,170	0.00	0.00
Library Services	898	575	379	627	0.00	0.00
Administration	86	55	36	60	0.77	0.87
Ambulance Services	127	81	54	89	1.10	1.24
Waste Diversion Services	-	-	-	-	0.00	0.00
Marinas	412	264	174	288	0.00	0.00
Total Municipal Wide Services	5,778	3,699	2,439	4,037	24.65	27.80
Urban Services						
Water Services	7,167	4,589	3,027	5,008	31.36	72.95
Wastewater Services	4,261	2,728	1,800	2,977	18.70	43.47
Total Urban Services	11,428	7,317	4,827	7,985	50.06	116.42

**Table D-5
Roads and Related Services
Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 110,308	\$ (24,404)	\$ (24,404)	494	\$ 5.62	\$ 2,778	\$ (21,627)	\$ 2,985	\$ 91,666
2019	\$ 91,666	\$ (30,800)	\$ (31,724)	988	\$ 15.77	\$ 15,590	\$ (16,134)	\$ 2,508	\$ 78,040
2020	\$ 78,040	\$ (42,865)	\$ (45,475)	988	\$ 16.24	\$ 16,057	\$ (29,418)	\$ 1,900	\$ 50,522
2021	\$ 50,522	\$ (35,424)	\$ (38,709)	988	\$ 16.73	\$ 16,539	\$ (22,170)	\$ 1,183	\$ 29,536
2022	\$ 29,536	\$ (33,845)	\$ (38,093)	988	\$ 17.23	\$ 17,035	\$ (21,058)	\$ 570	\$ 9,048
2023	\$ 9,048	\$ (18,702)	\$ (21,681)	988	\$ 17.75	\$ 17,546	\$ (4,134)	\$ 209	\$ 5,123
2024	\$ 5,123	\$ (14,743)	\$ (17,604)	988	\$ 18.28	\$ 18,073	\$ 469	\$ 161	\$ 5,753
2025	\$ 5,753	\$ (23,331)	\$ (28,694)	988	\$ 18.83	\$ 18,615	\$ (10,079)	\$ (11)	\$ (4,337)
2026	\$ (4,337)	\$ (29,935)	\$ (37,920)	988	\$ 19.40	\$ 19,173	\$ (18,747)	\$ (617)	\$ (23,701)
2027	\$ (23,701)	\$ (4,029)	\$ (5,257)	988	\$ 19.98	\$ 19,749	\$ 14,492	\$ (740)	\$ (9,950)
2028	\$ (9,950)	\$ -	\$ -	494	\$ 20.58	\$ 10,171	\$ 10,171	\$ (221)	\$ 0

**Table D-6
Roads and Related Services
Non-Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 234,512	\$ (51,883)	\$ (51,883)	935	\$ 5.62	\$ 5,252	\$ (46,631)	\$ 6,336	\$ 194,218
2019	\$ 194,218	\$ (65,480)	\$ (67,444)	1,869	\$ 17.77	\$ 33,215	\$ (34,229)	\$ 5,313	\$ 165,301
2020	\$ 165,301	\$ (91,129)	\$ (96,679)	1,869	\$ 18.30	\$ 34,211	\$ (62,468)	\$ 4,022	\$ 106,855
2021	\$ 106,855	\$ (75,311)	\$ (82,295)	1,869	\$ 18.85	\$ 35,238	\$ (47,057)	\$ 2,500	\$ 62,298
2022	\$ 62,298	\$ (71,954)	\$ (80,985)	1,869	\$ 19.42	\$ 36,295	\$ (44,690)	\$ 1,199	\$ 18,807
2023	\$ 18,807	\$ (39,760)	\$ (46,093)	1,869	\$ 20.00	\$ 37,384	\$ (8,710)	\$ 434	\$ 10,531
2024	\$ 10,531	\$ (31,343)	\$ (37,426)	1,869	\$ 20.60	\$ 38,505	\$ 1,079	\$ 332	\$ 11,942
2025	\$ 11,942	\$ (49,601)	\$ (61,003)	1,869	\$ 21.22	\$ 39,660	\$ (21,343)	\$ (32)	\$ (9,433)
2026	\$ (9,433)	\$ (63,640)	\$ (80,618)	1,869	\$ 21.85	\$ 40,850	\$ (39,768)	\$ (1,319)	\$ (50,520)
2027	\$ (50,520)	\$ (8,566)	\$ (11,176)	1,869	\$ 22.51	\$ 42,076	\$ 30,899	\$ (1,578)	\$ (21,199)
2028	\$ (21,199)	\$ -	\$ -	935	\$ 23.19	\$ 21,669	\$ 21,669	\$ (470)	\$ -

**Table D-7
Fire Services
Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 33,615	\$ -	\$ -	494	\$ 5.44	\$ 2,689	\$ 2,689	\$ 1,049	\$ 37,353
2019	\$ 37,353	\$ (45,360)	\$ (46,721)	988	\$ 5.78	\$ 5,713	\$ (41,008)	\$ 478	\$ (3,177)
2020	\$ (3,177)	\$ (3,794)	\$ (4,025)	988	\$ 5.95	\$ 5,885	\$ 1,860	\$ (101)	\$ (1,418)
2021	\$ (1,418)	\$ (17,590)	\$ (19,221)	988	\$ 6.13	\$ 6,061	\$ (13,160)	\$ (360)	\$ (14,939)
2022	\$ (14,939)	\$ -	\$ -	988	\$ 6.32	\$ 6,243	\$ 6,243	\$ (532)	\$ (9,227)
2023	\$ (9,227)	\$ (21,395)	\$ (24,803)	988	\$ 6.51	\$ 6,430	\$ (18,372)	\$ (829)	\$ (28,428)
2024	\$ (28,428)	\$ -	\$ -	988	\$ 6.70	\$ 6,623	\$ 6,623	\$ (1,130)	\$ (22,935)
2025	\$ (22,935)	\$ -	\$ -	988	\$ 6.90	\$ 6,822	\$ 6,822	\$ (879)	\$ (16,991)
2026	\$ (16,991)	\$ -	\$ -	988	\$ 7.11	\$ 7,027	\$ 7,027	\$ (607)	\$ (10,571)
2027	\$ (10,571)	\$ -	\$ -	988	\$ 7.32	\$ 7,237	\$ 7,237	\$ (313)	\$ (3,646)
2028	\$ (3,646)	\$ -	\$ -	494	\$ 7.54	\$ 3,727	\$ 3,727	\$ (81)	\$ 0

**Table D-8
Fire Services
Non-Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 71,465	\$ -	\$ -	935	\$ 5.44	\$ 5,084	\$ 5,084	\$ 2,220	\$ 78,770
2019	\$ 78,770	\$ (96,435)	\$ (99,328)	1,869	\$ 6.54	\$ 12,219	\$ (87,109)	\$ 994	\$ (7,345)
2020	\$ (7,345)	\$ (8,066)	\$ (8,557)	1,869	\$ 6.73	\$ 12,586	\$ 4,029	\$ (240)	\$ (3,556)
2021	\$ (3,556)	\$ (37,397)	\$ (40,865)	1,869	\$ 6.94	\$ 12,963	\$ (27,901)	\$ (788)	\$ (32,245)
2022	\$ (32,245)	\$ -	\$ -	1,869	\$ 7.14	\$ 13,352	\$ 13,352	\$ (1,151)	\$ (20,044)
2023	\$ (20,044)	\$ (45,485)	\$ (52,730)	1,869	\$ 7.36	\$ 13,753	\$ (38,977)	\$ (1,779)	\$ (60,799)
2024	\$ (60,799)	\$ -	\$ -	1,869	\$ 7.58	\$ 14,165	\$ 14,165	\$ (2,417)	\$ (49,051)
2025	\$ (49,051)	\$ -	\$ -	1,869	\$ 7.81	\$ 14,590	\$ 14,590	\$ (1,879)	\$ (36,340)
2026	\$ (36,340)	\$ -	\$ -	1,869	\$ 8.04	\$ 15,028	\$ 15,028	\$ (1,297)	\$ (22,609)
2027	\$ (22,609)	\$ -	\$ -	1,869	\$ 8.28	\$ 15,479	\$ 15,479	\$ (669)	\$ (7,799)
2028	\$ (7,799)	\$ -	\$ -	935	\$ 8.53	\$ 7,972	\$ 7,972	\$ (173)	\$ 0

**Table D-9
Parking Services
Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 15,795	\$ (2,473)	\$ (2,473)	494	\$ -	\$ -	\$ (2,473)	\$ 437	\$ 13,759
2019	\$ 13,759	\$ (2,473)	\$ (2,547)	988	\$ 1.23	\$ 1,212	\$ (1,336)	\$ 393	\$ 12,816
2020	\$ 12,816	\$ (2,473)	\$ (2,624)	988	\$ 1.26	\$ 1,248	\$ (1,376)	\$ 364	\$ 11,804
2021	\$ 11,804	\$ (2,473)	\$ (2,702)	988	\$ 1.30	\$ 1,285	\$ (1,417)	\$ 333	\$ 10,720
2022	\$ 10,720	\$ (2,473)	\$ (2,783)	988	\$ 1.34	\$ 1,324	\$ (1,460)	\$ 300	\$ 9,561
2023	\$ 9,561	\$ (2,473)	\$ (2,867)	988	\$ 1.38	\$ 1,364	\$ (1,503)	\$ 264	\$ 8,321
2024	\$ 8,321	\$ (2,473)	\$ (2,953)	988	\$ 1.42	\$ 1,405	\$ (1,548)	\$ 226	\$ 7,000
2025	\$ 7,000	\$ (2,473)	\$ (3,042)	988	\$ 1.46	\$ 1,447	\$ (1,595)	\$ 186	\$ 5,591
2026	\$ 5,591	\$ (2,473)	\$ (3,133)	988	\$ 1.51	\$ 1,490	\$ (1,643)	\$ 143	\$ 4,091
2027	\$ 4,091	\$ (2,473)	\$ (3,227)	988	\$ 1.55	\$ 1,535	\$ (1,692)	\$ 97	\$ 2,497
2028	\$ 2,497	\$ (2,473)	\$ (3,324)	494	\$ 1.60	\$ 790	\$ (2,533)	\$ 37	\$ 0

**Table D-10
Parking Services
Non-Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 33,581	\$ (5,258)	\$ (5,258)	935	\$ -	\$ -	\$ (5,258)	\$ 929	\$ 29,252
2019	\$ 29,252	\$ (5,258)	\$ (5,415)	1,869	\$ 1.38	\$ 2,576	\$ (2,840)	\$ 835	\$ 27,247
2020	\$ 27,247	\$ (5,258)	\$ (5,578)	1,869	\$ 1.42	\$ 2,653	\$ (2,925)	\$ 774	\$ 25,096
2021	\$ 25,096	\$ (5,258)	\$ (5,745)	1,869	\$ 1.46	\$ 2,733	\$ (3,013)	\$ 708	\$ 22,791
2022	\$ 22,791	\$ (5,258)	\$ (5,918)	1,869	\$ 1.51	\$ 2,815	\$ (3,103)	\$ 637	\$ 20,326
2023	\$ 20,326	\$ (5,258)	\$ (6,095)	1,869	\$ 1.55	\$ 2,899	\$ (3,196)	\$ 562	\$ 17,691
2024	\$ 17,691	\$ (5,258)	\$ (6,278)	1,869	\$ 1.60	\$ 2,986	\$ (3,292)	\$ 481	\$ 14,881
2025	\$ 14,881	\$ (5,258)	\$ (6,466)	1,869	\$ 1.65	\$ 3,076	\$ (3,391)	\$ 396	\$ 11,886
2026	\$ 11,886	\$ (5,258)	\$ (6,660)	1,869	\$ 1.69	\$ 3,168	\$ (3,492)	\$ 304	\$ 8,698
2027	\$ 8,698	\$ (5,258)	\$ (6,860)	1,869	\$ 1.75	\$ 3,263	\$ (3,597)	\$ 207	\$ 5,308
2028	\$ 5,308	\$ (5,258)	\$ (7,066)	935	\$ 1.80	\$ 1,680	\$ (5,385)	\$ 78	\$ -

**Table D-11
Parks and Recreation Services
Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ -	\$ -	\$ -	5,320	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2021	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2022	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2023	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2024	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2025	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2026	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2027	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2028	\$ -	\$ -	\$ -	5,320	\$ -	\$ -	\$ -	\$ -	\$ -

**Table D-12
Parks and Recreation Services
Non-Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ -	\$ -	\$ -	10,060	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2021	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2022	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2023	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2024	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2025	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2026	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2027	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2028	\$ -	\$ -	\$ -	10,060	\$ -	\$ -	\$ -	\$ -	\$ -

**Table D-13
Library Services
Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ -	\$ -	\$ -	5,320	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2021	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2022	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2023	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2024	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2025	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2026	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2027	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2028	\$ -	\$ -	\$ -	5,320	\$ -	\$ -	\$ -	\$ -	\$ -

**Table D-14
Library Services
Non-Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ -	\$ -	\$ -	10,060	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2021	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2022	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2023	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2024	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2025	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2026	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2027	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2028	\$ -	\$ -	\$ -	10,060	\$ -	\$ -	\$ -	\$ -	\$ -

**Table D-15
Administration
Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 10,116	\$ (2,303)	\$ (2,303)	494	\$ 0.72	\$ 356	\$ (1,947)	\$ 274	\$ 8,443
2019	\$ 8,443	\$ (8,061)	\$ (8,303)	988	\$ 0.77	\$ 763	\$ (7,540)	\$ 140	\$ 1,043
2020	\$ 1,043	\$ -	\$ -	988	\$ 0.80	\$ 786	\$ 786	\$ 43	\$ 1,872
2021	\$ 1,872	\$ (1,792)	\$ (1,958)	988	\$ 0.82	\$ 810	\$ (1,148)	\$ 39	\$ 763
2022	\$ 763	\$ -	\$ -	988	\$ 0.84	\$ 834	\$ 834	\$ 35	\$ 1,632
2023	\$ 1,632	\$ (5,374)	\$ (6,229)	988	\$ 0.87	\$ 859	\$ (5,370)	\$ (60)	\$ (3,798)
2024	\$ (3,798)	\$ -	\$ -	988	\$ 0.90	\$ 885	\$ 885	\$ (151)	\$ (3,064)
2025	\$ (3,064)	\$ -	\$ -	988	\$ 0.92	\$ 911	\$ 911	\$ (117)	\$ (2,270)
2026	\$ (2,270)	\$ -	\$ -	988	\$ 0.95	\$ 939	\$ 939	\$ (81)	\$ (1,412)
2027	\$ (1,412)	\$ -	\$ -	988	\$ 0.98	\$ 967	\$ 967	\$ (42)	\$ (487)
2028	\$ (487)	\$ -	\$ -	494	\$ 1.01	\$ 498	\$ 498	\$ (11)	\$ (0)

**Table D-16
Administration
Non-Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 21,507	\$ (4,897)	\$ (4,897)	935	\$ 0.72	\$ 673	\$ (4,224)	\$ 582	\$ 17,865
2019	\$ 17,865	\$ (17,139)	\$ (17,653)	1,869	\$ 0.87	\$ 1,632	\$ (16,021)	\$ 296	\$ 2,140
2020	\$ 2,140	\$ -	\$ -	1,869	\$ 0.90	\$ 1,681	\$ 1,681	\$ 89	\$ 3,910
2021	\$ 3,910	\$ (3,810)	\$ (4,163)	1,869	\$ 0.93	\$ 1,731	\$ (2,432)	\$ 81	\$ 1,559
2022	\$ 1,559	\$ -	\$ -	1,869	\$ 0.95	\$ 1,783	\$ 1,783	\$ 74	\$ 3,416
2023	\$ 3,416	\$ (11,424)	\$ (13,244)	1,869	\$ 0.98	\$ 1,837	\$ (11,407)	\$ (129)	\$ (8,120)
2024	\$ (8,120)	\$ -	\$ -	1,869	\$ 1.01	\$ 1,892	\$ 1,892	\$ (323)	\$ (6,551)
2025	\$ (6,551)	\$ -	\$ -	1,869	\$ 1.04	\$ 1,949	\$ 1,949	\$ (251)	\$ (4,853)
2026	\$ (4,853)	\$ -	\$ -	1,869	\$ 1.07	\$ 2,007	\$ 2,007	\$ (173)	\$ (3,019)
2027	\$ (3,019)	\$ -	\$ -	1,869	\$ 1.11	\$ 2,067	\$ 2,067	\$ (89)	\$ (1,042)
2028	\$ (1,042)	\$ -	\$ -	935	\$ 1.14	\$ 1,065	\$ 1,065	\$ (23)	\$ (0)

**Table D-17
Ambulance Services
Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 3,569	\$ (5,834)	\$ (5,834)	494	\$ 0.33	\$ 163	\$ (5,671)	\$ 6	\$ (2,096)
2019	\$ (2,096)	\$ (7,384)	\$ (7,606)	988	\$ 1.10	\$ 1,090	\$ (6,515)	\$ (241)	\$ (8,852)
2020	\$ (8,852)	\$ -	\$ -	988	\$ 1.14	\$ 1,123	\$ 1,123	\$ (373)	\$ (8,102)
2021	\$ (8,102)	\$ -	\$ -	988	\$ 1.17	\$ 1,157	\$ 1,157	\$ (339)	\$ (7,284)
2022	\$ (7,284)	\$ -	\$ -	988	\$ 1.21	\$ 1,192	\$ 1,192	\$ (301)	\$ (6,393)
2023	\$ (6,393)	\$ -	\$ -	988	\$ 1.24	\$ 1,227	\$ 1,227	\$ (260)	\$ (5,426)
2024	\$ (5,426)	\$ -	\$ -	988	\$ 1.28	\$ 1,264	\$ 1,264	\$ (216)	\$ (4,378)
2025	\$ (4,378)	\$ -	\$ -	988	\$ 1.32	\$ 1,302	\$ 1,302	\$ (168)	\$ (3,243)
2026	\$ (3,243)	\$ -	\$ -	988	\$ 1.36	\$ 1,341	\$ 1,341	\$ (116)	\$ (2,018)
2027	\$ (2,018)	\$ -	\$ -	988	\$ 1.40	\$ 1,381	\$ 1,381	\$ (60)	\$ (696)
2028	\$ (696)	\$ -	\$ -	494	\$ 1.44	\$ 711	\$ 711	\$ (15)	\$ (0)

**Table D-18
Ambulance Services
Non-Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 7,587	\$ (12,403)	\$ (12,403)	935	\$ 0.33	\$ 308	\$ (12,094)	\$ 12	\$ (4,495)
2019	\$ (4,495)	\$ (15,699)	\$ (16,170)	1,869	\$ 1.24	\$ 2,323	\$ (13,847)	\$ (514)	\$ (18,856)
2020	\$ (18,856)	\$ -	\$ -	1,869	\$ 1.28	\$ 2,393	\$ 2,393	\$ (795)	\$ (17,259)
2021	\$ (17,259)	\$ -	\$ -	1,869	\$ 1.32	\$ 2,464	\$ 2,464	\$ (721)	\$ (15,515)
2022	\$ (15,515)	\$ -	\$ -	1,869	\$ 1.36	\$ 2,538	\$ 2,538	\$ (641)	\$ (13,618)
2023	\$ (13,618)	\$ -	\$ -	1,869	\$ 1.40	\$ 2,614	\$ 2,614	\$ (554)	\$ (11,558)
2024	\$ (11,558)	\$ -	\$ -	1,869	\$ 1.44	\$ 2,693	\$ 2,693	\$ (460)	\$ (9,325)
2025	\$ (9,325)	\$ -	\$ -	1,869	\$ 1.48	\$ 2,774	\$ 2,774	\$ (357)	\$ (6,908)
2026	\$ (6,908)	\$ -	\$ -	1,869	\$ 1.53	\$ 2,857	\$ 2,857	\$ (247)	\$ (4,298)
2027	\$ (4,298)	\$ -	\$ -	1,869	\$ 1.57	\$ 2,943	\$ 2,943	\$ (127)	\$ (1,483)
2028	\$ (1,483)	\$ -	\$ -	935	\$ 1.62	\$ 1,515	\$ 1,515	\$ (33)	\$ 0

**Table D-19
Marinas
Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ -	\$ -	\$ -	5,320	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2021	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2022	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2023	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2024	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2025	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2026	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2027	\$ -	\$ -	\$ -	10,640	\$ -	\$ -	\$ -	\$ -	\$ -
2028	\$ -	\$ -	\$ -	5,320	\$ -	\$ -	\$ -	\$ -	\$ -

**Table D-20
Marinas
Non-Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ -	\$ -	\$ -	10,060	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2021	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2022	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2023	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2024	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2025	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2026	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2027	\$ -	\$ -	\$ -	20,120	\$ -	\$ -	\$ -	\$ -	\$ -
2028	\$ -	\$ -	\$ -	10,060	\$ -	\$ -	\$ -	\$ -	\$ -

**Table D-21
Water Services
Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 81,735.57	\$ (2,253.21)	\$ (2,253)	468	\$ 32.47	\$ 15,203	\$ 12,950	\$ 2,646	\$ 97,332
2019	\$ 97,332	\$ (6,354)	\$ (6,544)	936	\$ 31.36	\$ 29,366	\$ 22,822	\$ 3,262	\$ 123,416
2020	\$ 123,416	\$ (166,118)	\$ (176,235)	936	\$ 32.30	\$ 30,247	\$ (145,987)	\$ 1,343	\$ (21,228)
2021	\$ (21,228)	\$ (48,853)	\$ (53,383)	936	\$ 33.27	\$ 31,155	\$ (22,228)	\$ (1,455)	\$ (44,911)
2022	\$ (44,911)	\$ (52,504)	\$ (59,094)	936	\$ 34.27	\$ 32,089	\$ (27,004)	\$ (2,629)	\$ (74,544)
2023	\$ (74,544)	\$ (519,183)	\$ (601,876)	936	\$ 35.29	\$ 33,052	\$ (568,824)	\$ (16,153)	\$ (659,521)
2024	\$ (659,521)	\$ (128,367)	\$ (153,277)	936	\$ 36.35	\$ 34,044	\$ (119,233)	\$ (32,361)	\$ (811,115)
2025	\$ (811,115)	\$ (106,179)	\$ (130,586)	936	\$ 37.44	\$ 35,065	\$ (95,521)	\$ (38,649)	\$ (945,286)
2026	\$ (945,286)	\$ (127,092)	\$ (160,996)	936	\$ 38.57	\$ 36,117	\$ (124,879)	\$ (45,348)	\$ (1,115,513)
2027	\$ (1,115,513)	\$ (81,930)	\$ (106,900)	936	\$ 39.72	\$ 37,200	\$ (69,700)	\$ (51,766)	\$ (1,236,979)
2028	\$ (1,236,979)	\$ (2,257)	\$ (3,034)	867	\$ 40.92	\$ 35,456	\$ 32,422	\$ (54,935)	\$ (1,259,491)
2029	\$ (1,259,491)	\$ (2,257)	\$ (3,125)	797	\$ 42.14	\$ 33,573	\$ 30,449	\$ (55,992)	\$ (1,285,034)
2030	\$ (1,285,034)	\$ (2,257)	\$ (3,218)	797	\$ 43.41	\$ 34,581	\$ 31,362	\$ (57,121)	\$ (1,310,793)
2031	\$ (1,310,793)	\$ (6,987)	\$ (10,261)	797	\$ 44.71	\$ 35,618	\$ 25,357	\$ (58,415)	\$ (1,343,851)
2032	\$ (1,343,851)	\$ (1,505)	\$ (2,276)	797	\$ 46.05	\$ 36,687	\$ 34,410	\$ (59,699)	\$ (1,369,140)
2033	\$ (1,369,140)	\$ (1,505)	\$ (2,344)	797	\$ 47.43	\$ 37,787	\$ 35,443	\$ (60,814)	\$ (1,394,511)
2034	\$ (1,394,511)	\$ (1,505)	\$ (2,415)	797	\$ 48.86	\$ 38,921	\$ 36,506	\$ (61,932)	\$ (1,419,937)
2035	\$ (1,419,937)	\$ (1,505)	\$ (2,487)	797	\$ 50.32	\$ 40,088	\$ 37,601	\$ (63,051)	\$ (1,445,387)
2036	\$ (1,445,387)	\$ (6,987)	\$ (11,895)	3,377	\$ 51.83	\$ 175,023	\$ 163,128	\$ (61,372)	\$ (1,343,630)
2037	\$ (1,343,630)	\$ (1,505)	\$ (2,639)	5,957	\$ 53.39	\$ 318,018	\$ 315,380	\$ (53,367)	\$ (1,081,618)
2038	\$ (1,081,618)	\$ (1,491)	\$ (2,693)	5,957	\$ 54.99	\$ 327,559	\$ 324,866	\$ (41,363)	\$ (798,116)
2039	\$ (798,116)	\$ (1,491)	\$ (2,774)	5,957	\$ 56.64	\$ 337,386	\$ 334,612	\$ (28,386)	\$ (491,890)
2040	\$ (491,890)	\$ (1,491)	\$ (2,857)	5,957	\$ 58.34	\$ 347,507	\$ 344,650	\$ (14,380)	\$ (161,621)
2041	\$ (161,621)	\$ (6,973)	\$ (13,762)	2,978	\$ 60.09	\$ 178,966	\$ 165,204	\$ (3,583)	\$ 0

**Table D-22
Water Services
Non-Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 203,405	\$ (5,607)	\$ (5,607)	738	\$ 32.47	\$ 23,967	\$ 18,359	\$ 6,378	\$ 228,142
2019	\$ 228,142	\$ (15,812)	\$ (16,286)	1,476	\$ 72.95	\$ 107,687	\$ 91,401	\$ 8,215	\$ 327,758
2020	\$ 327,758	\$ (413,397)	\$ (438,573)	1,476	\$ 75.14	\$ 110,918	\$ (327,655)	\$ 4,918	\$ 5,021
2021	\$ 5,021	\$ (121,574)	\$ (132,847)	1,476	\$ 77.39	\$ 114,246	\$ (18,601)	\$ (230)	\$ (13,811)
2022	\$ (13,811)	\$ (130,660)	\$ (147,058)	1,476	\$ 79.71	\$ 117,673	\$ (29,386)	\$ (1,283)	\$ (44,479)
2023	\$ (44,479)	\$ (1,292,025)	\$ (1,497,811)	1,476	\$ 82.10	\$ 121,203	\$ (1,376,608)	\$ (32,975)	\$ (1,454,062)
2024	\$ (1,454,062)	\$ (319,450)	\$ (381,440)	1,476	\$ 84.57	\$ 124,839	\$ (256,601)	\$ (71,206)	\$ (1,781,869)
2025	\$ (1,781,869)	\$ (264,233)	\$ (324,973)	1,476	\$ 87.10	\$ 128,584	\$ (196,389)	\$ (84,603)	\$ (2,062,861)
2026	\$ (2,062,861)	\$ (316,277)	\$ (400,650)	1,476	\$ 89.72	\$ 132,442	\$ (268,208)	\$ (98,863)	\$ (2,429,932)
2027	\$ (2,429,932)	\$ (203,888)	\$ (266,028)	1,476	\$ 92.41	\$ 136,415	\$ (129,613)	\$ (112,263)	\$ (2,671,808)
2028	\$ (2,671,808)	\$ (5,618)	\$ (7,550)	1,834	\$ 95.18	\$ 174,596	\$ 167,046	\$ (116,473)	\$ (2,621,235)
2029	\$ (2,621,235)	\$ (5,618)	\$ (7,776)	2,193	\$ 98.04	\$ 214,944	\$ 207,168	\$ (113,294)	\$ (2,527,362)
2030	\$ (2,527,362)	\$ (5,618)	\$ (8,009)	2,193	\$ 100.98	\$ 221,392	\$ 213,383	\$ (108,930)	\$ (2,422,909)
2031	\$ (2,422,909)	\$ (17,388)	\$ (25,534)	2,193	\$ 104.01	\$ 228,034	\$ 202,500	\$ (104,475)	\$ (2,324,884)
2032	\$ (2,324,884)	\$ (3,745)	\$ (5,664)	2,193	\$ 107.13	\$ 234,875	\$ 229,211	\$ (99,463)	\$ (2,195,136)
2033	\$ (2,195,136)	\$ (3,745)	\$ (5,834)	2,193	\$ 110.34	\$ 241,921	\$ 236,087	\$ (93,469)	\$ (2,052,518)
2034	\$ (2,052,518)	\$ (3,745)	\$ (6,009)	2,193	\$ 113.65	\$ 249,179	\$ 243,169	\$ (86,892)	\$ (1,896,241)
2035	\$ (1,896,241)	\$ (3,745)	\$ (6,190)	2,193	\$ 117.06	\$ 256,654	\$ 250,465	\$ (79,695)	\$ (1,725,472)
2036	\$ (1,725,472)	\$ (17,388)	\$ (29,601)	2,569	\$ 120.57	\$ 309,720	\$ 280,118	\$ (71,344)	\$ (1,516,697)
2037	\$ (1,516,697)	\$ (3,745)	\$ (6,567)	2,945	\$ 124.19	\$ 365,738	\$ 359,171	\$ (60,170)	\$ (1,217,696)
2038	\$ (1,217,696)	\$ (3,711)	\$ (6,702)	2,945	\$ 127.91	\$ 376,710	\$ 370,008	\$ (46,471)	\$ (894,159)
2039	\$ (894,159)	\$ (3,711)	\$ (6,903)	2,945	\$ 131.75	\$ 388,012	\$ 381,108	\$ (31,662)	\$ (544,713)
2040	\$ (544,713)	\$ (3,711)	\$ (7,110)	2,945	\$ 135.70	\$ 399,652	\$ 392,542	\$ (15,680)	\$ (167,851)
2041	\$ (167,851)	\$ (17,354)	\$ (34,249)	1,473	\$ 139.78	\$ 205,821	\$ 171,572	\$ (3,721)	\$ 0

**Table D-23
Wastewater Services
Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 142,138.26	\$ (98,996.12)	\$ (98,996)	468	\$ 17.74	\$ 8,306	\$ (90,690)	\$ 2,904	\$ 54,352
2019	\$ 54,352	\$ (328,327)	\$ (338,177)	936	\$ 18.70	\$ 17,509	\$ (320,668)	\$ (5,177)	\$ (271,492)
2020	\$ (271,492)	\$ (134,354)	\$ (142,536)	936	\$ 19.26	\$ 18,034	\$ (124,502)	\$ (15,018)	\$ (411,013)
2021	\$ (411,013)	\$ (53,106)	\$ (58,030)	936	\$ 19.84	\$ 18,575	\$ (39,455)	\$ (19,383)	\$ (469,851)
2022	\$ (469,851)	\$ (16,172)	\$ (18,201)	936	\$ 20.43	\$ 19,133	\$ 931	\$ (21,122)	\$ (490,042)
2023	\$ (490,042)	\$ (16,806)	\$ (19,483)	936	\$ 21.04	\$ 19,707	\$ 223	\$ (22,047)	\$ (511,865)
2024	\$ (511,865)	\$ (14,313)	\$ (17,090)	936	\$ 21.67	\$ 20,298	\$ 3,207	\$ (22,962)	\$ (531,620)
2025	\$ (531,620)	\$ (19,884)	\$ (24,455)	936	\$ 22.33	\$ 20,907	\$ (3,549)	\$ (24,003)	\$ (559,171)
2026	\$ (559,171)	\$ (26,786)	\$ (33,931)	936	\$ 22.99	\$ 21,534	\$ (12,397)	\$ (25,442)	\$ (597,010)
2027	\$ (597,010)	\$ (17,227)	\$ (22,478)	936	\$ 23.68	\$ 22,180	\$ (298)	\$ (26,872)	\$ (624,180)
2028	\$ (624,180)	\$ (14,005)	\$ (18,822)	867	\$ 24.40	\$ 21,140	\$ 2,318	\$ (28,036)	\$ (649,898)
2029	\$ (649,898)	\$ (14,005)	\$ (19,386)	797	\$ 25.13	\$ 20,017	\$ 631	\$ (29,231)	\$ (678,498)
2030	\$ (678,498)	\$ (14,005)	\$ (19,968)	797	\$ 25.88	\$ 20,618	\$ 650	\$ (30,518)	\$ (708,366)
2031	\$ (708,366)	\$ (14,922)	\$ (21,913)	797	\$ 26.66	\$ 21,236	\$ (677)	\$ (31,892)	\$ (740,934)
2032	\$ (740,934)	\$ (9,440)	\$ (14,278)	797	\$ 27.46	\$ 21,874	\$ 7,595	\$ (33,171)	\$ (766,510)
2033	\$ (766,510)	\$ (9,440)	\$ (14,707)	797	\$ 28.28	\$ 22,530	\$ 7,823	\$ (34,317)	\$ (793,004)
2034	\$ (793,004)	\$ (9,440)	\$ (15,148)	797	\$ 29.13	\$ 23,206	\$ 8,058	\$ (35,504)	\$ (820,450)
2035	\$ (820,450)	\$ (9,440)	\$ (15,602)	797	\$ 30.00	\$ 23,902	\$ 8,300	\$ (36,734)	\$ (848,884)
2036	\$ (848,884)	\$ (6,973)	\$ (11,872)	3,377	\$ 30.90	\$ 104,354	\$ 92,482	\$ (36,119)	\$ (792,521)
2037	\$ (792,521)	\$ (1,491)	\$ (2,615)	5,957	\$ 31.83	\$ 189,611	\$ 186,997	\$ (31,456)	\$ (636,980)
2038	\$ (636,980)	\$ (1,491)	\$ (2,693)	5,957	\$ 32.79	\$ 195,300	\$ 192,606	\$ (24,330)	\$ (468,704)
2039	\$ (468,704)	\$ (1,491)	\$ (2,774)	5,957	\$ 33.77	\$ 201,159	\$ 198,385	\$ (16,628)	\$ (286,948)
2040	\$ (286,948)	\$ (1,491)	\$ (2,857)	5,957	\$ 34.78	\$ 207,193	\$ 204,336	\$ (8,315)	\$ (90,926)
2041	\$ (90,926)	\$ (6,973)	\$ (13,762)	2,978	\$ 35.83	\$ 106,705	\$ 92,942	\$ (2,016)	\$ (0)

**Table D-24
Wastewater Services
Non-Industrial Cashflow**

Year	Reserve Fund Opening Balance	Dev't Related Expenditures		GFA per Year	DC Rates w. Inflation (3%/Yr)	Anticipated Revenues	Revenues minus Expenditures	Interest Earnings (3%) / Costs (4.5%)	Reserve Fund Closing Balance after Financing
		Nominal	Inflated (3%/Yr)						
2018	\$ 353,721	\$ (246,359)	\$ (246,359)	738	\$ 17.74	\$ 13,094	\$ (233,265)	\$ 7,113	\$ 127,569
2019	\$ 127,569	\$ (817,066)	\$ (841,578)	1,476	\$ 43.47	\$ 64,172	\$ (777,406)	\$ (12,708)	\$ (662,545)
2020	\$ (662,545)	\$ (334,350)	\$ (354,712)	1,476	\$ 44.77	\$ 66,097	\$ (288,615)	\$ (36,308)	\$ (987,468)
2021	\$ (987,468)	\$ (132,157)	\$ (144,411)	1,476	\$ 46.12	\$ 68,080	\$ (76,332)	\$ (46,154)	\$ (1,109,953)
2022	\$ (1,109,953)	\$ (40,245)	\$ (45,296)	1,476	\$ 47.50	\$ 70,122	\$ 24,827	\$ (49,389)	\$ (1,134,516)
2023	\$ (1,134,516)	\$ (41,824)	\$ (48,485)	1,476	\$ 48.93	\$ 72,226	\$ 23,741	\$ (50,519)	\$ (1,161,294)
2024	\$ (1,161,294)	\$ (35,619)	\$ (42,531)	1,476	\$ 50.39	\$ 74,393	\$ 31,862	\$ (51,541)	\$ (1,180,974)
2025	\$ (1,180,974)	\$ (49,484)	\$ (60,859)	1,476	\$ 51.91	\$ 76,624	\$ 15,766	\$ (52,789)	\$ (1,217,997)
2026	\$ (1,217,997)	\$ (66,658)	\$ (84,440)	1,476	\$ 53.46	\$ 78,923	\$ (5,517)	\$ (54,934)	\$ (1,278,448)
2027	\$ (1,278,448)	\$ (42,871)	\$ (55,937)	1,476	\$ 55.07	\$ 81,291	\$ 25,354	\$ (56,960)	\$ (1,310,055)
2028	\$ (1,310,055)	\$ (34,853)	\$ (46,839)	1,834	\$ 56.72	\$ 104,043	\$ 57,204	\$ (57,665)	\$ (1,310,516)
2029	\$ (1,310,516)	\$ (34,853)	\$ (48,244)	2,193	\$ 58.42	\$ 128,087	\$ 79,842	\$ (57,177)	\$ (1,287,851)
2030	\$ (1,287,851)	\$ (34,853)	\$ (49,692)	2,193	\$ 60.17	\$ 131,929	\$ 82,238	\$ (56,103)	\$ (1,261,716)
2031	\$ (1,261,716)	\$ (37,134)	\$ (54,532)	2,193	\$ 61.98	\$ 135,887	\$ 81,355	\$ (54,947)	\$ (1,235,308)
2032	\$ (1,235,308)	\$ (23,491)	\$ (35,532)	2,193	\$ 63.84	\$ 139,964	\$ 104,431	\$ (53,239)	\$ (1,184,116)
2033	\$ (1,184,116)	\$ (23,491)	\$ (36,598)	2,193	\$ 65.75	\$ 144,163	\$ 107,564	\$ (50,865)	\$ (1,127,417)
2034	\$ (1,127,417)	\$ (23,491)	\$ (37,696)	2,193	\$ 67.72	\$ 148,487	\$ 110,791	\$ (48,241)	\$ (1,064,867)
2035	\$ (1,064,867)	\$ (23,491)	\$ (38,827)	2,193	\$ 69.76	\$ 152,942	\$ 114,115	\$ (45,351)	\$ (996,103)
2036	\$ (996,103)	\$ (17,354)	\$ (29,543)	2,569	\$ 71.85	\$ 184,564	\$ 155,021	\$ (41,337)	\$ (882,419)
2037	\$ (882,419)	\$ (3,711)	\$ (6,507)	2,945	\$ 74.00	\$ 217,946	\$ 211,439	\$ (34,951)	\$ (705,932)
2038	\$ (705,932)	\$ (3,711)	\$ (6,702)	2,945	\$ 76.22	\$ 224,484	\$ 217,782	\$ (26,867)	\$ (515,017)
2039	\$ (515,017)	\$ (3,711)	\$ (6,903)	2,945	\$ 78.51	\$ 231,219	\$ 224,315	\$ (18,129)	\$ (308,830)
2040	\$ (308,830)	\$ (3,711)	\$ (7,110)	2,945	\$ 80.87	\$ 238,155	\$ 231,045	\$ (8,699)	\$ (86,484)
2041	\$ (86,484)	\$ (17,354)	\$ (34,249)	1,473	\$ 83.29	\$ 122,650	\$ 88,401	\$ (1,917)	\$ (0)

Appendix E – Long-Term Capital and Operating Cost Examination

Appendix E – Long-Term Capital and Operating Cost Examination

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

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

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

SERVICE	NET GROWTH RELATED EXPENDITURES	ANNUAL OPERATING EXPENDITURES
1. Water Services	24,559,824	76,939
2. Wastewater Services	14,332,683	39,755
3. Roads and Related Services	2,887,040	7,446
4. Fire Protection Services	1,065,263	3,875
5. Parking Services	222,880	0
6. Parks and Recreation Services	2,256,464	7,638
7. Library Services	1,084,862	2,676
8. Administration	144,850	0
9. Ambulance Services	188,531	8,723
10. Waste Diversion Services	0	0
11. Marinas	544,036	437

Appendix F – Local Service Policy

Appendix F – Draft Local Service Policy

This Appendix sets out the County’s General Policy Guidelines on Development Charges (D.C.) and local service funding for Roads and Related Services, Stormwater Management, Water Services, Wastewater Services, and Parkland Development. The guidelines outline, in general terms, the size and nature of engineered infrastructure that is included in the study as a D.C. project, versus infrastructure that is considered as a local service, to be emplaced separately by landowners, pursuant to a development agreement.

The following policy guidelines are general principles by which staff will be guided in considering development applications. However, each application will be considered, in the context of these policy guidelines as subsection 59(2) of the Development Charges Act, 1997, as amended (D.C.A.) on its own merits having regard to, among other factors, the nature, type and location of the development and any existing and proposed development in the surrounding area, as well as the location and type of services required and their relationship to the proposed development and to existing and proposed development in the area.

A. Roads and Related Services

All improvements to road (or road-related) infrastructure to facilitate development are considered local services to be paid for by the developer.

Collector Roads

- Collector roads internal to a development are a direct developer responsibility under s.59 of the *DCA* as a local service. The oversized share of a collector road internal to a development is DC recoverable. The oversizing cost is considered to be the marginal cost difference in width, from the local service need (20m ROW) to the full oversized width, for the following items: Asphalt, Granular A and Granular B.
- Collector roads external to 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 *DCA*. Otherwise, the works are included in DC calculation to the extent permitted under s.5(1) of the *DCA*.
 - New collector roads constructed external to the development, but serving primarily to connect a development to the main road network, are a direct developer responsibility.

- If the developer is required to provide a collector road for Official Plan requirements but serving primarily to connect a development to the main road network, the collector road is a direct responsibility of the developer.
- New, widened, extended or upgraded collector roads that are external to specific developments, and not captured by the items above, are considered to be development charge projects.

Arterial Roads

- Arterial roads internal to a development are a direct developer responsibility under s.59 of the *DCA* as a local service. The oversized share of an arterial road internal to a development is DC recoverable. The oversizing cost is considered to be the marginal cost difference in width, from the local service need (20m ROW) to the full oversized width, for the following items: Asphalt, Granular A and Granular B.

Local Roads

- New local roads constructed internal to the development are the direct responsibility of the developer.

Traffic Signals

- Traffic signalization for development internal or adjacent to road is a direct developer responsibility as a local service under s. 59 of the *DCA*.

Intersection Improvements

- Intersections improvements internal to a development and works necessary to connect entrances (private and specific subdivision) to the roadway are to be a direct developer responsibility as a local service under s.59 of *DCA*.
- Intersection improvements on other roads due to increased traffic arising solely from development and are not identified in the Integrated Master Plan are to be a direct developer responsibility as a local service under s.59 of *DCA*.

Streetlights

- Streetlights internal to a development or site are a direct developer responsibility as a local service under s.59 of the *DCA*.

- Streetlights external to a development but related to the subject lands to provide connectivity to the existing network are a direct developer responsibility as a local service under s.59 of the *DCA*.
- New streetlights in other areas related to development may be included in the DC calculation to the extent permitted under s. 5(1) of the *DCA*.

Sidewalks and Multi-Use Paths

- Sidewalks internal to a development or site are a direct developer responsibility as a local service under s.59 of the *DCA*.
- Sidewalks external to a development but required and related to the subject lands to provide connectivity to the existing network are a direct developer responsibility as a local service under s.59 of the *DCA*.
- New sidewalks in other areas related to development are included in the DC calculation to the extent permitted under s.5(1) of the *DCA*.

Bike Routes and Bike Lanes

- Bike routes and bike lanes internal to development are a direct developer responsibility under s.59 of the *DCA* (as a local service).
- Bike routes and bike lanes, within the road allowance and external to a development, are to be included in DC road costs, consistent with the service standard provisions of the *DCA*, s.5(1).

Noise Abatement Measures

- Noise abatement measures internal to a development are a direct developer responsibility as a local service under s.59 of the *DCA*.
- 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 as a local service under s.59 of the *DCA*.

Pedestrian Crossings

- Pedestrian crossing internal or external to the plan of subdivision, or within the area to which the plan relates, are a direct developer responsibility as a local service under s.59 of the *DCA*.

Land Acquisition for Road Allowances

- Land acquisition for planned road allowances within development lands is to be a dedication under *Planning Act* subdivision provisions (s.51).
- Land acquisition for planned road allowances outside of development lands, and that is not a dedication under the *Planning Act*, is to be included in the DC calculation to the extent permitted under s.5(1) of the *DCA*.

Land Acquisition for Easements

- Easement costs internal to a development shall be considered a local service.
- Easement costs external to, but related to, a development shall be considered a local service.

B. Stormwater Management

- The costs of stormwater management (SWM) facilities internal to subdivision and related to a plan of subdivision are considered to be a local service under the *DCA* and the associated costs are not included in the development charges calculation. Local SWM facilities would typically include:
 - Stormwater management facilities servicing local drainage areas;
 - Expansion of stormwater management facilities servicing local drainage areas to accommodate flows from a specific new development(s);
 - 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 DC eligible road infrastructure, may be included in a separate area-specific development charge calculation.
- Master drainage planning studies or similar non-development specific studies may be included in the DC calculation.

C. Water

All development-related water supply, storage, treatment facilities and booster stations may be considered as a local service, unless specifically noted otherwise in the Development Charges Background Study. The definition of a “local service” with respect to water services is as follows:

- Watermains within a development, or required to accommodate the flows and pressures of the development, as determined by the County’s hydraulic models,

are deemed to be a local service and are a direct funding responsibility of the developer as a local service under s.59 of the *DCA*.

- Watermains within a development that are larger than what is required to accommodate the flows and pressures of the development, as determined by the County's hydraulic models, are to be included in the DC calculation. The amount of cost contribution for watermains within a development shall be calculated using tendered unit prices and shall be the difference between the cost of the pipe diameter required to accommodate the flows and pressures of the development, as determined by the County's hydraulic models, and the cost of the pipe diameter being installed plus a 10% engineering fee. Only watermain pipe and valves will be included in the above calculation. Any costs related to the depth of pipe are the responsibility of the developer as a local service under s.59 of the *DCA*.
- Watermains shall generally be required to be carried to a property line or external to the subdivision to connect to an existing watermain as a local service as a direct developer funding responsibility as a local service under s.59 of the *DCA*.

D. Wastewater

All development-related wastewater collection, sanitary pumping stations and wastewater treatment facilities are to be included as a local service, unless specifically noted otherwise in the Development Charges Background Study. The definition of a "local service" with respect to wastewater services is as follows:

- Sanitary sewer mains and forcemains within a development, or required to meet the design flows of the development are deemed to be a local service and are a direct funding responsibility of the developer.
- Sanitary sewers mains and foremains that are larger than what is required to meet the design flows of a development shall have cost sharing calculated on the tendered unit prices and shall be the difference between the cost of the pipe diameter required to meet the design flows of the development and the cost of the pipe diameter being installed plus a 10% engineering fee. All other appurtenances with respect to oversizing and any costs related to the depth of pipe are a direct funding responsibility of the developer as a local service under s.59 of the *DCA*.
- Sanitary sewer mains and forcemains external to a development that require upsizing to meet the required design flows of the development are a direct funding responsibility of the developer as a local service under s.59 of the *DCA*.

- Sanitary pumping stations servicing a small localized area (which may be a single or multiple developments) are a local service and are a direct funding responsibility of the developer under s.59 of the *DCA*. If a sanitary pumping station serves multiple developments the costs are to be shared, as a local service, under a developer's agreement or may be considered under a separate area-specific DC.
- Connections to sanitary sewer mains, forcemains, and pumping stations to service a development are a direct funding responsibility of the developer as a local service under s.59 of the *DCA*.
- Sanitary sewer mains shall generally be required to be carried to a property line or external limits of a development to facilitate future connections to the system and are a direct developer funding responsibility as a local service under s.59 of the *DCA*.

E. Parkland Development

- For the purpose of parkland development, local services include the requirement for the developer 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 developer 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 development charge calculation.
- With respect to other parkland development costs, the municipal policy is to include all other components of parkland development in the DC calculation, including parking, park furniture, signage, landscaping and walkways, multi-purpose trails and trail bridges, and underpasses, in addition to the necessary fields, diamonds, playground equipment, lighting, irrigation, and field houses.

Appendix G – Proposed D.C. By-law

The Corporation of Norfolk County

By-Law 2019-XXX

Being a By-Law respecting Development Charges on Lands within The Corporation of Norfolk County.

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

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

AND WHEREAS as required by Section 11 of the Act this By-law is being enacted within one year of the December 2018 completion of the said development charge background study, titled " Norfolk County 2018 Development Charges Background Study," dated December 21, 2018 prepared by Watson & Associates Economists Ltd. and has been made available to the public at least two weeks prior to the public meeting;

AND WHEREAS the Council of Norfolk County, at its meeting of June __, 2019 has adopted the Development Charges Background Study;

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

AND WHEREAS the Council of Norfolk County, has heard all persons who applied to be heard no matter whether in objection to, or in support of, the said By-law;

AND WHEREAS by resolution adopted by Council on June __, 2019, Council has indicated that it intends to ensure that the increase in the need for services attributable to the anticipated development will be met;

AND WHEREAS by resolution adopted by Council on June __, 2019, Council has indicated its intent that the future excess capacity identified in the Study shall be paid for by development charges or other similar charges;

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

1. Definitions

In this By-law,

- 1.1** "agricultural land" means land which is zoned for agricultural or farming uses in the zoning by-law of Norfolk County, or a predecessor municipality;
- 1.2** "apartment" means a building consisting of more than one dwelling unit with a private bathroom and kitchen facilities in each unit and which is not a single detached dwelling, a semi-detached dwelling, a farm help house, a multiple unit dwelling, a mobile home or a temporary residential structure;
- 1.3** "bedroom" includes any room which can be used as sleeping quarters but does not include a kitchen, bathroom, living room or dining room;
- 1.4** "benefiting area" means an area defined by a map, plan or legal description on a front-ending agreement as an area that will receive a benefit from the construction of a service;
- 1.5** "brownfields" mean abandoned, idled or underutilized industrial and commercial properties where expansion or redevelopment is complicated by real or perceived environmental contamination, building deterioration/obsolescence, and/or inadequate infrastructure which have been specifically designated as such by Council;
- 1.6** "capital cost" includes the capital costs defined in Section 5(3) of the Act;
- 1.7** "commercial development" means a building or structure used, designed or intended for use for, or in connection with the purchase and/or sale and/or rental of commodities; the provision of services for a fee; or the operation of a business office. Commercial development does not include a "retail development", an "industrial development", or "roofed accommodation development" as defined herein;
- 1.8** "Council" means the Council of Norfolk County;
- 1.9** "development" includes redevelopment;
- 1.10** "development charge or development charges" means the charges imposed by this By-law against land to pay for increased capital costs required because of increased needs for services arising from development of the area to which this By-law applies;
- 1.11** "existing industrial development" means an industrial development that existed at the time of this by-law's passage;
- 1.12** "farming business" means a business operating on agricultural land with a current Farm Business Registration Number issued pursuant to the Farm

Registration and farm Organization Funding Act, 7993, S.O. 1993 Chapter 21 and assessed in the Farmland Realty Tax Class by the Municipal Property Assessment Corporation;

- 1.13** "farm help house", means a residential building constructed on a farm and not attached to any other building or structure, with sleeping, cooking, living and sanitary facilities, and used for seasonal, interim or occasional residential uses by farm labourers;
- 1.14** "grade" means the average level of proposed or finished ground adjoining, at all exterior walls, a building containing one or more dwelling units, a non-residential building or structure with both residential and non-residential uses;
- 1.15** "gross floor area" means the total area of all floors above and below grade of a building containing one or more dwelling units or a non-residential building or structure of a building or structure with both residential and non-residential uses measured between the outside surfaces of exterior walls or between the outside surfaces of exterior walls and the centre line of party walls dividing the dwelling unit or non-residential building or structure from another dwelling unit or non-residential building or structure or other portion of a building, and excludes those areas used exclusively for parking garages or parking structures, except where parking garages or parking structures are used for the sale, lease, or service of vehicles;
- 1.16** "growth-related net capital cost" means the portion of the net capital cost of services that is reasonably attributable to the need for such net capital costs that results or will result from development in all or a defined part of Norfolk County;
- 1.17** "industrial development" means a building used for, or in connection with:
- a. Manufacturing, producing, processing, storing or distributing something;
 - b. Research or development in connection with manufacturing, producing or processing, something;
 - c. Retail sales by a manufacturer, producer or processor of something they manufactured, produced or processed, if the retail sales are at the site which the manufacturing, production or processing takes place;
 - d. Office or administrative purposes, if they are:
 - i) carried out with respect to manufacturing, producing, processing, storage or distributing of something, and,
 - ii) in or attached to the building or structure used for that manufacturing, producing or processing, storage or distribution;
 - e. Without limiting the generality of the foregoing, industrial development also includes a building used as a commercial greenhouse which is not a farm business as defined herein, a warehouse, and a mini-storage facility.
- 1.18** "institutional" means a building used for, or in connection with religious, charitable, cultural, educational, governmental, health or welfare purposes and shall include but not be limited to, public and private non-commercial schools, nursery schools or day care facilities;

- 1.19** "local board" means a school board, transportation commission, public library board, board of park management, local board of health, board of commissioners of police, or any other board, commission, committee, or local authority established or exercising any power of authority under any general or special Act with respect to any of the affairs or purposes, including school purposes, of Norfolk County;
- 1.20** "manufactured home" means a manufactured home as defined in the Building Code Act, standard for manufactured homes CSA A-277, "Procedure for Certification of Factory Built Houses";
- 1.21** "mixed use development" means a building or structure in which there are or will be both residential and non-residential uses, but does not include a hotel, motel, resort development, guest house, boarding house, nursing home, retirement living multiple unit dwelling or home for the aged;
- 1.22** "mobile home" means a mobile home as defined in the Building Code Act, standard for mobile homes CAN/CSA-Z240.2.1 "Structural Requirements for Mobile Homes";
- 1.23** "multiple unit dwelling" means a residential building consisting of three or more dwelling units attached by a vertical wall or walls and not abutting any dwelling units along a horizontal plane;
- 1.24** "net capital cost" means the capital cost less capital grants, subsidies and other contributions made to the County or that the Council of Norfolk County anticipates will be made, including conveyances or payments under Sections 42, 51, and 53 of the Planning Act, R.S.O. 1990, Chapter P.13 in respect of the capital cost;
- 1.25** "non-residential" means a building used for or in connection with other than residential use, and, without limiting the generality of the foregoing includes commercial, industrial, institutional and retail development;
- 1.26** "place of worship" means a building or structure which is or would be classified as exempt from taxation for realty taxes in accordance with the exemption for "...every place of worship and land used in connection therewith and every churchyard, cemetery or burying ground," in Assessment Act, R.S.O. 1990, Chapter A.31;
- 1.27** "predecessor municipality" means the former Regional Municipality of Haldimand- Norfolk, former Corporation of the City of Nanticoke, former Corporation of the Town of Simcoe, former Corporation of the Township of Delhi and former Corporation of the Township of Norfolk;
- 1.28** "County" means the body corporate continued as a municipality under the name "The Corporation of Norfolk County";
- 1.29** "Residential" includes:

- i) single detached dwellings;
 - ii) individual dwelling units in semi-detached dwellings;
 - iii) farm help houses;
 - iv) individual mobile homes;
 - v) individual dwelling units in multiple unit dwellings;
 - vi) individual apartment dwelling units;
 - vii) individual manufactured homes;
 - viii) temporary residential structures;
 - ix) semi-detached dwellings, multiple unit dwellings and apartments in buildings or structures which are not exclusively used for residential purposes; and,
 - x) residential facility.
- 1.30** "residential facility" means a building containing two or more dwelling units which dwelling units do not have self-contained kitchens. Residential facility includes a garden suite within the meaning of Section 39.1 of the Planning Act. R.S.O. 1990, c. P.13, as amended. Residential facility does not include a single detached dwelling, a semi-detached dwelling, a farm help house, a multiple unit dwelling, an apartment, or roofed accommodation as defined herein;
- 1.31** "retail development" means land, buildings or portions thereof used, designed or intended for use for the purpose of offering foods, wares, merchandise, substances, articles or things for sale directly or providing entertainment to the public and includes rental of wares, merchandise, substances, articles or things and includes offices and storage in connection with, related or ancillary to such retail uses. Retail development includes, but is not limited to: conventional restaurants; fast food restaurants; concert halls I theatres I cinemas I movie houses / drive-in theatres; automotive fuel stations with or without service facilities; specialty automotive shops I auto repairs I collision serviced car or truck washes; auto dealerships' regional shopping centres; community shopping centres; neighbourhood shopping centres, including more than two stores attached and under one ownership; department I discount stores; banks and similar financial institutions; including credit unions (excluding freestanding bank kiosks); warehouse clubs and retail warehouses. Retail development does not include roofed accommodation development.
- 1.32** "roofed accommodation development" means a building or structure used, designed or intended for use for the purpose of offering overnight accommodation to the public and includes hotels, motels, and inns;
- 1.33** "semi-detached dwelling" means a residential building consisting of two dwelling units attached by a vertical wall or walls;
- 1.34** "services" means services designated in Schedule "A" of this By-law or designated in a front-ending agreement;
- 1.35** "single detached dwelling" means a residential building containing one dwelling unit and not attached to another building or structure, whether or not the sole

single detached dwelling is situated on a single lot, and includes manufactured homes; and

- 1.36** "temporary building or structure" means building without a foundation which is constructed, erected or placed on land for a continuous period of time not exceeding one (1) year, or a like addition or alteration to an existing building or an existing structure that has the effect of increasing the usability thereof for a continuous period not exceeding one (1) year. Temporary building or structure excludes a garden suite within the meaning of Section 39.1 of the Planning Act, R.S.O. 1990, c. P. 13, as amended.

2. Scope of By-Law

- 2.1** This By-law applies to all of the land within Norfolk County.

3. Development Charges

- 3.1** The development of land, buildings or structures for residential and non-residential uses have required or will require the provision, enlargement, expansion of the services referenced in Schedule A.

- i) For the purposes of the water and wastewater services, development charge will be imposed if the development has or will have access to these services by 2041 (the term of the Development Charge Study).

- 3.2** The development of land is subject to a development charge where the development requires one of the following:

- i) The development of land is subject to a development charge where the development requires one of the following:
- ii) The passing of a zoning by-law or an amendment thereto under Section 34 of the Planning Act;
- iii) The approval of a minor variance under Section 45 of the Planning Act;
- iv) A conveyance of land to which a by-law passed under subsection 50(7) of the Planning Act applies;
- v) The approval of a plan of subdivision under Section 51 of the Planning Act;
- vi) A consent under Section 53 of the Planning Act;
- vii) The approval of a description under Section 50 of the Condominium Act; R.S.O. 1990, Chapter 26; or
- viii) The issuing of a permit under the Building Code Act, 1992, S.O. 1992, Chapter 23, in relation to a building or structure.

4. Calculation of Development Charges

4.1 The development charge with respect to the development of any land, buildings and structures are to be calculated and collected in accordance with the rates set out in Schedule “B” and Schedule “C”, subject to the other provisions of this by-law, calculated as follows:

- i) In the case of residential development, or the residential portion of a mixed-use development, based upon the number and type of dwelling units;
- ii) In the case of non-residential development, or the non-residential portion of a mixed-use development, based upon the gross floor area of such development;

4.2 Subject to the provisions of this by-law, development charges against land are to be calculated and collected in accordance with the rates set out in Schedule “B” and Schedule “C” in respect of the services set out in Schedule “A” of this by-law.

a) Mixed-Use Development

- i) Where a development has both residential and non-residential uses, development charges will be assessed against both uses, to the extent of their respective uses of a building or structure, and as though the uses were separate.

b) Redevelopment

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

c) Change of Use

- i) Where an existing non-residential building or structure is converted in whole or in part to residential uses, the residential development charge payable for the dwelling units created shall be reduced by an amount equal to the non-residential development charge previously paid for the development being converted, but any such reduction shall not produce a refund. No credit will be provided for services excluded from the non-residential charge.
- ii) Where an existing residential building is converted in whole or in part to non-residential uses, the non-residential development charge payable for the gross floor area so converted shall be reduced by an amount equal to any residential development charges previously paid for the residential

building being converted, and if a dwelling unit is only partially converted the reduction shall be in proportion to the extent of the conversion, but any such reduction shall not produce a refund.

- iii) Development charges assessable for the conversion of uses in a mixed-use building or structure shall be determined in accordance with subsections (c) i) and (c) ii) of this by-law as applicable.

5. Exemptions from Development Charges

5.1 As provided for in Section 2(3) of the Act and Ontario Regulation 82/98, the following are not subject to development charges under the Act and this By-law if the only effect of an action referred to in Section 4 of this By-law is to:

- a. Permit the enlargement of an existing dwelling unit; or,
- b. Permit the creation of up to two additional dwelling units, as prescribed, subject to the prescribed restrictions, in prescribed classes of existing residential buildings. The said prescribed matters from Ontario Regulation 82/98 are attached as Schedule "D".

5.2 Notwithstanding any other provision of this By-law, the following types of development are exempted from any development charges under this By-law:

- i) Industrial development
- ii) Roofed accommodation development
- iii) Temporary Structures
- iv) Farm help house development
- v) Farming business development
- vi) Affordable housing, provided the development charge liabilities of the affordable housing project are not eligible for funding by senior levels of government, and which receives funding from the County under its social housing program.
- vii) A parking garage exclusively devoted to parking, including the construction of an outdoor parking lot at grade, or the construction of a parking garage above or below grade;
- viii) Development which is or would be classified under the Assessment Act as exempt from taxation for realty taxes as a place of worship;
 - a. Any development undertaken by:
 - i) Any board within the meaning of subsection 1 (1) of the Education Act, R.S.O. 1990, Chapter E.2, and,

ii) Any local board of the County.

- 5.3** All development within the boundaries of the "Central Business Districts" as defined within the County's official plan or official plans of the predecessor municipalities.
- 5.4** Brownfield development that has been approved by the County, or any predecessor municipality thereof. The amount of the exemption hereunder is equivalent to the cost of environmental remediation on, in or under the property as approved by the County and required to be paid by the owner, up to but not exceeding the amount of the development charges otherwise payable under this By-law.

6. Collection of Development Charges

- 6.1** Subject to the provision of this section, development charges are payable at the time of building permit issuance.
- 6.2** Prepayment or Deferral Agreements
Council may authorize, in accordance with Section 27 of the Act, an agreement with a person to permit, on such terms as Council may require, the payment of a development charge before or after it is otherwise payable under this By-law.
- 6.3** Services in Lieu Agreements
Council may agree, in accordance with Sections 38, 39, 40 and 41 of the Act, to allow a person to perform work that relates to a service to which this development charge by-law relates, in return for a credit towards the development charges payable by the said person, upon terms specified by Council in its agreement with the person. No such credit shall exceed the total development charges payable by the person.
- 6.4** Front-Ending Agreements
Council may authorize a front-ending agreement in accordance with the provisions of Part III of the Act, upon such terms as Council may require, in respect of the development of land.

7. Administration of By-Law

- 7.1** This By-law shall be administered by the Treasurer of Norfolk County.
- 7.2** As authorized in paragraph ten of Section 5(1) of the Act, the development charges provided for in this By-law shall be adjusted annually by the percentage change during the preceding year, as recorded in the Statistics Canada Quarterly, Construction Price Statistics, and Catalogue number 62-007. This adjustment shall take place on July 1st of each year.
- 7.3** The Treasurer shall, in each year prior to May 31st, commencing May 31, 2019 for the 2018 year, furnish to Council a statement in respect of the separate reserve funds required by the Act for each service to which this By-law relates,

for the prior year, containing the information set out in Section 43 of the Act and Section 12 of Ontario Regulation 82/98.

7.4 This By-Law may be referred to as the "2018 Norfolk County Development Charges By-Law".

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

Read a first and second time this ___ day of June, 2019.

Read a third time and finally passed this ___ day of June, 2019.

Mayor

Clerk

List of Schedules attached to and forming part of By-law No. 2019-XXX

Schedule “A” – List of Services

Schedule “B” – Schedule of Residential Development Charges by Service

Schedule “C” – Schedule of Non-Residential Development Charges by Service

Schedule “D” – Table from O.Reg. 82/98 referred to in Sec.2

SCHEDULE "A"
TO BY-LAW NO. 2019-XXX

Services for Which Development Charges are levied

Roads and Related

Fire Protection

Parking

Parks and Recreation

Library

Administration

Ambulance

Waste Diversion

Marinas

Water

Wastewater

SCHEDULE "B"
TO BY-LAW NO. 2019-XXX

Service	RESIDENTIAL			
	Single and Semi-Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples
Municipal Wide Services:				
Roads and Related Services	1,793	1,148	757	1,253
Fire Protection Services	645	413	272	451
Parking Services	142	91	60	99
Parks and Recreation Services	1,675	1,073	708	1,171
Library Services	898	575	379	627
Administration	86	55	37	60
Ambulance Services	127	81	53	89
Waste Diversion Services	-	-	-	-
Marinas	412	264	174	288
Total Municipal Wide Services	5,778	3,700	2,440	4,038
Urban Services				
Water Services	7,167	4,589	3,027	5,008
Wastewater Services	4,261	2,728	1,800	2,977
Total Urban Services	11,428	7,317	4,827	7,985
GRAND TOTAL RURAL AREA	5,778	3,700	2,440	4,038
GRAND TOTAL URBAN AREA	17,206	11,017	7,267	12,023

SCHEDULE "C"
TO BY-LAW NO. 2019-XXX

Service	NON-RESIDENTIAL
	(per m ² of Gross Floor Area)
Municipal Wide Services:	
Roads and Related Services	17.08
Fire Protection Services	6.28
Parking Services	1.33
Parks and Recreation Services	0.00
Library Services	0.00
Administration	0.84
Ambulance Services	1.19
Waste Diversion Services	0.00
Marinas	0.00
Total Municipal Wide Services	26.71
Urban Services	
Water Services	52.91
Wastewater Services	31.53
Total Urban Services	84.44
GRAND TOTAL RURAL AREA	26.71
GRAND TOTAL URBAN AREA	111.15

SCHEDULE "D"
TO BY-LAW NO. 2019-XXX

Table from O.Reg. 82/09 referred to in Sec.2

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