



The Corporation of the Township of Tay

Public Meeting of Municipal Council Development Charge Review

January 23, 2019
6:30 p.m.

Municipal Office Council Chambers Agenda

1. **Call to Order**
2. **Declarations of Interest**
3. **Statement of Public Notice**
4. **Correspondence Received**
5. **Presentation & Background Report by Consultant**
 - 5.1 Presentation and Background Study Overview from DFA Infrastructure International Inc.
6. **Question & Clarification Period - Public**
7. **Question & Clarification Period – Council**
8. **Final Statement by the Chair**
9. **Adjournment**



The Corporation of the Township of Tay

THE CORPORATION OF THE TOWNSHIP OF TAY NOTICE OF A PUBLIC MEETING For Proposed New Development Charges By-law

The Corporation of the Township of Tay will be holding a Public Meeting pursuant Section 12 to the Development Charges Act, 1997, S.O, 1997, as amended, to present and obtain input on the draft Development Charges Background Study and proposed Development Charges By-law.

The **Public Meeting** will be held at **6:30 PM on Wednesday, January 23rd, 2019** in the Council Chambers at the Township of Tay Municipal Office, 450 Park Street, Victoria Harbour.

Purpose and Effect of the Proposed By-law:

Development Charges are levied against new development and are the primary source of funding for growth-related capital expenditures. Capital services include water, wastewater, roads and related, public works, fire, library, parks & recreation, and general government.

All interested parties are invited to attend the public meeting and any person who attends the meeting may make representation relating to the draft Development Charges Background Study and the proposed Development Charges By-Law.

Information Available: A Copy of the draft Development Charges Background Study and the proposed Development Charges By-Law was made available on December 3, 2018 on the Township website at www.tay.ca. Copies will also be available at the Township Municipal Offices at the above referenced address.

Take Notice that anyone wishing to address Council with respect to the Development Charges Background Study and proposed by-law may do so at the Public Meeting. Persons may provide written comments to Council up until the time of the Public Meeting. If you are submitting letters, faxes, e-mails, presentations or other communications with the Township concerning this application, you should be aware that your name and the fact that you communicated with the Township will become part of the public record. The Township will also make your communication and any personal information in it available to the public, unless you expressly request the Township to remove it. Such correspondence can be sent to the Clerk, Alison Gray, via email agray@tay.ca or by mail/in person to:

Township of Tay
Township Clerk
Re: DC Background Study
450 Park St, P.O. Box 100
Victoria Harbour, ON
L0K 2A0

Dated at the Township of Tay on the 3rd day of January, 2019

Any questions should be directed to Joanne Sanders, Director of Finance/Treasurer at 705-534-7248, ext. 226 or email at jsanders@tay.ca.

Township of Tay

2018 Development Charges Background Study and By- Law Review

Public Meeting
January 23rd , 2019



DFA Infrastructure International Inc.



The Objectives of Today's Workshop is:

- Provide background on Development Charges
- Present Draft DC Study
- Obtain Feedback from the Public

What are Development Charges?

- Development charges are fees levied against new development to recover the capital cost required to service new growth
- Principle behind DCs is that “growth pays for growth” and do not place an undue burden on existing tax payers for the cost of growth
- Development charges do not:
 - Pay for operating costs
 - Pay for asset replacement



Requirement for Imposing Development Charges

- Municipalities are given the authority to impose development charges under the *Development Charges Act, 1997*
- The Act requires that the following steps be taken to impose a development charge:
 - Prepare a Background Study
 - Hold at least one public meeting
 - Pass a DC by-law (DC by-laws are valid for 5 years with current DC by-law expiring on February 12, 2019)



Draft DC Background Study



Main Components of a DC Background Study

- Development Forecast (What is the anticipated growth?)
- Historic Service Levels (What is the current level of service provided?)
- Capital Program (What services are required to support the anticipated growth?)

Growth Projections (Residential)

Dwelling Type	Persons Per Unit (PPU) ¹	10-Year Development Charges Study Period (2019-2028)		Beyond 10 Years (2029-2031)		Total to Build Out (2019-2031)	
		No. of Units ²	Population Growth	No. of Units	Population Growth	No. of Units	Population Growth
Single Detached & Semi Detached	2.40	394	945	118	283	512	1,228
Multiples	2.00	44	87	13	26	57	114
Apartments	1.90	-	-	-	-	-	-
<i>(GROSS) Population Increase in New Units</i>		437	1,032	131	310	569	1,342
<i>NET (Total Population Increase)³</i>			703		211		914

1. PPU's from 2016 Statistics Canada Census Data

2. Township of Tay Municipal Residential Land Budget 2017

3. Township of Tay Municipal Residential Land Budget 2017

Growth Projections (Non-Residential)

Employment Sector	10-Year Development Charges Study Period (2019-2028)	Beyond 10 Years (2029-2031)	Total to Build Out (2019-2031)	% of Total to Build Out (2019-2031)
<u>Population</u>				
Employment Land Employment	21	6	27	21%
Population Related Employment (PRE)	29	9	38	30%
Rural	49	15	63	49%
Total Employment Population Increase	98	29	127	100%
<u>¹Gross Floor Area (m²)</u>				
Employment Land Employment	1,459	438	1,896	20%
Population Related Employment (PRE)	2,063	619	2,682	29%
Rural	3,451	1,380	4,831	51%
Total GFA Increase (m²)	6,973	2,437	9,410	100%

1. GFA Per Employee is the average from 2016 Simcoe County DC Study (71 m²)

Historical Service Levels

Service	Average Service Level Per Capita	Service Level Cap	Population Used
General Government	N/A	N/A	N/A
Library	\$ 335.55	\$ 236,000	Residential
Fire	\$ 684.52	\$ 548,527	Residential and Employment
Parks & Recreation	\$ 1,387.46	\$ 975,847	Residential
Public Works	\$ 662.83	\$ 531,151	Residential and Employment
Roads and Related	\$ 4,971.90	\$ 3,984,152	Residential and Employment
Water	N/A	N/A	N/A
Wastewater	N/A	N/A	N/A

Capital Costs (Gross)

Service	Gross Cost	Period
Township Wide Services		
General Government	\$ 270,000	2019 - 2028
Library	\$ 379,500	2019 - 2028
Fire	\$ 4,085,192	2019 - 2028
Parks & Recreation	\$ 1,385,000	2019 - 2028
Public Works	\$ 412,501	2019 - 2028
Roads and Related	\$ 17,596,984	2019 - 2028
Total Township Wide Services	\$ 24,129,177	
Water and Wastewater Services		
Water	\$ 6,907,109	2019 - 2031
Wastewater	\$ 12,348,943	2019 - 2031
Total Water and Wastewater Services	\$ 19,256,051	
Total	\$ 43,385,229	

Capital Costs (Net)

Service	Gross Cost	Grants/ Subsidies	Benefit To Existing Development	Required 10% Discount	Reserve Adjustments	Post Period Capacity to be Carried Forward	Net Recoverable Costs
Township Wide Services							
General Government	\$ 270,000	\$ -	\$ 50,000	\$ 22,000	\$ 20,473	\$ -	\$ 177,527
Library	\$ 379,500	\$ -	\$ 139,750	\$ 23,975	\$ 2,000	\$ -	\$ 213,775
Fire	\$ 4,085,192	\$ -	\$ 2,230,884	\$ -	\$ (12,951)	\$ 1,318,733	\$ 548,527
Parks & Recreation	\$ 1,385,000	\$ -	\$ 352,440	\$ 103,256	\$ 418,616	\$ -	\$ 510,688
Public Works	\$ 412,501	\$ -	\$ 56,875	\$ -	\$ 63,369	\$ -	\$ 292,256
Roads and Related	\$ 17,596,984	\$ -	\$ 16,299,181	\$ -	\$ 314,374	\$ -	\$ 983,429
Total Township Wide Services	\$ 24,129,177	\$ -	\$ 19,129,130	\$ 149,231	\$ 805,882	\$ 1,318,733	\$ 2,726,201
Water and Wastewater Services							
Water	\$ 6,907,109	\$ -	\$ 3,080,000	\$ -	\$ 402,957	\$ 907,200	\$ 2,516,952
Wastewater	\$ 12,348,943	\$ -	\$ 6,712,935	\$ -	\$ 177,061	\$ 1,030,750	\$ 4,428,197
Total Water and Wastewater Services	\$ 19,256,051	\$ -	\$ 9,792,935	\$ -	\$ 580,018	\$ 1,937,950	\$ 6,945,149
Total	\$ 43,385,229	\$ -	\$ 28,922,066	\$ 149,231	\$ 1,385,899	\$ 3,256,683	\$ 9,671,350

Allocation of Net Capital Costs

Service	Net Capital Needs to be Recovered	Residential Share	Non-Residential Share	Basis for Allocation
Township Wide Services				
General Government	\$ 177,527	\$ 162,132	\$ 15,395	% of Population and Employment Growth
Library	\$ 213,775	\$ 213,775	\$ -	100% residential
Fire	\$ 548,527	\$ 500,960	\$ 47,567	% of Population and Employment Growth
Parks and Recreation	\$ 510,688	\$ 510,688	\$ -	100% residential
Public Works	\$ 292,256	\$ 266,913	\$ 25,344	% of Population and Employment Growth
Roads and Related	\$ 983,429	\$ 898,149	\$ 85,280	% of Population and Employment Growth
Total Township Wide Services	\$ 2,726,201	\$ 2,552,616	\$ 173,586	
Water and Wastewater Services				
Water	\$ 2,516,952	\$ 2,288,244	\$ 228,707	% of Population and Employment Growth
Wastewater	\$ 4,428,197	\$ 4,025,820	\$ 402,376	% of Population and Employment Growth
Total Water and Wastewater Services	\$ 6,945,149	\$ 6,314,065	\$ 631,084	
Total Adjustments	\$ 9,671,350	\$ 8,866,681	\$ 804,669	

Calculated Charges

Service	Residential Rate (Cost/Capita)	Non-Residential Rate (Cost/m ²)
Township Wide Services		
General Government	\$ 154.03	\$ 2.16
Library	\$ 208.98	\$ -
Fire	\$ 448.34	\$ 6.30
Parks and Recreation	\$ 480.72	\$ -
Public Works	\$ 253.75	\$ 3.57
Roads and Related	\$ 861.16	\$ 12.10
Total Township Wide Services	\$ 2,406.98	\$ 24.14
Water and Wastewater Services		
Water	\$ 1,819.46	\$ 25.93
Wastewater	\$ 3,236.97	\$ 46.13
Total Water and Wastewater Services	\$ 5,056.43	\$ 72.06
Total Adjustments	\$ 7,463.41	\$ 96.20

Persons per Unit

Type of Dwelling	Persons per Unit (PPU)
Single Detached & Semi Detached	2.40
Multiples	2.00
Apartments (2+ Bedrooms)	1.90
Apartments (Bachelor & 1 Bedroom)	1.50

Draft DCs - Residential

Service	Residential Charge By Dwelling Type			
	Single Detached Dwellings and Semi-Detached Dwellings	Other Multiples	Apartment Units - 2 or more Bedrooms	Apartment Units - Bachelor and 1 bedroom
General Government	\$ 370	\$ 308	\$ 293	\$ 231
Library	\$ 502	\$ 418	\$ 397	\$ 313
Fire	\$ 1,076	\$ 897	\$ 852	\$ 673
Parks & Recreation	\$ 1,154	\$ 961	\$ 913	\$ 721
Public Works	\$ 609	\$ 508	\$ 482	\$ 381
Roads and Related	\$ 2,067	\$ 1,722	\$ 1,636	\$ 1,292
Sub-total Township Wide Services	\$ 5,777	\$ 4,814	\$ 4,573	\$ 3,610
Water	\$ 4,367	\$ 3,639	\$ 3,457	\$ 2,729
Wastewater	\$ 7,769	\$ 6,474	\$ 6,150	\$ 4,855
Sub-total for Water and Wastewater	\$ 12,135	\$ 10,113	\$ 9,607	\$ 7,585
TOTAL CHARGE PER FULLY SERVICED UNIT	\$ 17,912	\$ 14,927	\$ 14,180	\$ 11,195

Comparison with Current DC Rates

Service	Residential Charge By Dwelling Type				Non-Residential Charge
	Single/Semi-Detached Dwelling	Other Multiples	Apartments Units - 2 or more Bedrooms	Apartments-Bachelor and 1 bedroom	(per m 2 of Gross Floor Area)
CURRENT (2019) CHARGES					
Total Township Wide Services	\$ 6,637	\$ 5,690	\$ 4,743	\$ 3,556	\$ 29.04
Total Water and Wastewater Services	\$ 11,470	\$ 9,831	\$ 8,194	\$ 6,144	\$ 63.71
GRAND TOTAL TOWNSHIP WIDE CHARGE	\$ 18,107	\$ 15,521	\$ 12,937	\$ 9,700	\$ 92.75
PROPOSED CHARGES					
Total Township Wide Services	\$ 5,777	\$ 4,814	\$ 4,573	\$ 3,610	\$ 24.14
Total Water and Wastewater Services	\$ 12,135	\$ 10,113	\$ 9,607	\$ 7,585	\$ 72.06
GRAND TOTAL TOWNSHIP WIDE CHARGE	\$ 17,912	\$ 14,927	\$ 14,180	\$ 11,195	\$ 96.20
DIFFERENCE					
Total Township Wide Services	\$ (860)	\$ (876)	\$ (170)	\$ 54	\$ (4.90)
Total Water and Wastewater Services	\$ 665	\$ 282	\$ 1,413	\$ 1,441	\$ 8.35
GRAND TOTAL TOWNSHIP WIDE CHARGE	\$ (195)	\$ (594)	\$ 1,243	\$ 1,495	\$ 3.45

Persons per Unit (Comparison)

Type of Dwelling	Persons per Unit (PPU) Current Study	Persons per Unit (PPU) Previous Study
Single Detached & Semi Detached	2.40	2.80
Other Multiples	2.00	2.40
Apartments (2+ Bedrooms)	1.90	2.00
Apartments (Bachelor & 1 Bedroom)	1.50	1.50

Residential Comparison (single family)

Municipality	Township Wide (W&WW)		Total Charge
Erin	\$ 11,551	\$ 3,554	\$ 15,105
Centre Wellington	\$ 14,285	\$ 8,770	\$ 23,055
Mapleton	\$ 9,149	\$ 6,290	\$ 15,439
Wellington North	\$ 2,955	\$ 15,324	\$ 18,279
Minto	\$ 1,811	\$ 4,810	\$ 6,621
Southgate	\$ 5,141	\$ 13,967	\$ 19,108
Shelburne	\$ 10,422	\$ 7,142	\$ 17,564
Grand Valley	\$ 10,741	\$ 15,243	\$ 25,984
Blue Mountain	\$ 18,994	\$ 6,717	\$ 25,711
Collingwood	\$ 13,749	\$ 10,823	\$ 24,572
Wasaga Beach	\$ 15,938	\$ 4,861	\$ 20,799
Midland	\$ 12,322	\$ 3,793	\$ 16,115
Severn	\$ 7,442	\$ 11,964	\$ 19,406
Penetanguisene	\$ 6,394	\$ 7,063	\$ 13,457
Springwater	\$ 12,465	\$ 9,482	\$ 21,947
Ramara	\$ 6,466	\$ 7,219	\$ 13,685
New Tecumseth	\$ 22,371	\$ 19,603	\$ 41,974
Orillia	\$ 13,829	\$ 3,879	\$ 17,708
Meadord	\$ 5,307	\$ 7,179	\$ 12,486
Average	\$ 10,596	\$ 8,825	\$ 19,422
Tay (Current)	\$ 6,637	\$ 11,470	\$ 18,107
Tay (Proposed)	\$ 5,777	\$ 12,135	\$ 17,912

Residential Comparison

(apartment unit – 2 bedrooms or more)

Municipality	Township Wide (W&WW)		Total Charge
Erin	\$ 6,561	\$ 2,020	\$ 8,581
Centre Wellington	\$ 8,295	\$ 5,092	\$ 13,387
Mapleton	\$ 4,120	\$ 1,633	\$ 5,753
Wellington North	\$ 1,917	\$ 9,944	\$ 11,861
Minto	\$ 984	\$ 2,613	\$ 3,597
Southgate	\$ 3,296	\$ 8,956	\$ 12,252
Shelburne	\$ 5,921	\$ 4,056	\$ 9,977
Grand Valley	\$ 5,750	\$ 13,185	\$ 18,935
Blue Mountain	\$ 12,663	\$ 2,642	\$ 15,305
Collingwood	\$ 10,082	\$ 7,935	\$ 18,017
Wasaga Beach	\$ 10,947	\$ 3,338	\$ 14,285
Midland	\$ 8,370	\$ 2,578	\$ 10,948
Severn	\$ 5,019	\$ 7,881	\$ 12,900
Penetanguisene	\$ 4,232	\$ 4,673	\$ 8,905
Springwater	\$ 7,060	\$ 5,360	\$ 12,420
Ramara	\$ 4,913	\$ 7,219	\$ 12,132
New Tecumseth	\$ 16,082	\$ 14,093	\$ 30,175
Orillia	\$ 9,705	\$ 2,722	\$ 12,427
Meadord	\$ 3,570	\$ 4,825	\$ 8,395
Average	\$ 6,815	\$ 5,830	\$ 12,645
Tay (Current)	\$ 4,743	\$ 8,194	\$ 12,937
Tay (Proposed)	\$ 4,573	\$ 9,607	\$ 14,180

Non-Residential Comparison

(per square metre)

Municipality	Township Wide	W&WW	Total
Erin	\$49.30	\$15.93	\$65.23
Centre Wellington	\$36.92	\$31.22	\$68.14
Mapleton	\$30.35	\$12.38	\$42.73
Wellington North	\$8.18	\$69.43	\$77.61
Minto	\$7.86	\$17.76	\$25.62
Southgate	\$26.26	\$87.73	\$113.99
Shelburne	\$25.41	\$28.63	\$54.04
Grand Valley	\$43.81	\$114.64	\$158.44
Blue Mountain	\$63.64	\$96.80	\$160.44
Collingwood	\$29.17	\$39.61	\$68.78
Wasaga Beach	\$44.18	\$16.02	\$60.20
Midland	\$17.30	\$16.16	\$33.46
Severn	\$43.70	\$39.50	\$83.21
Penetanguishene	\$75.29	\$72.92	\$148.21
Springwater	\$38.50	\$41.32	\$79.82
Ramara	\$65.28	\$73.61	\$138.89
New Tecumseth	\$57.17	\$158.66	\$215.83
Orillia	\$46.78	\$25.04	\$71.82
Meaford	\$11.39	\$32.76	\$44.15
Average	\$37.92	\$52.11	\$90.03
Tay (Current)	\$29.04	\$63.71	\$92.75
Tay (Proposed)	\$24.14	\$72.06	\$96.20



Questions / Comments



DFA Infrastructure International Inc.

33 Raymond Street St. Catharines Ontario Canada L2R 2T3
Telephone: (905) 938 -0965 Fax: (905) 937-6568

January 14, 2019

Joanne Sanders
Director of Finance/ Treasurer
Township of Tay
450 Park Street
Victoria Harbour, Ontario L4K 2A0

Dear Ms. Sanders,

**Re: Township of Tay
2018 Development Charges (DC) Background Study & By-law
REPORT**

We are pleased to submit the 2019 DC Background Study and proposed By-Law for presentation at the Statutory January 23rd Public Meeting. This report and by-law present the development charges for the period February 12, 2019 to February 11, 2024 and the basis for the calculations in accordance with the requirements of the Development Charges Act 1997 (DCA) and O.Reg.82/98.

Please do not hesitate to call if you have any questions.

Respectfully Submitted by,

DFA Infrastructure International Inc.

A handwritten signature in black ink, appearing to read 'Derek Ali', is written over a faint horizontal line.

Derek Ali, MBA, P.Eng.
President

Executive Summary

ES-1 Purpose

This document is the DC Background Study and its main purpose is to:

- Document the Development Charge policies and calculations of the new rates that inform the preparation of the new DC By-law;
- Present the proposed new DC By-Law to replace the existing by-law upon its expiry on February 12, 2019; and
- Meet the requirements of the DCA and O.Reg.82/98.

ES-2 Services Included

The services identified in Table ES1 were covered in this development charges background study and proposed new by-law based on the eligibility requirement of the Development Charges Act (DCA) and the existing By-law 51-13.

Table ES-1: Eligible Services

Services Included in DC Calculations	
<ul style="list-style-type: none">• Fire Services<ul style="list-style-type: none">- Fire Vehicles- Buildings, Land & Furnishings- Equipment• Roads & Related Services<ul style="list-style-type: none">- Road Works- Related Studies• Park & Recreation Services<ul style="list-style-type: none">- Indoor Recreation- Outdoor Recreation	<ul style="list-style-type: none">• Library Services<ul style="list-style-type: none">- Facilities- Vehicles- Equipment• Public Works<ul style="list-style-type: none">- Public Works Facilities- Public Works Fleet• Wastewater Services<ul style="list-style-type: none">- Treatment- Collection• Water Services<ul style="list-style-type: none">- Water Supply & Treatment- Water Storage- Water Distribution• General Government<ul style="list-style-type: none">- Growth Related Studies

ES-3 Population and Employment Growth

The population and employment growth are summarized in Table ES-2 and Table ES-3. These estimates were used to calculate the service level caps, allocating costs between residential and non-residential growth and calculating the rates.

The residential population growth over the 10-year period is projected to be 703 and 914 to 2031. Residential growth represents approximately 88% of total growth over the 10-year period and to 2031. The growth in number of units is 437 over the next 10 years and 569 to 2031. The population growth in new units is 1032 and 1342 by 2028 and 2031 respectively, based on the occupancy (persons per unit – PPU) shown in Table ES-2.

Table ES-2: Population Growth in New Dwelling Units

Dwelling Type	Persons Per Unit (PPU) ¹	10-Year Development Charges Study Period (2019-2028)		Beyond 10 Years (2029-2031)		Total to Build Out (2019-2031)	
		No. of Units	Population Growth	No. of Units	Population Growth	No. of Units	Population Growth
Single Detached & Semi Detached	2.40	394	945	118	283	512	1,228
Multiples	2.00	44	87	13	26	57	114
Apartments	1.90	-	-	-	-	-	-
Population Increase in New Units		437	1,032	131	310	569	1,342

Table ES-3 shows the employment growth projections over the same periods are 98 for the first 10 years and 127 to 2031. These equate to an additional 6,937 m² of Gross Floor Area (GFA) in the first 10 years and 9,410 m² to build out.

The growth in new units in the settlement (urban) areas represents approximately 95% of the municipal dwelling unit growth. This equates to 415 units by 2028 and 540 by 2031 (build out). The corresponding population increases (in new units) are 980 and 1,275

The employment growth estimate by 2031 is 121 which is equivalent to a GFA of approximately 8,939 m². These urban area projections form the basis for the water and wastewater charges.

Table ES-3: Employment Growth – Township Wide

Employment Sector	10-Year Development Charges Study Period (2019-2028)	Beyond 10 Years (2029-2031)	Total to Build Out (2019-2031)	% of Total to Build Out (2019-2031)
<i>Population</i>				
Employment Land Employment	21	6	27	21%
Population Related Employment (PRE)	29	9	38	30%
Rural	49	15	63	49%
Total Employment Population Increase	98	29	127	100%
<i>¹Gross Floor Area (m²)</i>				
Employment Land Employment	1,459	438	1,896	20%
Population Related Employment (PRE)	2,063	619	2,682	29%
Rural	3,451	1,380	4,831	51%
Total GFA Increase (m²)	6,973	2,437	9,410	100%

ES-4 Recoverable Growth Related Capital Needs

The capital cost eligible for recovery through the development charges after deductions and adjustments and their respective allocations to the residential and non-residential sectors are summarized by service in Table ES-4.

Table ES-4: Allocation of Costs to Residential & Non-Residential

Service	Net Capital Needs to be Recovered	Residential Share	Non-Residential Share	Basis for Allocation
Township Wide Services				
General Government	\$ 177,527	\$ 162,132	\$ 15,395	% of Population and Employment Growth
Library	\$ 213,775	\$ 213,775	\$ -	100% residential
Fire	\$ 548,527	\$ 500,960	\$ 47,567	% of Population and Employment Growth
Parks and Recreation	\$ 330,688	\$ 330,688	\$ -	100% residential
Public Works	\$ 292,256	\$ 266,913	\$ 25,344	% of Population and Employment Growth
Roads and Related	\$ 983,429	\$ 898,149	\$ 85,280	% of Population and Employment Growth
Total Township Wide Services	\$ 2,546,201	\$ 2,372,616	\$ 173,586	
Water and Wastewater Services				
Water	\$ 2,516,952	\$ 2,288,244	\$ 228,707	% of Population and Employment Growth
Wastewater	\$ 4,428,197	\$ 4,025,820	\$ 402,376	% of Population and Employment Growth
Total Water and Wastewater Services	\$ 6,945,149	\$ 6,314,065	\$ 631,084	
Total Adjustments	\$ 9,491,350	\$ 8,686,681	\$ 804,669	

ES-4 Calculated Development Charges

The calculated residential development charges by type of dwelling unit and the non-residential development charges per square metre are presented in Table ES-5. The charges were based on:

- Occupancy rates (persons per unit - PPU) of 2.40, 2.00, 1.9 and 1.5 for single & semi-detached, multiples, apartments - 2 or more bedrooms, apartments - bachelor and 1 bedroom respectively.
- Applying the charges for water and wastewater to development within the settlement areas only.
- All charges will be subject to annual indexing in accordance with O.Reg.82/98 Section 7.

Table ES-5: Calculated Development Charges

Service	Residential Charge By Dwelling Type				Non-Residential Charge (per square metre of Gross floor area)
	Single Detached Dwellings and Semi-Detached Dwellings	Other Multiples	Apartment Units - 2 or more Bedrooms	Apartment Units - Bachelor and 1 bedroom	
General Government	\$ 370	\$ 308	\$ 293	\$ 231	\$ 2.16
Library	\$ 502	\$ 418	\$ 397	\$ 313	\$ -
Fire	\$ 1,076	\$ 897	\$ 852	\$ 673	\$ 6.30
Parks & Recreation	\$ 1,154	\$ 961	\$ 913	\$ 721	\$ -
Public Works	\$ 609	\$ 508	\$ 482	\$ 381	\$ 3.57
Roads and Related	\$ 2,067	\$ 1,722	\$ 1,636	\$ 1,292	\$ 12.10
Sub-total Township Wide Services	\$ 5,777	\$ 4,814	\$ 4,573	\$ 3,610	\$ 24.14
Water	\$ 4,367	\$ 3,639	\$ 3,457	\$ 2,729	\$ 25.93
Wastewater	\$ 7,769	\$ 6,474	\$ 6,150	\$ 4,855	\$ 46.13
Sub-total for Water and Wastewater	\$ 12,135	\$ 10,113	\$ 9,607	\$ 7,585	\$ 72.06
TOTAL CHARGE PER FULLY SERVICED UNIT	\$ 17,912	\$ 14,927	\$ 14,180	\$ 11,195	\$ 96.20

ES-5 Comparison with Existing 2018 Charges

The current 2018 and proposed residential and non-residential development charges are compared in Table ES-6. Table ES-6 shows a decrease in the proposed Township-wide charges for single family and other multiple dwelling units as well as the non-residential charges, with increases in the Township-wide charges in the large and small apartment residential categories. Proposed residential and non-residential charges for water and wastewater services will increase over the current 2018 charges.

Table ES-6: Proposed vs. 2018 Development Charges

Service	Residential Charge By Dwelling Type				Non-Residential Charge
	Single/Semi-Detached Dwelling	Other Multiples	Apartments Units - 2 or more Bedrooms	Apartments-Bachelor and 1 bedroom	(per m 2 of Gross Floor Area)
CURRENT (2018) CHARGES					
Total Township Wide Services	\$ 6,309	\$ 5,409	\$ 4,508	\$ 3,381	\$ 27.60
Total Water and Wastewater Services	\$ 10,903	\$ 9,345	\$ 7,789	\$ 5,840	\$ 60.56
GRAND TOTAL TOWNSHIP WIDE CHARGE	\$ 17,212	\$ 14,754	\$ 12,297	\$ 9,221	\$ 88.16
PROPOSED CHARGES					
Total Township Wide Services	\$ 5,777	\$ 4,814	\$ 4,573	\$ 3,610	\$ 24.14
Total Water and Wastewater Services	\$ 12,135	\$ 10,113	\$ 9,607	\$ 7,585	\$ 72.06
GRAND TOTAL TOWNSHIP WIDE CHARGE	\$ 17,912	\$ 14,927	\$ 14,180	\$ 11,195	\$ 96.20
DIFFERENCE					
Total Township Wide Services	\$ (532)	\$ (595)	\$ 65	\$ 229	\$ (3.46)
Total Water and Wastewater Services	\$ 1,232	\$ 768	\$ 1,818	\$ 1,745	\$ 11.50
GRAND TOTAL TOWNSHIP WIDE CHARGE	\$ 700	\$ 173	\$ 1,883	\$ 1,974	\$ 8.04

ES-6 Recommendations

The following are the recommendations are presented for consideration by the Township.

1. That this DRAFT Development Charges Background Study and By-Law be posted on the Municipality’s website effective immediately for public review in accordance with the requirements of the Development Charges Act, 1997 Section 10 (4).
2. That following approval of the by-law, the required notices are issued to the public and stakeholders and a pamphlet is prepared, in accordance with O.Reg.82/98 Section and O.Reg. 82/98 Section 14 respectively.
3. That the growth-related capital projects forecast identified in this Development Charges Background Study be approved by Council as a statement of its intention to meet the increased need for service due to growth, as required under O.Reg.82/98 Section 3.
4. That any excess capacity created as a result of undertaking the growth-related capital projects identified in this background study would be paid for by development charges and therefore deemed to be “committed” in accordance with the requirements of O.Reg.82/98 Section (5).

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1 Introduction

1.1 Background

The Township of Tay (Township) is a lower tier municipality within Simcoe County with a population of approximately 10,000 residents. It provides a wide range of services to its residents and businesses for which development charges are currently collected. These services include:

- Fire Services
- Roads and Related
- Public Works
- Parks & Recreation
- Library Services
- General Government
- Wastewater Services
- Water Services

The extent to which these services are delivered, and the costs depend not only on the existing residents and businesses but also on the anticipated growth. The recovery of the capital costs of development driven service expansions is governed by the Development Charges Act (1997) (DCA) and Ontario Regulation 82/98 (O.Reg. 82/98). These were amended by the Smart Growth for Our Communities Act (2015) (Bill 73) which became effective on January 1, 2016. Changes include the requirement for municipalities to have approved Asset Management Plans, increased lead time for public review of DC Studies prior to final approval and the need for consideration of the use of area specific charges. The calculation and implementation of development charges (DCs) including the requirement for municipalities to prepare DC Background Studies and pass by-laws setting out the DCs to be collected from developers are prescribed by the DCA and O.Reg. 82/98.

The Township's current DC By-Law No. 2014-01 will expire on February 12, 2019. It needs to be updated through the preparation of a new Background DC Study and By-law and become effective by February 11, 2019.

1.2 Purpose of this Document

This document is the DC Background Study and its main purpose is to:

- Document the Development Charge policies and calculations of the new rates that inform the preparation of the new DC By-law;
- Present the new DC By-Law; and
- Meet the requirements of the DCA and O.Reg.82/98.

2 Study Methodology

2.1 Steps in Calculating Development Charges

The methodology for this study very closely followed the methodology prescribed by the DCA particularly Section 5(1) and O.Reg. 82/98. The steps are outlined in Table 2-1.

Table 2-1: Study Methodology

DC Background Study Steps	
Step 1: Review Development Charges Act, 1997 (DCA) Requirements (See Section 3)	
<ul style="list-style-type: none">The DCA and O.Reg.82/98 were reviewed to confirm requirements and their application to the Township's situation	
Step 2: Develop Policy Framework (See Section 4)	
<ul style="list-style-type: none">The existing By-law No.2014-01 was reviewed to identify existing policies, rules and charges set by the Township.Input received from Council and senior staff on relevant policies and services to be included in the DC calculations indicated no changes from the current by-law	<ul style="list-style-type: none">A presentation was delivered to Council on September 26, 2018 outlining requirements of the DCA and O.Reg.82/98 and policy items for consideration by Council
Step 3: Identify Services Eligible for DCs (See Section 5)	
The services identified for preliminary consideration for inclusion in the study are listed below. These meet the eligibility requirements of O.Reg.82/98 Section 2.1:	
<ul style="list-style-type: none">General Government<ul style="list-style-type: none">Growth Related StudiesFire Services<ul style="list-style-type: none">Fire VehiclesBuildings, Land & FurnishingsEquipmentRoads & Related Services<ul style="list-style-type: none">Road WorksRelated StudiesPark & Recreation Services<ul style="list-style-type: none">Indoor RecreationOutdoor Recreation	<ul style="list-style-type: none">Library Services<ul style="list-style-type: none">FacilitiesVehiclesEquipmentPublic Works<ul style="list-style-type: none">Public Works FacilitiesPublic Works FleetWastewater Services<ul style="list-style-type: none">TreatmentCollectionWater Services<ul style="list-style-type: none">Water Supply & TreatmentWater StorageWater Distribution

DC Background Study Steps

Step 4: Determine Population & Employment Growth (See Section 6)

- The growth-related data and information were reviewed
- Residential population growth was determined for the 10-year period 2019 – 2028 inclusive and the build out period 2028 – 2031 inclusive (most recent build out period approved by Council). The projections considered the decline in population as to identify the “net” growth
- Household growth was determined for the 10-year period 2019 – 2028 inclusive and the build out period 2029 – 2031 inclusive
- The number of persons per household (PPU) was determined for each type of household using the 2016 Statistics Canada Census data.
- Employment population growth was determined for the 10-year period 2019 – 2028 inclusive and the build out period 2029 – 2031 inclusive
- Employment population growth was converted to non-residential gross floor area (GFA)
- The location of new growth was assumed to be across the Township but focused in the urban areas (settlement areas) as noted in the Tay Municipal Residential Land Budget 2017.

Step 5: Determine Historical Service Levels (See Section 7)

- The services for which historical service levels are required were identified. Historical service level calculations for water and wastewater were not required as these services are governed by other legislation.
- The historical population served by each service was determined
- The quantity (floor area, number of equipment, etc.) and quality (cost per square metre, per unit, etc.) of services for each year over the historical 10 years were determined.
- The average service level (cost per population) for the historical 10-year period 2009 – 2018 inclusive was determined

Step 6: Determine the Net Capital Costs to be Recovered from Development Charges (See Section 8)

Step 6.1: Identify Growth Related Capital Needs (Gross)

- Current available servicing studies were reviewed to identify growth related capital needs.
- The forecast period used for projecting capital costs was 10 years (2019-2028) except for water, wastewater, roads and fire protection. These costs were projected over a longer term (2018 to 2031) in accordance with the DCA Section 5(1)4.
- IN cases where debt was incurred to pay for the projects the amount of principal and debt to be repaid within the study period for the respective service was included. This is particularly relevant to Water and Wastewater where the benefit from the debt financed project goes well beyond 2031.
- Input from staff was obtained on growth related capital projects
- The growth-related capital forecasts were developed for each service for the period 2019-2028 inclusive showing the gross capital cost of each project.
- The post period capacities identified in the 2014 background study were brought forward to this study and included in the capital requirements.

DC Background Study Steps

Step 6.2: Undertake Statutory & Other Deductions

- Any approved grants or third-party funding that are expected to be received to reduce the cost of each project were deducted from the gross cost
- Deduct the statutory 10% of the remaining cost after deducting grants, third party funding and benefit to existing population. The 10% deduction does not apply to Water, Wastewater, Fire and Roads Services pursuant to the DCA Section 5(5)
- The portion of each project that will benefit the existing population was determined and deducted from the net cost after grants and third-party funding were deducted

Step 6.3: Further Adjustments after Deductions

- The DCA Section 5(1) does not define uncommitted excess capacity but requires that it be deducted from the increased need for services to accommodate the new growth.
- Any credits related to existing front-end agreements were identified and added to the capital projections in accordance with O.Reg. 82/98 Section 5.
- The deduction of uncommitted excess capacity was deemed to have been done during the planning stages for services when capacity was assessed to determine the need for capacity expansions hence the new projects.
- Any eligible debt or reserve deficits were identified and added to the to the capital forecasts
- The remaining amounts were adjusted by any uncommitted reserve balances because these funds are available for use to offset the growth-related costs.

Step 6.4: Apply Service Level Caps

- The historical average service level (Cost per Population) was multiplied by the projected population growth for the forecast period to obtain the maximum amount (cap) that could be recovered through the DCs.
- The lower of the service level cap or the net capital cost for the forecast period was used as the amount to be recovered through DCs.

Step 7: Calculate the Residential and Non-Residential Development Charges (See Section 9)

Step 7.1: Allocate the Net Capital Cost of each Service to Residential and Non-Residential

- The basis for allocating costs to the residential and non-residential sectors was identified. Residential growth allocation was based on residential population as a percentage of the total residential plus employment population growth over the applicable period. The allocation to non-residential growth was the remainder.
- Parks and Recreation services were deemed 100% benefit of the residential sector.

DC Background Study Steps

Step 7.2: Calculate the Residential and Non-Residential Unadjusted Rates

- The cost allocated to the residential sector for each service was divided by the residential population growth over the applicable period to arrive at a cost per residential population (cost per capita). The result was the unadjusted residential development charge per capita
- The cost allocated to the non-residential sector for each service was divided by the employment population growth over the applicable period to arrive at a cost per employment population.

The cost per employment population was converted to cost per square metre of Gross Floor Area (GFA) based on an average conversion of 71.13 m² per employment population. The result was the unadjusted non-residential rate per square metre.

Step 7.3: Undertake Cash Flow Analyses

- A cash flow analysis was completed for each service using the projected opening reserve balance, anticipated expenditures, anticipated revenues based on the calculated development charges, interest earned on positive annual balances and interest accrued on negative annual balances over the 10-year period or 13-year period. Expenditures, revenues and rates were inflated over the period.
- The residential and non-residential development charges (cost per population for residential and cost per square metre for non-residential) for each service were adjusted to obtain a net zero balance for each reserve at the end of the 10th or 13th year. These became the “adjusted” development charge rates.

Step 7.4: Calculate Proposed Development Charges

- The adjusted rate per population was converted to a charge per unit for single detached dwelling units, multiple dwelling units and apartments using the appropriate persons per unit (PPU).
- The adjusted rate per square metre was deemed the proposed non-residential development charges rate for the by-law.

Step 8: Proposed Development Charges Comparison (See Section 10)

- The proposed development charges were compared with the existing charges.
- The proposed development charges were compared with those in other jurisdictions

DC Background Study Steps

Step 9: Assess Long-term Capital & Operating Cost Impacts (See Section 11)

- The long-term increase to operating costs of each service resulting from growth related infrastructure was estimated. An operating cost per capita was calculated for each service from the Township's most recent Financial Information Return. These rates were applied to projected growth in estimating operating costs.
- The life expectancy for each asset to be funded by the development charges was calculated based on each asset's estimated useful life.
- Annuities were calculated for the replacement of the growth-related assets and funding
- The increases to capital costs of each service as a result of implementing the growth-related infrastructure were estimated. This was based on the portion of capital costs not funded by DCs but funded from other sources
- The future replacement cost of each asset was determined

Step 10: Prepare Draft Background Study & Draft By-Law (See Section 12)

- The Background Study (this document) was prepared in accordance with the requirements of the DCA Section (10) and O.Reg.82/98 Section (8)
- The By-Law (proposed) was prepared in accordance with the DCA Section (6) and based on the rules included in the existing by-law

Step 11: Undertake Stakeholder Consultation (See Section 13)

- The Draft Background Study and Draft By-law was made available for public/ stakeholder review at least 60 days prior to approval of the by-law.
- Public notice for a meeting to be held (Date TBD) to obtain public/ stakeholder comments on the Draft Background Study and Draft By-law was issued at least 20 days in advance of the meeting (Date TBD)
- The Draft Background Study and Draft By-law will be made available to the public/ stakeholders at least 2 weeks prior to the public meeting
- A Stakeholder Meeting will be held (Date TBD) at (Location TBD)

Step 12: Approval & Implementation of Final Background Study and Final By-Law (See Section 14)

- Comments received from stakeholders will be considered and necessary changes made to the Draft Background Study and Draft By-law.
- Approval by Council will be sought in time for the new by-law to become effective by February 11, 2019
- The Final Background Study and Final By-law will be prepared
- Notice of approval of DC By-law will be given within 20 days of final approval by Council.
- A pamphlet will be prepared (within 60 days of approval of the by-law) containing the items noted in O.Reg.82/98 Section 14(1) and make available to the public.

2.1 Data Sources

The primary sources of data used to prepare this Background Study are listed in Table 2-2. In addition, information was also developed from discussions with and input from the Township’s staff, as required.

Table 2-2: Background Study Data Sources

Item	Data Source
Services to be Included	<ul style="list-style-type: none"> • By-Law No. 2014-01 • Council Direction • Input from staff
Historical Residential Population and Future Growth	<ul style="list-style-type: none"> • Township of Tay Development Charge Study, 2014 • Township of Tay Municipal Residential Land Budget June 2017 • Statistics Canada 2016 Census
Historical Employment Population and Future Growth	<ul style="list-style-type: none"> • Township of Tay Development Charge Study, 2014 • Township of Tay Employment Land Budget Summary June 2017 • Statistics Canada 2016 Census
Household Projections	<ul style="list-style-type: none"> • Township of Tay Municipal Residential Land Budget June 2017 • Statistics Canada 2016 Census • Input from staff
Historical Service Level Information	<ul style="list-style-type: none"> • Information supplied by the Town • Township of Tay Development Charge Study, 2014
Growth Related Capital Costs	<ul style="list-style-type: none"> • Township’s Long-Term Financial Plan • Township of Tay Fire Master Plan • Township of Tay Development Charge Study, 2014 • Staff Input
Operating Costs	<ul style="list-style-type: none"> • Township’s 2017 FIR
Policies & Rules	<ul style="list-style-type: none"> • By-Law No. 2014-01 • Council Direction • Input from staff

3 Step1: Development Charges Act 1997 (DCA) Requirements

3.1 General Requirements

In Ontario the governing legislation for development charges is the Development Charges Act (1997), O.Reg. 82/98 and O.Reg.192/07. The latter regulation applies only to the Toronto-York Subway Station and is not relevant to this background study.

The DCA Section 2 (1) allows municipalities to establish by-laws to impose development charges “against land to pay for increased capital costs required because of increased needs for services arising from development of the area to which the by-law applies”. In accordance with the DCA Section 2(2),

“A development charge may be imposed only for development that requires,

- (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 subsection 50 (7) of the Planning Act applies;*
- (d) *the approval of a plan of subdivision under section 51 of the Planning Act;*
- (e) *a consent under section 53 of the Planning Act;*
- (f) *the approval of a description under section 9 of the Condominium Act, 1998; or*
- (g) *the issuing of a permit under the Building Code Act, 1992 in relation to a building or structure. “*

The DCA and O.Reg. 82/98 are very prescriptive in the services and costs that can be included in the DC calculations and how the calculations are to be undertaken. They also prescribe the stakeholder consultation and other requirements for implementation of development charges.

In general, the DCA and O.Reg.82/98 identify the following:

- The information must be presented in the background study
- The services for which DCs may be recovered
- The need to calculate the 10-year historical service levels to determine the maximum cost (cap) that may be included in the DC calculations. This does not apply to engineered services such as transportation, water, wastewater and stormwater.
- The requirement to determine “excess capacity” within the current services and whether or not such excess capacity is committed or available to facilitate new growth
- The period for forecasting costs. This is typically 10 years for most services but longer for others such as water, wastewater, stormwater, transportation, etc.

- The eligible and ineligible capital costs for inclusion in the DC calculations
- Required reductions to gross capital costs of DC related projects
- Creation and maintenance of dedicated reserve funds for each service
- Stakeholder consultation and notices and their timing
- The contents and effective period of the by-law (5 years)
- Protocol for appealing the proposed development charges
- Rules for collection of development charges including mandatory exemptions

Further details on the requirements of the DCA and O.Reg.82/98 are available by referencing these documents at www.ontario.ca/laws/statute/97d27 .

3.2 Prescribed Calculation Methodology

The methodology for calculating development charges is defined by the specific requirements of the DCA and O.Reg. 82/98 and is very consistent across Ontario.

The DCA Section 5(1) states that: *“The following is the method that must be used, in developing a development charge by-law, to determine the development charges that may be imposed:*

- 1. The anticipated amount, type and location of development, for which development charges can be imposed, must be estimated.*
- 2. The increase in the need for service attributable to the anticipated development must be estimated for each service to which the development charge by-law would relate.*
- 3. The estimate under paragraph 2 may include an increase in need only if the council of the Township has indicated that it intends to ensure that such an increase in need will be met. The determination as to whether a council has indicated such an intention may be governed by the regulations.*
- 4. The estimate under paragraph 2 must not include an increase that would result in the level of service exceeding the average level of that service provided in the Township over the 10-year period immediately preceding the preparation of the background study required under section 10. How the level of service and average level of service is determined may be governed by the regulations. The estimate also must not include an increase in the need for*

service that relates to a time after the 10-year period immediately following the preparation of the background study unless the service is set out in subsection (5).

- 5. The increase in the need for service attributable to the anticipated development must be reduced by the part of that increase that can be met using the Township's excess capacity, other than excess capacity that the council of the Township has indicated an intention would be paid for by new development. How excess capacity is determined and how to determine whether a council has indicated an intention that excess capacity would be paid for by new development may be governed by the regulations.*
- 6. The increase in the need for service must be reduced by the extent to which an increase in service to meet the increased need would benefit existing development. The extent to which an increase in service would benefit existing development may be governed by the regulations.*
- 7. The capital costs necessary to provide the increased services must be estimated. The capital costs must be reduced by the reductions set out in subsection (2). What is included as a capital cost is set out in subsection (3). How the capital costs are estimated may be governed by the regulations.*
- 8. The capital costs must be reduced by 10 per cent. This paragraph does not apply to services set out in subsection (5).*
- 9. Rules must be developed to determine if a development charge is payable in any case and to determine the amount of the charge, subject to the limitations set out in subsection (6).*
- 10. The rules may provide for full or partial exemptions for types of development and for the phasing in of development charges. The rules may also provide for the indexing of development charges based on the prescribed index".*

4 Step 2: Policy Framework

4.1 Existing Development Charges By-Law No. 2014-01

The existing DC By-Law No. 2014-01 was approved by the Township's Council on February 12, 2014 and will remain effective until expiry on February 11, 2019. Some of the main features of the existing by-law include:

- Identifying the following services for which the DCs are currently collected:
 - Fire Services;
 - Roads & Related;

- Public Works;
 - Parks & Recreation;
 - Library Services;
 - General Government
 - Water Services; and
 - Wastewater Services
-
- Establishing rules for exemptions, industrial buildings expansions and redevelopment of existing properties.
 - Exempting Commercial Development Charges properties zoned Village Commercial by Zoning By-law 2000-57, as amended, or its successor, in the downtown core areas of the communities of Port McNicoll, Victoria Harbour and Waubaushene.
 - Collecting residential DCs on per “dwelling unit” the basis times the number of dwelling units;
 - Setting residential DCs for the following types of dwelling units:
 - Single Detached & Semi-Detached Dwellings;
 - Multiples Dwellings;
 - Apartment Units - 2 or more Bedrooms; and
 - Apartment Units - Bachelor and 1 Bedroom
 - Collecting non-residential DCs on the basis of GFA which is consistent with industry practise.

A copy of the existing DC By-law No. 2014-01 is available on the Township’s website at: www.tay.ca/en/your-municipality/resources/Documents/DCA-By-law-Passed-Feb-2014.pdf

4.2 Policy Direction

The policies used in preparing the background study and by-law were guided by the existing DC By-law 2014-01 as described in Section 4.1 and a Council workshop was held on September 26, 2018 to solicit feedback. The outcome of discussions was to maintain the policies of the current by-law. These include discretionary exemptions for commercial development as noted in Section 4.1.

It is important to note that reductions in revenue due to exemptions result in increase needs in tax and rate budgets. A table outlining the policy items covered in the by-law is included in the final document in Appendix A.

5 Step 3: Services Eligible for Development Charges

The services identified for inclusion in the study are listed in Table 5-1. These met the eligibility criteria noted in O.Reg.82/98 Section 2.1.

Table 5-1: Eligible Services

Services Included in DC Calculations	
<ul style="list-style-type: none">• General Government<ul style="list-style-type: none">- Growth Related Studies• Fire Services<ul style="list-style-type: none">- Fire Vehicles- Buildings, Land & Furnishings- Equipment• Roads & Related Services<ul style="list-style-type: none">- Road Works- Related Studies• Park & Recreation Services<ul style="list-style-type: none">- Indoor Recreation- Outdoor Recreation	<ul style="list-style-type: none">• Library Services<ul style="list-style-type: none">- Facilities- Vehicles- Equipment• Public Works<ul style="list-style-type: none">- Public Works Facilities- Public Works Fleet• Wastewater Services<ul style="list-style-type: none">- Treatment- Collection• Water Services<ul style="list-style-type: none">- Water Supply & Treatment- Water Storage- Water Distribution

6 Step 4: Population and Employment Growth

The DCA Section 5(1) requires that *“the anticipated amount, type and location of development, for which development charges can be imposed, must be estimated”*. Therefore, estimated future growth in new households over the study period and the location of such growth is required for the calculations. Determination of net historical growth over the last 10 years is also required to determine the historical service levels. The projected net residential and employment population growth are used to determine the service level caps. Population growth in new households and employment growth are used to allocate costs between residential and non-residential growth and calculate the development charges on a per capita and per square metre basis for residential and non-residential respectively.

In Simcoe County, Provincial and County direction for accommodating population and employment growth and related development is provided by the Provincial Policy Statement (PPS), the Growth Plan for the Greater Golden Horseshoe (Growth Plan) and the Simcoe County Official Plan.

Simcoe County has prepared a population, household and employment forecast to 2031 allocating the growth by municipality. These projects are documented in the respective Residential and Employment Land Budgets for the Township. Projections beyond 2031 are not yet allocated or approved.

Appendix B provides the residential and employment projections for:

- The 10-year historical period 2009 to 2018;
- The 10-year study period 2019 to 2028; and
- The build out period 2028 to 2031

The annual growth is assumed to be linear between the milestone years. The growth in population, employment and dwelling units are based on growth information contained in the Township of Tay Municipal Residential Land Budget 2017, Employment Land Budget 2017 and Statistics Canada 2016 census data.

6.1 Municipal Wide Growth

Table 6-1 summarizes the growth in residential population over the next 10 years (2019 - 2029) and to build out (2019 -2031). The municipal wide growth in population for the 10-year period is 703 and 914 to 2031. Approximately 95% of the growth is expected in the settlement areas.

Table 6-1: Municipal Wide Population Growth (2019-2031)

Geographical Area	10-Year Development Charges Study Period (2019-2028)	Beyond 10 Years (2029-2031)	Total to Build Out (2019-2031)	% of Total ²
Delineated Built Boundaries & Undelineated Built-Up Areas ¹	141	42	183	20%
Designated Greenfield Areas ¹	528	158	686	75%
Subtotal Settlement Areas	668	200	869	95%
Outside Settlement Areas ¹	35	11	46	5%
Total Population Increase	703	211	914	100%

1. Township of Tay Municipal Residential Land Budget 2017 Table 1 for 2016 & 2031. Interpolation in between years.

2. Percentage allocations using percentages in Table 2, Township of Tay Municipal Residential Land Budget 2017

Table 6-2 shows the number of new dwelling units to be 437 over 10 years and 569 to 2031. According to the housing mix identified in 2017 Land Budget Table 5, single and semi-detached account for 90% (512) of the projected growth in new units and multiples 10% (57 by 2031). No growth in apartment units is expected. The residential growth to be accommodated in these new units is projected to be 1,032 by 2028 and 1,342 to build out as shown in Table 6-3.

Table 6-2: Municipal Wide Growth in New Dwelling Units

Geographical Area	10-Year Development Charges Study Period (2019-2028)	Beyond 10 Years (2029-2031)	Total to Build Out (2019-2031)	% of Total ²
Delineated Built Boundaries & Undelineated Built-Up Areas ¹	87	26	114	20%
Designated Greenfield Areas ¹	328	98	426	75%
Subtotal Settlement Areas	415	125	540	95%
Outside Settlement Areas ¹	22	7	28	5%
Total Increase in Household Units	437	131	569	100%

1. Township of Tay Municipal Residential Land Budget 2017 Table 1 for 2016 & 2031. Interpolation in between years.

2. Percentage allocations using percentages in Table 2, Township of Tay Municipal Residential Land Budget 2017

Table 6-3: Municipal Wide Population Growth in New Dwelling Units

Dwelling Type	Persons Per Unit (PPU) ¹	10-Year Development Charges Study Period (2019-2028)		Beyond 10 Years (2029-2031)		Total to Build Out (2019-2031)	
		No. of Units	Population Growth	No. of Units	Population Growth	No. of Units	Population Growth
Single Detached & Semi Detached	2.40	394	945	118	283	512	1,228
Multiples	2.00	44	87	13	26	57	114
Apartments	1.90	-	-	-	-	-	-
Population Increase in New Units		437	1,032	131	310	569	1,342

1. PPU's from 2016 Statistics Canada Census Data

The employment growth projections over the same periods are shown in Table 6-4. The projected employment growth is 98 for the first 10 years and 127 to build out. These equate to an additional 6,973 m² of Gross Floor Area (GFA) in the first 10 years and 9,410 m² to build out. The floor area was calculated using the average employment density for all lands as derived from the 2016 Simcoe County DC Study 2016, Appendix A, Tables 12 and 13. The average conversion rate used is 71.15 m² per employee which is consistent with the County’s average.

Table 6-4: Municipal Wide Employment Growth

Employment Sector	10-Year Development Charges Study Period (2019-2028)	Beyond 10 Years (2029-2031)	Total to Build Out (2019-2031)	% of Total to Build Out (2019-2031)
<i>Population</i>				
Employment Land Employment	21	6	27	21%
Population Related Employment (PRE)	29	9	38	30%
Rural	49	15	63	49%
Total Employment Population Increase	98	29	127	100%
<i>¹ Gross Floor Area (m²)</i>				
Employment Land Employment	1,459	438	1,896	20%
Population Related Employment (PRE)	2,063	619	2,682	29%
Rural	3,451	1,380	4,831	51%
Total GFA Increase (m²)	6,973	2,437	9,410	100%

1. GFA Per Employee is the average from 2016 Simcoe County DC Study, Appendix A, Tables 12 & 13.

6.2 Urban Area Growth

In keeping with the direction of the PPS and Growth Plan, and Land Budget, the majority of future population and housing growth in the Township will be directed to the urban areas referred to as “*Delineated Built Boundaries, Undelineated Built-Up Areas and Designated Greenfield Areas*”.

The growth in new units in these areas represents approximately 95% of the municipal dwelling unit growth. This equates to 415 units by 2028 and 540 by 2031 (build out) as shown in Table 6-2. The corresponding population increases (in new units) for the respective periods are 980 and 1,275. It is anticipated that the growth in the urban areas will be supported by the installation of new or expansion of existing water and wastewater systems, as necessary.

The employment growth estimate by 2031 is 121 which is equivalent to a GFA of approximately 8,939 m² as shown in Table 6-5. These urban area projections form the basis for the water and wastewater charges.

Table 6-5: Urban Area Employment Growth to Build Out (2018 - 2041)

Settlement Area	10-Year Development Charges Study Period (2019-2028)	Beyond 10 Years (2029-2031)	Total to Build Out (2019-2031)	% of Total to Build Out (2019-2031) ²
<i>Employment Population</i>				
Delineated Built Boundaries & Undelineated Built-Up Areas ¹	20	6	25	20%
Designated Greenfield Areas ¹	74	22	96	75%
Total Employment Population Increase	93	28	121	95%
<i>¹ Gross Floor Area (m²)</i>				
Delineated Built Boundaries & Undelineated Built-Up Areas ¹	1,395	487	1,882	20%
Designated Greenfield Areas ¹	5,230	1,828	7,057	75%
Total GFA Increase (m²)	6,624	2,315	8,939	95%

1. GFA Per Employee is the average from 2016 Simcoe County DC Study, Appendix A, Tables 12 & 13.

2. Percentage allocations using percentages in Table 2, Township of Tay Municipal Residential Land Budget 2017

7 Step 5: Historical Service Levels

The DCA Section 5(1)4 limits the level of service to be provided to new customers to the same as the average level of service over the 10-year period immediately preceding the year of the new DC Background Study. This requirement ensures that improvements to existing service levels are not funded by the new development charges. Accordingly, the capital cost to be recovered through the development charges must not exceed an amount (referred to as the service level “cap”) using the 10-year historical service level as the basis. This requirement applies to all eligible service except for general government, water and wastewater.

The amount of the cap is calculated by first determining the average historical cost per population. The inventory of historical services (e.g. facilities gross floor areas, number of units of equipment, etc.), current replacement costs and the historical populations are used to calculate the average historical service level. These satisfy the requirements of O.Reg. Section 4(1) which state that the quantity (number of units of equipment, etc.) and quality (e.g. cost per unit) of the services must be taken into account. The cap is calculated by multiplying the average service level (cost per population) by the projected population over the next 10 years. The inventory and replacement costs were provided by the Township.

The detailed tables showing the historical service level calculations for each service are included in Appendices C1 to C5. Table 7-1 summarizes the historical average service level for each eligible service. The service level cap for each service was used to adjust the capital costs in calculating the net to be recovered through the development charges. This is further described in Section 8.4. Service level caps do not apply to studies, water and wastewater.

Table 7-1: Average Historical Service Levels

Service	10 Year Historical Average Service Level Per Capita	Population Used
General Government	N/A	N/A
Library	\$ 335.55	Residential
Fire	\$ 684.52	Residential and Employment
Parks & Recreation	\$ 1,387.46	Residential
Public Works	\$ 662.83	Residential and Employment
Roads and Related	\$ 4,971.90	Residential and Employment
Water	N/A	N/A
Wastewater	N/A	N/A

8 Step 6: Net Growth-Related Capital Costs

This Section presents the capital investments required to facilitate the projected residential and employment growth. All required deductions and allowable adjustments were made in accordance with the DCA and O.Reg.82/98 to arrive at the net capital investment required for each service. The service level caps and post period provisions were applied to these amounts to identify the net costs to be recovered from the development charges.

It should be noted that costs to be recovered from future growth include debts incurred for previous growth-related capital works related to fire, public works, water and wastewater. These debts are recoverable from future growth with the principal repayment made over the study period having been included for recovery, as well as the corresponding interest payments, which have been discounted back to 2019 dollars. The principal and interest payment occurring beyond the study period will be recovered in future DC study updates.

Also considered in the development of net growth-related capital costs were post period amounts identified to be carried forward from the previous study. These provisions were reviewed with staff and determined to already be addressed in the capital program as presented or through completion of capital works, and therefore not included

The detailed calculations are presented by service in Appendices D1 to D8.

8.1 Step 6.1: Growth Related Capital Needs

Table 8-1 summarizes the gross capital needs for each service before required deductions and allowable adjustments were made. The respective periods over which these costs would be incurred for each service are also shown. The amounts shown are the costs of the projects that are required to facilitate growth as identified by staff, the Township’s Long-Term Financial Plan and/or master servicing plans.

All or a portion of the funding for each of these projects would be from development charges. Approximately \$24.13 million in capital investment (not including water and wastewater is required to support future growth over the periods indicated. Additional investments of approximately \$6.91 million in the water systems and \$12.35 million in wastewater systems would also be required in areas where these services would be offered. The total requirement is approximately \$43.39 million.

Table 8-1: Growth- Related Capital Needs (Gross)

Service	Gross Cost	Period
Township Wide Services		
General Government	\$ 270,000	2019 - 2028
Library	\$ 379,500	2019 - 2028
Fire	\$ 4,085,192	2019 - 2028
Parks & Recreation	\$ 1,385,000	2019 - 2028
Public Works	\$ 412,501	2019 - 2028
Roads and Related	\$ 17,596,984	2019 - 2028
Total Township Wide Services	\$ 24,129,177	
Water and Wastewater Services		
Water	\$ 6,907,109	2019 - 2031
Wastewater	\$ 12,348,943	2019 - 2031
Total Water and Wastewater Services	\$ 19,256,051	
Total	\$ 43,385,229	

8.2 Step 6.2: Deductions

Table 8-2 summarizes the net capital needs for each service *after* making the required deductions. These deductions reduce the amounts recoverable from development charges and are in accordance with the requirements of the DCA and O.Reg.82/98.

The net recoverable amount after deductions is approximately \$4.85 million (not including water and wastewater vehicles) and approximately \$3.83 million for water and \$5.64 million for wastewater. The total recoverable amount is approximately \$14.31 million. Appendix D shows the detailed deductions for each service.

Table 8-2: Net Recoverable Capital Costs after Deductions

Service	Gross Cost	Grants/ Subsidies	Benefit To Existing Development	Required 10% Discount	Total Development Recoverable Costs Net of Stat. Deduction
Township Wide Services					
General Government	\$ 270,000	\$ -	\$ 50,000	\$ 22,000	\$ 198,000
Library	\$ 379,500	\$ -	\$ 139,750	\$ 23,975	\$ 215,775
Fire	\$ 4,085,192	\$ -	\$ 2,230,884	\$ -	\$ 1,854,308
Parks & Recreation	\$ 1,385,000	\$ -	\$ 352,440	\$ 103,256	\$ 929,304
Public Works	\$ 412,501	\$ -	\$ 56,875	\$ -	\$ 355,626
Roads and Related	\$ 17,596,984	\$ -	\$ 16,299,181	\$ -	\$ 1,297,803
Total Township Wide Services	\$ 24,129,177	\$ -	\$ 19,129,130	\$ 149,231	\$ 4,850,816
Water and Wastewater Services					
Water	\$ 6,907,109	\$ -	\$ 3,080,000	\$ -	\$ 3,827,109
Wastewater	\$ 12,348,943	\$ -	\$ 6,712,935	\$ -	\$ 5,636,007
Total Water and Wastewater Services	\$ 19,256,051	\$ -	\$ 9,792,935	\$ -	\$ 9,463,116
Total	\$ 43,385,229	\$ -	\$ 28,922,066	\$ 149,231	\$ 14,313,932

8.3 Step 6.3: Adjustments

Adjustments to the projected capital costs considered:

- Positive and negative reserve balances. Positive balances were deducted, and negative balances added to the recoverable amounts;
- Adding any credits owed to developers based on existing front-end agreements. In the Township’s case there were no credits;

Table 8-3 summarizes the adjustments made. The adjustments made were to reduce the respective capital projections for each service by the amounts of existing positive reserve balances and increase for negative reserve balances. There were no credits to be brought forward. The respective positive reserve fund balances are deemed available cash that were applied to the growth-related costs to reduce the amount required from the new development charges. Negative reserve fund balances are deemed debts that are required to be recovered from new development. The total adjustments made were approximately \$1.39 million.

Table 8-3: Summary of Adjustments

Service	Reserve Balance	Reserve Deficits	Credits	Total Adjustments
Township Wide Services				
General Government	\$ 20,473	\$ -	\$ -	\$ 20,473
Library	\$ 2,000	\$ -	\$ -	\$ 2,000
Fire	\$ -	\$ (12,951)	\$ -	\$ (12,951)
Parks and Recreation	\$ 418,616	\$ -	\$ -	\$ 418,616
Public Works	\$ 63,369	\$ -	\$ -	\$ 63,369
Roads and Related	\$ 314,374	\$ -	\$ -	\$ 314,374
Total Township Wide Services	\$ 818,833	\$ (12,951)	\$ -	\$ 805,882
Water and Wastewater Services				\$ -
Water Services	\$ 402,957	\$ -	\$ -	\$ 402,957
Wastewater Services	\$ 177,061	\$ -	\$ -	\$ 177,061
Total Water and Wastewater Services	\$ 580,018	\$ -	\$ -	\$ 580,018
Total Adjustments	\$ 1,398,851	\$ (12,951)	\$ -	\$ 1,385,899

Table 8-4 summarizes the recoverable net capital for each service *after* making the required deductions *and* adjustments but before the service level caps were applied and post period capacity calculated.

The net recoverable amount after deductions and adjustments is approximately \$4.04 million for Township wide services and approximately \$3.42 million for water and \$5.46 million for wastewater. The total requirement is approximately \$12.93 million. The adjustments are also shown in Appendices D1 to D8 for each service.

Table 8-4: Net Recoverable Capital Costs after Deductions & Adjustments

Service	Total Development Recoverable Costs Net of Stat. Deduction	Adjustments	Total DC Eligible Costs for Recovery
Township Wide Services			
General Government	\$ 198,000	\$ 20,473	\$ 177,527
Library	\$ 215,775	\$ 2,000	\$ 213,775
Fire	\$ 1,854,308	\$ (12,951)	\$ 1,867,259
Parks and Recreation	\$ 929,304	\$ 418,616	\$ 510,688
Public Works	\$ 355,626	\$ 63,369	\$ 292,256
Roads and Related	\$ 1,297,803	\$ 314,374	\$ 983,429
Total Township Wide Services	\$ 4,850,816	\$ 805,882	\$ 4,044,934
Water and Wastewater Services			
		\$ -	
Water	\$ 3,827,109	\$ 402,957	\$ 3,424,152
Wastewater	\$ 5,636,007	\$ 177,061	\$ 5,458,947
Total Water and Wastewater Services	\$ 9,463,116	\$ 580,018	\$ 8,883,099
Total	\$ 14,313,932	\$ 1,385,899	\$ 12,928,033

8.4 Step 6.4: Service Level Cap

The service level cap is calculated based on the historical service levels. It limits the amount of funding recoverable from the development charges for some services regardless of the net amounts after deductions and adjustments. The lower of the recoverable amounts net of deductions and adjustments or the service level cap were used to determine the development charges. Amounts that exceed the service level cap were deemed to be post period capacity which can be carried forward to the next study for consideration at that time. While service level caps do not apply to water and wastewater, post period capacity has also been identified for water and wastewater. This is due to the relatively short study period that ends in 2031 whereas the benefit of the projects would extend well beyond 2031. Water and Wastewater post period calculations are the result of plant and storage capacity projects being funded over the short planning period in this study. To ensure fairness in the rates it has been proposed that the new capacity be allocated over a 20 years period, with post 2031 capacity to be recovered in future updates of the DC by-law.

Table 8-5: Application of Service Level Caps

Service	Gross Capital Needs	Net Capital Needs	Service Level Cap	Post Period Capacity to be Carried Forward	Total DC Eligible Costs for Recovery
Township Wide Services					
General Government	\$ 270,000	\$ 177,527		\$ -	\$ 177,527
Library	\$ 379,500	\$ 213,775	\$ 236,000	\$ -	\$ 213,775
Fire	\$ 4,085,192	\$ 1,867,259	\$ 548,527	\$ 1,318,733	\$ 548,527
Parks and Recreation	\$ 1,385,000	\$ 510,688	\$ 975,847	\$ -	\$ 510,688
Public Works	\$ 412,501	\$ 292,256	\$ 531,151	\$ -	\$ 292,256
Roads and Related	\$ 17,596,984	\$ 983,429	\$ 3,984,152	\$ -	\$ 983,429
Total Township Wide Services	\$ 24,129,177	\$ 4,044,934		\$ 1,318,733	\$ 2,726,201
Water and Wastewater Services					
Water	\$ 6,907,109	\$ 3,424,152		\$ 907,200	\$ 2,516,952
Wastewater	\$ 12,348,943	\$ 5,458,947		\$ 1,030,750	\$ 4,428,197
Total Water and Wastewater Services	\$ 19,256,051	\$ 8,883,099		\$ 1,937,950	\$ 6,945,149
Total Adjustments	\$ 43,385,229	\$ 12,928,033		\$ 3,256,683	\$ 9,671,350

Table 8-5 summarizes the service level caps, recoverable amounts through the development charges and any post period capacity to be carried forward to the next study. The Total DC Eligible Cost for Recovery were the final amounts used to calculate the development charges as described in Section 9.

The net recoverable amount after deductions and adjustments, application of the service level caps and provision of post period capacity is approximately \$2.73 million for Township wide services and approximately \$2.52 million for water and \$4.43 for wastewater. The detailed calculations for each service are presented in Appendices D1 to D8.

8.5 Council Approval of Capital Investments

O.Reg.82/98 Section 3 requires that municipal councils demonstrate their intention to meet the increase in need for capital expenditures related to growth. Otherwise such capital costs cannot be included in the calculations. Therefore, it is recommended that Council approve the capital forecasts noted in Section 8.1 and provided in Appendix D to confirm its intention to meet the growth requirements.

9 Step 7: Calculation of Development Charges

This section presents the calculation of the residential and non-residential development charges based on the net recoverable growth-related capital costs determined in the previous sections of this report. The calculation details are shown in Appendices E1 to E8.

9.1 Step 7.1: Allocation of Costs to Residential & Non-Residential Growth

Many of the services provided by the Township benefit both the residential and non-residential sectors. The costs to be recovered for these services were allocated to the residential and non-residential sectors on the basis of each sector's proportionate share of total net residential and employment population growth. Some services such as Library, and Parks and Recreation services are geared to the residential sector with 100% of eligible costs being allocated to residential growth.

Table 9-1 shows the allocations for each service. The residential share of the Township wide costs to be recovered (not including water and wastewater) is approximately \$2.55 million and the non-residential share approximately \$0.17 million. The residential and non-residential shares of the water costs are approximately \$2.29 million and \$0.23 million respectively. The residential and non-residential shares of the wastewater costs are approximately \$4.03 million and \$0.40 million respectively.

Table 9-1: Allocation of Costs to Residential & Non-Residential

Service	Net Capital Needs to be Recovered	Residential Share	Non-Residential Share	Basis for Allocation
Township Wide Services				
General Government	\$ 177,527	\$ 162,132	\$ 15,395	% of Population and Employment Growth
Library	\$ 213,775	\$ 213,775	\$ -	100% residential
Fire	\$ 548,527	\$ 500,960	\$ 47,567	% of Population and Employment Growth
Parks and Recreation	\$ 510,688	\$ 510,688	\$ -	100% residential
Public Works	\$ 292,256	\$ 266,913	\$ 25,344	% of Population and Employment Growth
Roads and Related	\$ 983,429	\$ 898,149	\$ 85,280	% of Population and Employment Growth
Total Township Wide Services	\$ 2,726,201	\$ 2,552,616	\$ 173,586	
Water and Wastewater Services				
Water	\$ 2,516,952	\$ 2,288,244	\$ 228,707	% of Population and Employment Growth
Wastewater	\$ 4,428,197	\$ 4,025,820	\$ 402,376	% of Population and Employment Growth
Total Water and Wastewater Services	\$ 6,945,149	\$ 6,314,065	\$ 631,084	
Total Adjustments	\$ 9,671,350	\$ 8,866,681	\$ 804,669	

9.2 Step 7.2: Unadjusted Development Charge Rates

Development charge rates were calculated on a per capita (population) basis for the residential sector by dividing the costs allocated to residential by the residential population growth over the 10-year period 2019 to 2028. For water and wastewater services this period was 13 years (2019-2031). Similarly, the non-residential rates were calculated by dividing the non-residential cost allocations by the growth in gross floor area over the 10-year period to arrive at a cost per m². These resulted in the preliminary unadjusted residential and non-residential rates prior to undertaking the cash flow analyses. These rates were subsequently adjusted as described in Section 9.3.

Table 9-2 shows the unadjusted residential and non-residential rates by service. Assumptions used in the calculation of gross floor area related to industrial, commercial and institutional employment are consistent with the assumptions used in the County's development charge study.

Table 9-2: Unadjusted Residential & Non-Residential Rates

Service	Residential			Non-Residential		
	Cost	Growth in Population	Rate (Cost/Capita)	Cost	Growth in Floor Area (Square Metres)	Rate (Cost/m ²)
Township Wide Services						
General Government	\$ 162,132	1,032	\$ 157.09	\$ 15,395	6,973	\$ 2.21
Library	\$ 213,775	1,032	\$ 207.12	\$ -	6,973	\$ -
Fire	\$ 500,960	1,032	\$ 485.38	\$ 47,567	6,973	\$ 6.82
Parks and Recreation	\$ 510,688	1,032	\$ 494.80	\$ -	6,973	\$ -
Public Works	\$ 266,913	1,032	\$ 258.61	\$ 25,344	6,973	\$ 3.63
Roads and Related	\$ 898,149	1,032	\$ 870.21	\$ 85,280	6,973	\$ 12.23
Total Township Wide Services	\$ 2,552,616		\$ 2,473.21	\$ 173,586		\$ 24.90
Water and Wastewater Services						
Water	\$ 2,288,244	1,275	\$ 1,795.19	\$ 228,707	8,939	\$ 25.59
Wastewater	\$ 4,025,820	1,275	\$ 3,158.37	\$ 402,376	8,939	\$ 45.01
Total Water and Wastewater Services	\$ 6,314,065		\$ 4,953.56	\$ 631,084		\$ 70.60
Total Adjustments	\$ 8,866,681		\$ 7,426.77	\$ 804,669		\$ 95.49

9.3 Step 7.3: Cash Flow Analyses

Cash flow analyses were undertaken over the 10-year period 2019 to 2028 for services with a 10-year study period. A 13-year cash flow period was used for the other services. These analyses considered the transfers in and out of the respective reserve fund for each service and their timing. Cash outflows were according to the projected capital expenditures. Cash inflows were calculated by multiplying the projected annual residential population growth by the adjusted rate per capita and adding the product of the non-residential growth in floor area and

the adjusted rate per square metre. The rates were increased by inflation assumed at 2% per year. The objective of undertaking the cash flow analyses is to ensure that the rates are sufficient to result in a zero net cash flow at the end of the 10-year period. The rates were adjusted to achieve this objective. Appendices E1 to E8 provides a cash flow table for each service.

The adjusted rates are summarized in Table 9-3. The total residential rate for Township wide services was calculated to be \$2,406.98 per capita and the non-residential rate \$24.14 per m².

The rates for water were determined to be \$1,819.46 per capita and \$25.93 per m² for residential and non-residential respectively. The rates for wastewater were determined to be \$3,236.97 per capita and \$46.13 per m² for residential and non-residential respectively.

Table 9-3: Adjusted Residential & Non-Residential Rates (After Cash Flow Analyses)

Service	Residential Rate (Cost/Capita)	Non-Residential Rate (Cost/m ²)
Township Wide Services		
General Government	\$ 154.03	\$ 2.16
Library	\$ 208.98	\$ -
Fire	\$ 448.34	\$ 6.30
Parks and Recreation	\$ 480.72	\$ -
Public Works	\$ 253.75	\$ 3.57
Roads and Related	\$ 861.16	\$ 12.10
Total Township Wide Services	\$ 2,406.98	\$ 24.14
Water and Wastewater Services		
Water	\$ 1,819.46	\$ 25.93
Wastewater	\$ 3,236.97	\$ 46.13
Total Water and Wastewater Services	\$ 5,056.43	\$ 72.06
Total Adjustments	\$ 7,463.41	\$ 96.20

9.4 Step 7.4: Proposed Development Charges

The non-residential development charges are the adjusted rates per square metre calculated as described in Section 9.3. The residential development charges by type of dwelling unit were calculated using the adjusted rate per capita and the respective household size estimates (persons per unit – PPU) noted in Table 9-4 for each type of dwelling unit. The household sizes are based on the Statistics Canada 2016 Census data and Township’s 2013 Development

Charges Study for Bachelor & 1-Bedroom Units. These calculations were undertaken for each service and type of dwelling and are consistent with requirements of O.Reg. 82/98 Section (2).

Table 9-4: Occupancy by Type of Dwelling Unit

Type of Dwelling Unit	Occupancy - Persons per Unit (PPU)
Single Detached & Semi- Detached	2.40
Other Multiples	2.00
Apartments – 2 or More Bedrooms	1.90
Apartments – Bachelor & 1 Bedroom	1.50

The proposed residential development charges by unit type are listed in Table 9-5 for each service and are based on the policies and rules noted in Section 4.2. The development charge for a single detached dwelling was calculated to be \$5,777 for the Township wide services and \$12,135 for water and wastewater. These are rounded to the nearest dollar. Table 9-5 also shows the proposed non-residential rates and total \$96.20 per m². All charges will be subject to annual indexing in accordance with O.Reg.82/98 Section 7.

Table 9-5: Proposed Development Charges

Service	Residential Charge By Dwelling Type				Non-Residential Charge (per square metre of Gross floor area)
	Single Detached Dwellings and Semi-Detached Dwellings	Other Multiples	Apartment Units - 2 or more Bedrooms	Apartment Units - Bachelor and 1 bedroom	
General Government	\$ 370	\$ 308	\$ 293	\$ 231	\$ 2.16
Library	\$ 502	\$ 418	\$ 397	\$ 313	\$ -
Fire	\$ 1,076	\$ 897	\$ 852	\$ 673	\$ 6.30
Parks & Recreation	\$ 1,154	\$ 961	\$ 913	\$ 721	\$ -
Public Works	\$ 609	\$ 508	\$ 482	\$ 381	\$ 3.57
Roads and Related	\$ 2,067	\$ 1,722	\$ 1,636	\$ 1,292	\$ 12.10
Sub-total Township Wide Services	\$ 5,777	\$ 4,814	\$ 4,573	\$ 3,610	\$ 24.14
Water	\$ 4,367	\$ 3,639	\$ 3,457	\$ 2,729	\$ 25.93
Wastewater	\$ 7,769	\$ 6,474	\$ 6,150	\$ 4,855	\$ 46.13
Sub-total for Water and Wastewater	\$ 12,135	\$ 10,113	\$ 9,607	\$ 7,585	\$ 72.06
TOTAL CHARGE PER FULLY SERVICED UNIT	\$ 17,912	\$ 14,927	\$ 14,180	\$ 11,195	\$ 96.20

10 Step 8: Comparison of Development Charges

10.1 Comparison with 2018 Existing and Proposed Development Charges

Table 10-1 compares the proposed development charges with the existing 2018 charges.

The proposed Township-wide charges for single family and other multiple dwelling units, as well as the non-residential charges will decrease over the current 2018 charges. Township-wide charges for the large and small apartment residential categories will increase. Proposed residential and non-residential charges for water and wastewater services will also increase over the current 2018 charges.

Overall, the proposed total charges for all residential categories and non-residential uses will increase over current 2018 charges.

Table 10-1: Proposed vs. Existing 2018 Development Charges

Service	Residential Charge By Dwelling Type				Non-Residential Charge
	Single/Semi-Detached Dwelling	Other Multiples	Apartments Units - 2 or more Bedrooms	Apartments-Bachelor and 1 bedroom	(per m ² of Gross Floor Area)
CURRENT (2018) CHARGES					
Total Township Wide Services	\$ 6,309	\$ 5,409	\$ 4,508	\$ 3,381	\$ 27.60
Total Water and Wastewater Services	\$ 10,903	\$ 9,345	\$ 7,789	\$ 5,840	\$ 60.56
GRAND TOTAL TOWNSHIP WIDE CHARGE	\$ 17,212	\$ 14,754	\$ 12,297	\$ 9,221	\$ 88.16
PROPOSED CHARGES					
Total Township Wide Services	\$ 5,777	\$ 4,814	\$ 4,573	\$ 3,610	\$ 24.14
Total Water and Wastewater Services	\$ 12,135	\$ 10,113	\$ 9,607	\$ 7,585	\$ 72.06
GRAND TOTAL TOWNSHIP WIDE CHARGE	\$ 17,912	\$ 14,927	\$ 14,180	\$ 11,195	\$ 96.20
DIFFERENCE					
Total Township Wide Services	\$ (532)	\$ (595)	\$ 65	\$ 229	\$ (3.46)
Total Water and Wastewater Services	\$ 1,232	\$ 768	\$ 1,818	\$ 1,745	\$ 11.50
GRAND TOTAL TOWNSHIP WIDE CHARGE	\$ 700	\$ 173	\$ 1,883	\$ 1,974	\$ 8.04

10.2 Comparison with 2019 Projected and Proposed Development Charges

Table 10-2 compares the proposed development charges with projected 2019 charges that will come into effect on January 1, 2019 as a result of the automatic annual indexation of development charges. 2018 development charge rates will increase on January 1st by 5.2% based on increases in the Non-Residential Building Construction Price Index.

Table 10-2: Proposed vs. Projected 2019 Development Charges

Service	Residential Charge By Dwelling Type				Non-Residential Charge
	Single/Semi-Detached Dwelling	Other Multiples	Apartments Units - 2 or more Bedrooms	Apartments-Bachelor and 1 bedroom	(per m ² of Gross Floor Area)
PROJECTED (2019) CHARGES					
Total Township Wide Services	\$ 6,637	\$ 5,690	\$ 4,743	\$ 3,556	\$ 29.04
Total Water and Wastewater Services	\$ 11,470	\$ 9,831	\$ 8,194	\$ 6,144	\$ 63.71
GRAND TOTAL TOWNSHIP WIDE CHARGE	\$ 18,107	\$ 15,521	\$ 12,937	\$ 9,700	\$ 92.75
PROPOSED CHARGES					
Total Township Wide Services	\$ 5,777	\$ 4,814	\$ 4,573	\$ 3,610	\$ 24.14
Total Water and Wastewater Services	\$ 12,135	\$ 10,113	\$ 9,607	\$ 7,585	\$ 72.06
GRAND TOTAL TOWNSHIP WIDE CHARGE	\$ 17,912	\$ 14,927	\$ 14,180	\$ 11,195	\$ 96.20
DIFFERENCE					
Total Township Wide Services	\$ (860)	\$ (876)	\$ (170)	\$ 54	\$ (4.90)
Total Water and Wastewater Services	\$ 665	\$ 282	\$ 1,413	\$ 1,441	\$ 8.35
GRAND TOTAL TOWNSHIP WIDE CHARGE	\$ (195)	\$ (594)	\$ 1,243	\$ 1,495	\$ 3.45

11 Step 9: Long-Term Capital and Operating Costs Implications

This section presents the long-term cost implications of the investments to accommodate future growth. These assessments considered the implications to future operating and capital costs as well as the costs related to future asset renewal. The detailed projections are provided in Appendix F.

11.1 Long-Term Operating Costs

The long-term operating cost impacts were based on historical operating costs per capita noted in the Township’s 2017 Financial Information Return reporting, and the projected increase in growth. Table 11-1 summarizes the estimated increase in operating costs due to new growth as it related to each service area. The total accumulative 10-year increase in operating costs is estimated to be approximately \$3.77 million, with \$1.94 million being funded from future tax payers, and \$1.83 million being funded from future rate payers

Table 11-1: 10-Year Operating Cost Implications

Cummulative Net Operating Impacts	
Service	Total
General Government	\$ -
Library	\$ 140,104
Fire	\$ 386,075
Parks and Recreation	\$ 504,310
Public Works	\$ 4,617
Roads and Related	\$ 901,287
Water	\$ 812,537
Wastewater	\$ 1,021,514
Total Cummulative Net Operating Impacts	\$ 3,770,442

11.2 Long-term Capital Costs

The long-term capital cost impacts were determined to be the portions of growth-related costs not funded by development charges due to deductions. These amounts include the 10% statutory deductions and the “benefit to existing” amounts shown in Appendix D and would be funded through either taxes or the water and wastewater rates as the case may be. Table 11-2 summarizes the increase in capital costs (not funded through development charges) due to the addition of the new growth-related assets in each service area. The total 10-year accumulative increase in capital costs for the tax supported services is estimated to be approximately \$19.26 million. The increase for the rate supported services (water and wastewater) is approximately \$9.79 million.

Table 11-2: 10-year Capital Cost Implications

Cumulative Net Capital Cost Impacts	
By Service	Total
General Government	\$ 72,000
Library Services	\$ 163,725
Fire	\$ 2,230,884
Parks and Recreation	\$ 455,696
Public Works	\$ 56,875
Roads and Related	\$ 16,299,181
Water	\$ 3,080,000
Wastewater	\$ 6,712,935
Total Capital Cost Impacts	\$ 29,071,296

11.3 Asset Management Plan

The DCA Section 10(2) requires that an asset management plan be included in the Development Charges Background Study to capture the costs required to sustain the new growth-related assets over the long-term. This plan reflects the annual investments required to renew and replace the assets as they age. The growth-related capital cost estimates were annualized over the estimated life expectancies based on the future cost in projected the year of replacement. The estimated life expectancies used for the purpose of this study were 10 for vehicles, 20 years for equipment, and 40 years for facilities and infrastructure assets. The total 10-year asset management requirements estimated to be \$8.93 million. Approximately \$4.61 million relate to tax supported assets and \$4.32 million to rate supported assets.

Table 11-3: 10-Year Asset Management Cost Implications

Cummulative Net Lifecycle Impact	
Service	Total
General Government	\$ -
Library	\$ 218,383
Fire	\$ 227,540
Parks and Recreation	\$ 272,332
Public Works	\$ 33,261
Roads and Related	\$ 3,908,414
Water	\$ 1,379,381
Wastewater	\$ 2,921,126
Total Cummulative Net Lifecycle Impacts	\$ 8,960,436

12 Step 10: Background Study & By-Law

This background study report was prepared to provide the detail required in accordance with the DCA Section (10) and O.Reg.82/98 Section (8). The by-law is included in the study as Appendix G. The by-law identifies the services included, rules that apply to the development charges and schedule of applicable residential and non-residential development charges. The study and by-law will be revised based on the stakeholder consultation described in Section 13 prior to being finalized for approval by Council.

13 Step 11: Stakeholder Consultation

The DCA Section 10(4) requires that the Development Charges Study and the By-Law be made available to the public for review at least 60 days in advance of the passing of the by-law. This step in the process provides the opportunity for interested parties to make representations on the Development Charges Study and proposed by-law prior to finalization and implementation.

The legislation prescribes that Council conduct a public meeting with at least 20 days' notice of the meeting. In accordance with O. Reg. 82/98, Section 9 (1) notice may be by publication in a local newspaper, which in the Clerk's opinion, has with sufficient general circulation across the Township or by personal service, mail or fax to every land owner.

A meeting with stakeholders to solicit input was held on January 8th, 2019. A statutory public meeting will be held January 23rd, 2019 to receive comments. A report summarizing the comments and input received at the stakeholder meeting is included in Appendix H. All comments received will be considered and the study and by-law will be updated accordingly upon final approval by Council.

14 Step 12: By-Law Adoption & Implementation

The final background study and by-law will be prepared following consultation with stakeholders (as described in Section 13) and presented to Council for approval to take effect upon expiry of the existing development charges by-law. In accordance with the DCA Section 13, written notice of the passing of the DC by-law will be given no later than 20 days after the day the by-law is passed (i.e. as of the day of newspaper publication or the mailing of the notice). The O.reg.82/98 Section 10(4) lists the items that must be covered in the notice.

A pamphlet will also be prepared in accordance with O.Reg.82/98 Section 14 within 60 days of the passing of the by-law and include the following:

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

15 Recommendations

The following are the recommendations are presented for consideration by the Township.

1. That this DRAFT Development Charges Background Study and By-Law be posted on the Municipality's website effective immediately for public review in accordance with the requirements of the Development Charges Act, 1997 Section 10 (4).
2. That following approval of the by-law, the required notices are issued to the public and stakeholders and a pamphlet is prepared, in accordance with O.Reg.82/98 Section and O.Reg. 82/98 Section 14 respectively.
3. That the growth-related capital projects forecast identified in this Development Charges Background Study be approved by Council as a statement of its intention to meet the increased need for service due to growth, as required under O.Reg.82/98 Section 3.
4. That any excess capacity created as a result of undertaking the growth-related capital projects identified in this background study would be paid for by development charges and therefore deemed to be "committed" in accordance with the requirements of O.Reg.82/98 Section (5).

APPENDICES

Appendix A

**POLICY ITEMS TO BE
CONSIDERED BY COUNCIL
(To be added in next draft)**

Appendix B

Growth Projections

APPENDIX B: GROWTH PROJECTIONS

Type of Dwelling	Persons per Unit (PPU) ¹
Single Detached & Semi Detached ²	2.40
Multiples ³	2.00
Apartments (2+ Bedrooms) ⁴	1.90
Apartments (Bachelor & 1 Bedroom) ⁵	1.50

1. Source: Data tables, 2016 Census Structural Type of Dwelling (10) and Household Size (8) for Occupied Private Dwellings of Canada, Provinces and Territories, Census Divisions and Census Subdivisions, 2016 Census - 100% Data

2. Equivalent to Single Detached PPU in Source table identified in 1. above

3. Equivalent to Rown Housing PPU in Source table identified in 1. above

4. Equivalent to Apartments (<5 Storeys) PPU in Source table identified in 1. above

5. Equivalent to PPU used in current by-law. Determination of the PPU for this category not available from source table identified in 1 above.

Household Growth - Township Wide

Growth Item	2019 - 2028	2029-2031	Total	% of Total ²
Delineated Built Boundaries & Undelineated Built-Up Areas ¹	87	26	114	20%
Designated Greenfield Areas ¹	328	98	426	75%
Subtotal Settlement Areas	415	125	540	95%
Outside Settlement Areas ¹	22	7	28	5%
Township Wide Household Growth	437	131	569	100%

1. Township of Tay Municipal Residential Land Budget 2017 Table 1 for 2016 & 2031. Interpolation in between years.

2. Percentage allocations using percentages in Table 2, Township of Tay Municipal Residential Land Budget 2017

APPENDIX B: GROWTH PROJECTIONS

Household Growth by Unit Type

Growth Item	2019 - 2028	2029-2031	Total	% of Total
Single-Detached & Semi-detached	394	118	512	90%
Multiples	44	13	57	10%
Apartments	-	-	-	0%
Total Households	437	131	569	100%

1. Percentages from Township of Tay Municipal Residential Land Budget 2017 Table 5.

Projected Number of Households & Annual Increase (10 Years - and to Buildout)

Growth Item	10-Year Development Charges Study Period (2019-2028)										Build Out (2029-2031)		
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Township Wide Households ¹	5,062	5,106	5,150	5,193	5,237	5,281	5,325	5,368	5,412	5,456	5,500	5,543	5,587
Increase	44	44	44	44	44	44	44	44	44	44	44	44	44
% Increase	0.9%	0.9%	0.9%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Total Households	5,062	5,106	5,150	5,193	5,237	5,281	5,325	5,368	5,412	5,456	5,500	5,543	5,587
								2019 to 2028 Units Growth		437	2029 to 2031 Units Growth		131

1. Township of Tay Municipal Residential Land Budget 2017 Table 1 for 2016 and 2031. Interpolation in between years.

APPENDIX B: GROWTH PROJECTIONS

Historical Population (Last 10 years)

Growth Item	10-Year Historical									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Census Population (Excluding undercount) ¹	9,741	9,738	9,736	9,795	9,855	9,914	9,974	10,033	10,101	10,170
	(2)	(2)	(2)	59	59	59	59	59	68	68
% Increase	0.0%	0.0%	0.0%	0.6%	0.6%	0.6%	0.6%	0.6%	0.7%	0.7%
Total Population (Including undercount) ²	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486
	(2)	(2)	(2)	61	61	61	61	72	70	70
% Increase	0.0%	0.0%	0.0%	0.6%	0.6%	0.6%	0.6%	0.7%	0.7%	0.7%
Population Growth (EXCLUDING Undercount)	2009 to 2018 Growth									426
Population Growth (INCLUDING Undercount)	2009 to 2018 Growth									450

1. Township of Tay Development Charge Study, 2014 Table A1 for 2006 & 2011. Township of Tay Municipal Residential Land Budget 2017 Table 1 for 2031. Interpolation in between years.
 2. Township of Tay Municipal Residential Land Budget 2017 Table 1 for 2016 & 2031. Interpolation in between years. 3% added to Census Population from 2006 to 2015 based on Table 1.

Projected Population & Annual Growth (10 Years - and to Buildout)

Growth Item	10-Year Development Charges Study Period										Projections to Build Out		
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Census Population (Excluding undercount) ¹	10,238	10,306	10,374	10,443	10,511	10,579	10,647	10,716	10,784	10,852	10,920	10,989	11,057
	68	68	68	68	68	68	68	68	68	68	68	68	68
% Increase	0.7%	0.7%	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
Total Population (Including undercount) ²	10,556	10,626	10,697	10,767	10,837	10,908	10,978	11,048	11,119	11,189	11,259	11,330	11,400
	70	70	70	70	70	70	70	70	70	70	70	70	70
% Increase	0.7%	0.7%	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
Population Growth (EXCLUDING Undercount)	2019 to 2028 Growth									683	2029 to 2031 Growth		205
Population Growth (INCLUDING Undercount)	2019 to 2028 Growth									703	2029 to 2031 Growth		211

1. Township of Tay Development Charge Study, 2014 Table A1 for 2006 & 2011. Township of Tay Municipal Residential Land Budget 2017 Table 1 for 2031. Interpolation in between years.
 2. Township of Tay Municipal Residential Land Budget 2017 Table 1 for 2016 & 2031. Interpolation in between years. 3% added to Census Population from 2006 to 2015 based on Table 1.

APPENDIX B: GROWTH PROJECTIONS

Projected Employment Population & Floor Space Growth (Next 10 Years - and to Buildout)

Growth Item	10-Year Development Charges Study Period										Projections to Build Out			
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
Employment Population¹	1,679	1,689	1,700	1,710	1,720	1,730	1,740	1,750	1,760	1,771	1,781	1,791	1,801	
Increase	10	10	10	10	10	10	10	10	10	10	10	10	10	
% Increase	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
Total Employment Population Growth for Period	2019 to 2028 Growth										102	2029 to 2031 Growth		30
⁴Annual Employment Population Growth by Sector Excluding Work at Home														
Employment Land Employment	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	
Population Related Employment (PRE)	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	
Rural	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	
Annual Employment Pop Growth	10	10	10	10	10	10	10	10	10	10	10	10	10	
Employment Population Growth for Period	2019 to 2028 Growth										98	2029 to 2031 Growth		29
²Annual Gross Floor Area (GFA) Growth by Sector (m²)														
Employment Land Employment	146	146	146	146	146	146	146	146	146	146	146	146	146	
Population Related Employment (PRE)	206	206	206	206	206	206	206	206	206	206	206	206	206	
Rural	345	345	345	345	345	345	345	345	345	345	345	345	345	
Total Annual GFA Growth (sf)	697	697	697	697	697	697	697	697	697	697	697	697	697	
GFA Growth (sf) for Period	2019 to 2028 Growth										6,973	2029 to 2031 Growth		2,092
³Gross Floor Area (GFA) Per Employee (m²/employee)														
Employment Land Employment	71	71	71	71	71	71	71	71	71	71	71	71	71	
Population Related Employment (PRE)	71	71	71	71	71	71	71	71	71	71	71	71	71	
Rural	71	71	71	71	71	71	71	71	71	71	71	71	71	

1. Employment Population between 2011 and 2031 interpolated from Employment Land Budget 2017. Employment Population prior to 2011 from October 2015 Corporate Strategic Plan Figure 14

2. GFA Projections determined by multiplying the respective employment population by the GFA per employee

3. GFA Per Employee is the average from 2016 Simcoe County DC Study, Appendix A, Table 12 & 13.

4. Employment excludes "work at home" employment estimated 41 job on employment lands

Appendix C

Historical Service Level Calculations

Appendix C-1
Table 1
Township of Tay
Calculation of Service Standards
Parks & Recreation (Indoor Rec Land)

**Unit Measure: Value of Land Per Capita
Inventory (Hectares) & Value**

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Unit Value (\$/hectare)
Land											
Oakwood Community Centre - Victoria Harbour	0.087	0.087	0.087	0.087	0.087	0.087	0.087	0.087	0.087	0.087	\$ 863,062
Port McNicoll Community Centre - Port McNicoll	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	\$ 990,013
Talbot Park Youth Centre (541 Calvert Street)	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	\$ 2,395,213
Oakwood Change Rooms	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	\$ 9,036,157
Waverly Snack Shack	0.004	0.004	0.004	0.004	0.004	0.010	0.010	0.010	0.010	0.010	\$ 2,857,147
Talbot Park - Change Room & Rink Building	0.004	0.004	0.004	0.280	0.280	0.280	0.280	0.280	0.280	0.280	\$ 160,428
Bridgeview Park - Change Rooms and Community Centre (Portable)	0.010	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	\$ 24,409,502
Total	0										
Total Value(\$)	\$ 485,338	\$ 391,243	\$ 391,243	\$ 435,618	\$ 435,618	\$ 455,000					

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Value Per Capita (\$)	\$ 48.37	\$ 39.01	\$ 39.01	\$ 43.18	\$ 42.92	\$ 44.56	\$ 44.29	\$ 43.98	\$ 43.69	\$ 43.39	\$ 43.24

Service Level Cap	
Forecast Population Growth (2019 to 2028)	703
Average Service Level (\$ per Capita)	\$ 43.24
Service Level Cap	\$ 30,412

**Appendix C-1
Table 2
Township of Tay
Calculation of Service Standards
Parks & Recreation (Parks Fleet)**

**Unit Measure: Value of Vehicles Per Capita
Inventory (No. of Vehicles) & Value**

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/unit)
2000 1 Ton Truck	1	1	1	1							\$ 70,000
2007 3/4 Ton Pick-up Truck	1	1	1	1	1	1	1	1	1	1	\$ 45,000
1/2 ton Pick-up	1	1	1	1	1	1	1	1	1	1	\$ 25,000
2006 1 Ton Dump	1	1	1	1	1	1	1	1	1	1	\$ 70,000
3/4 Ton Van -Addition to fleet										1	\$ 38,000
-watering apparatus for 2008 Tandem								1	1	1	\$ 6,000
2007 Farm Tractor	1	1	1	1	1	1	1	1	1	1	\$ 15,000
2002/2012 Lawnmower	1	1	1	1	1	1	1	1	1	1	\$ 20,000
2006/2015 Lawnmower	1	1	1	1	1	1	1	1	1	1	\$ 18,000
2018 Lawnmower - New add										1	\$ 18,000
Ice Resurfacer-Olympia			1	1	1	1	1	1	1	1	\$ 80,000
2008 John Deer Tractor	1	1	1	1	1	1	1	1	1	1	\$ 25,000
2006 Wood Chipper -in roads	1	1	1	1	1						\$ 45,000
2001-33 Trailer - on roads sheet	1	1	1	1	1						\$ 7,500
2012-60 Trailer on roads sheet				1	1						\$ 20,000
Canada Trailer							1	1	1	1	\$ 4,000
Canada Trailer							1	1	1	1	\$ 4,000
Total Units	10	10	11	12	11	8	10	11	11	13	
Total Value \$	\$ 340,500	\$ 340,500	\$ 420,500	\$ 440,500	\$ 370,500	\$ 298,000	\$ 306,000	\$ 312,000	\$ 312,000	\$ 368,000	

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Value Per Capita	\$ 33.94	\$ 33.95	\$ 41.93	\$ 43.66	\$ 36.50	\$ 29.18	\$ 29.79	\$ 30.16	\$ 29.96	\$ 35.10	\$ 34.42

10 Year Funding Envelope Calculation

Service Level Cap	
Forecast Population Growth (2019 to 2028)	703
Average Service Level (\$ per Capita)	\$ 34.42
Service Level Cap	\$ 24,206

Appendix C-1
Table 3
Township of Tay
Calculation of Service Standards
Parks & Recreation (Parks Trails)

Unit Measure: Value of Trails Per Capita
Inventory (Hectares) & Value

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Unit Value
Tay Shore Trail	34.30	34.30	34.30	34.30	34.30	34.30	34.30	34.30	34.30	34.30	\$ 12,699
First Avenue Trail										0.02	\$ 12,699
Total	34.30	34.32									
Total Value \$	\$ 435,600	\$ 435,866									

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Value Per Capita	\$ 43.42	\$ 43.43	\$ 43.44	\$ 43.17	\$ 42.91	\$ 42.66	\$ 42.40	\$ 42.11	\$ 41.82	\$ 41.57	\$ 42.69

Service Level Cap	10-Year
Forecast Population Growth (2019 to 2028)	703
Average Service Level (\$ per Capita)	\$ 42.69
Service Level Cap	\$ 30,027

Appendix C-1
Table 4
Township of Tay
Calculation of Service Standards
Parks & Recreation (Indoor Rec Equipment)

Unit Measure: Value of Equipment Per Capita Inventory (No. Units) & Value

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/unit)
Equipment											
Oakwood Community Centre - Victoria Harbour	1	1	1	1	1	1	1	1	1	1	\$ 122,700
Port McNicoll Community Centre - Port McNicoll	1	1	1	1	1	1	1	1	1	1	\$ 64,590
Talbot Park Youth Centre	1	1	1	1	1	1	1	1	1	1	\$ 27,900
Bridgeview Community Centre	1	1	1	1	1	1	1	1	1	1	\$ 67,500
Total Units	4										
Total Value \$	\$ 282,690										

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Value Per Capita	\$ 28.18	\$ 28.18	\$ 28.19	\$ 28.02	\$ 27.85	\$ 27.68	\$ 27.52	\$ 27.33	\$ 27.14	\$ 26.96	\$ 27.70

10 Year Funding Envelope Calculation

Service Level Cap	
Forecast Population Growth (2019 to 2028)	703
Average Service Level (\$ per Capita)	\$ 27.70
Service Level Cap	\$ 19,486

**Appendix C-1
Table 5
Township of Tay
Calculation of Service Standards
Parks & Recreation (Indoor Rec Buildings)**

**Unit Measure: Value of Indoor Facilities Per Capita
Inventory (Sq Ft) & Value**

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/sq ft)
Buildings											
Oakwood Community Centre - Victoria Harbour	9,354	9,354	9,354	9,354	9,354	9,354	9,354	9,354	9,354	9,354	\$ 235
Port McNicoll Community Centre - Port McNicoll	4,349	4,349	4,349	4,349	4,349	4,349	4,349	4,349	4,349	4,349	\$ 230
Talbot Park Youth Centre	1,798	1,798	1,798	1,798	1,798	1,798	1,798	1,798	1,798	1,798	\$ 222
Oakwood Change Rooms - Constructed 1994	893	893	893	893	893	893	893	893	893	893	\$ 200
Talbot Park Change Rooms	420	420	420	420	420	420	420	420	420	420	\$ 238
Bridgeview Change Rooms	161	161	161	161	161	161	161	161	161	161	\$ 619
Waverly Snack Shack	400	400	400	400	400	1,130	1,130	1,130	1,130	1,130	\$ 111
Addition of Waverly Snack Shack		7,130	7,130	7,130	7,130	-	-	-	-	-	\$ 111
Bridgeview Community Centre (Portable)	500	500	500	500	500	500	500	500	500	500	\$ 100
Talbot Park Outdoor Rink Building				29,773	29,773	29,773	29,773	29,773	29,773	29,773	\$ 67
MacKenzie Park (Washroom)	248	248	248	248	248	248	248	248	248	248	\$ 404
Sunset Park (Washroom)	301	301	301	301	301	301	301	301	301	301	\$ 365
Patterson Park (Washroom)	248	248	248	248	248	248	248	248	248	248	\$ 444
Total Units	18,671	25,801	25,801	55,574	55,574	49,174	49,174	49,174	49,174	49,174	
Total Value \$	\$ 4,390,313	\$ 5,178,883	\$ 5,178,883	\$ 7,178,883	\$ 7,178,883	\$ 6,471,073					

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Value Per Capita	\$ 437.59	\$ 516.31	\$ 516.44	\$ 711.54	\$ 707.25	\$ 633.70	\$ 629.92	\$ 625.53	\$ 621.30	\$ 617.14	\$ 601.67

10 Year Funding Envelope Calculation

Service Level Cap	
Forecast Population Growth (2019 to 2028)	703
Average Service Level (\$ per Capita)	\$ 601.67
Service Level Cap	\$ 423,175

Appendix C-1
Table 6
Township of Tay
Calculation of Service Standards
Parks & Recreation (Developed Land)

Unit Measure: Value of Developed Parkland Per Capita Inventory (Hectares) & Value

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Unit Value
Neighbourhood Parks											
Forest Harbour Park #1 (100 Forest Harbour Pkwy)	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	\$ 167,679
Port McNicoll Community Centre (excluding Comm. Centre)(560 Seventh)	0.63	0.63	0.63	0.63	0.63	0.59	0.59	0.59	0.59	0.59	\$ 643,329
Port McNicoll Gazebo (769 Fourth)	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$ 419,004
Mackenzie Beach - 6 Bergie Cres.	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	\$ 364,334
Makenzie Beach - 28 Juneau Rd	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$ 366,539
Magnus Beach (102 Grandview Rd)	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	\$ 412,476
Midland Bay Woods #1 (164 Bayview)	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	\$ 711,898
Rope Subdivision Park (212 Ruta)	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	\$ 160,402
Sunset Park - 255 Queen Steet	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	\$ 97,607
Waubauhene Beach Park (3 Pine St)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$ 3,068,334
Veteran's Park (113 Pine Street)	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	\$ 107,079
Albert Park -110 Albert Park	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	\$ 570,243
Waubashene Gazebo -2007 (338 Pine)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	\$ 263,047
Bayview Park (66 Forest Hrb Pkwy)	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	\$ 302,379
77 Anderson Crescent	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	\$ 117,162
Community Parks											
Bridgeview Park - 445 Pine Street (excludes Firehall)	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	\$ 120,500
Oakwood Park (excluding Community Centre) - 280 Park Street	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	3.61	\$ 120,500
Patterson Park - 180 Patterson Boulevard	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	\$ 125,514
Waverly Park - 1049 Truax Lane	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	\$ 100,960
Talbot Park - 560 Calvert	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	\$ 120,500
Open Spaces											
Midland Bay Woods (165 Bayview)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$ 853,636
Ralph Dalton Park (1965 Gervais Rd)	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	\$ 20,907
Midland Bay Woods #3 (106 Bayview)	2.10	2.10	2.10	2.10	2.10	2.08	2.08	2.08	2.08	2.08	\$ 163,137
Victoria Harbour Cenotaph Park (143 Richard)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$ 277,363
Waverly Cenotaph (223 Darby Rd)	0.20	0.20	0.20	0.20	0.20	0.19	0.19	0.19	0.19	0.19	\$ 277,993
Port McNicoll Community Centre Park #1 (excluding Comm. Centre) -560 Seventh	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	\$ 88,035
Port McNicoll Community Centre Park #2(584 Seventh)	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	\$ 99,608
Port McNicoll Cenotaph on Library Property	0.20	0.20	0.20	0.20	0.20						
Victoria Harbour Government Dock #1 (91 Albert St.)	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	\$ 582,915
Eplett Park (320 Waldie Ave)	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	\$ 111,292
Victoria Harbour Government Dock #2 (50 Ellen St.)	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	\$ 1,275,597
Waubashene Government Dock (4 Gpvt Dock Rd.)	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	\$ 440,782
Tanners Park (18 Acorn)	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$ 300,824
Woodlands Avenue (171 Woodlands Ave)	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	\$ 129,614
Sunset Court Park (10 Sunset Court)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$ 210,039
Waverley Heights (11 Waverley Hts)	-	-	-	-	-	0.66	0.66	0.66	0.66	0.66	\$ 110,667
Richards Park (111 Maskinonge)	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	\$ 499,056
Richards Park (113 Maskinonge)	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	\$ 732,490
Forest Harbour Park #3 (182 Forest Harbour Parkwy)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$ 537,241
Sallows (39 Sallows Dr)	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	\$ 675,421
Lighthouse (283 William Street)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$ 1,765,282
Talbot Park - 541 Calvert (excluding Youth Centre)	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	\$ 329,473
Total	39	38									
Total Value \$	\$ 6,498,699	\$ 6,544,711	\$ 6,544,711	\$ 6,544,711	\$ 6,544,711	\$ 6,399,572					

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Value Per Capita	\$ 647.73	\$ 647.89	\$ 648.05	\$ 644.12	\$ 640.24	\$ 640.91	\$ 637.09	\$ 632.64	\$ 628.37	\$ 610.32	\$ 637.74
Service Level Cap											
10-Year Forecast											
Forecast Population Growth (2019 to 2028)	703										
Average Service Level (\$ per Capita)	\$ 637.74										
Service Level Cap	\$ 448,541										

Appendix C-2
Table 1
Township of Tay
Calculation of Service Standards
Library (Buildings)

Unit Measure: Value of Building Area Per Capita Inventory (Square Feet - ft²) & Value

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/ft ²)	2018 Replacement Value
Port McNicoll Library	4,672	4,672	4,672	4,672	4,672	4,672	4,672	4,672	4,672	4,672	\$ 200	\$ 934,400
Waubauhene Library	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	\$ 200	\$ 372,400
Victoria Harbour Library (municipal premises)	2,335	2,335	2,335	2,335	2,335	2,335	2,335	2,335	2,335	2,335	\$ 200	\$ 467,000
Total	8,869											
Total Value \$	\$ 1,773,800											

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Value per Capita	\$ 176.80	\$ 176.84	\$ 176.88	\$ 175.81	\$ 174.75	\$ 173.70	\$ 172.67	\$ 171.46	\$ 170.31	\$ 169.16	\$ 173.84

Service Level Cap	10 Year
Forecast Population Growth (2019 to 2028)	703
Average Service Level (\$ per Capita)	\$ 173.84
Service Level Cap	\$ 122,267

Appendix C-2
Table 2
Township of Tay
Calculation of Service Standards
Library (Land)

Unit Measure: Value of Land Per Capita Inventory (Hectares) & Value

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Unit Value (\$/hectare)
Port McNicoll Library	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	300,000
Waubauhene Library - 17 Thiffault St.	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	250,000
Victoria Harbour Library (municipal premises)	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	350,000
Total	0.24										
Total Value \$	\$ 74,000										

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Value Per Capita	\$ 7.38	\$ 7.38	\$ 7.38	\$ 7.33	\$ 7.29	\$ 7.25	\$ 7.20	\$ 7.15	\$ 7.10	\$ 7.06	\$ 7.25

Service Level Cap	
Population Growth (2019 to 2028)	703
Average Service Level (\$ per Capita)	\$ 7.25
Service Level Cap	\$ 5,101

**Appendix C-2
Table 3
Township of Tay
Calculation of Service Standards
Library (Materials)**

Unit Measure: Value of Library Collection Items Per Capita Inventory (No. of Items) & Value

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/unit)
Total Volume of Library Materials	50,929	51,526	48,744	49,243	50,099	78,068	79,663	56,528	57,118	57,118	\$ 25
Total	50,929	51,526	48,744	49,243	50,099	78,068	79,663	56,528	57,118	57,118	
Total Value \$	\$ 1,273,225	\$ 1,288,150	\$ 1,218,600	\$ 1,231,075	\$ 1,252,475	\$ 1,951,700	\$ 1,991,575	\$ 1,413,200	\$ 1,427,950	\$ 1,427,950	

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Value Per Capita	\$ 126.90	\$ 128.42	\$ 121.52	\$ 122.02	\$ 123.39	\$ 191.13	\$ 193.87	\$ 136.61	\$ 137.10	\$ 136.18	\$ 141.71

Service Level Cap	
Population Growth (2019 to 2028)	703
Average Service Level (\$ per Capita)	\$ 141.71
Service Level Cap	\$ 99,672

**Appendix C-2
Table 4
Township of Tay
Calculation of Service Standards
Library (Furniture and Equipment)**

Unit Measure: Value of Library Furniture & Equipment (Units) Per Capita Inventory (No. Units) & Value

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Replacement Value (\$/unit)
Shelves	1	1	1	1	1	1	1	1	1	1	\$ 130,000
Total	1										
Total Value \$	\$ 130,000										

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Value Per Capita	\$ 12.96	\$ 12.96	\$ 12.96	\$ 12.88	\$ 12.81	\$ 12.73	\$ 12.65	\$ 12.57	\$ 12.48	\$ 12.40	\$ 12.74

Service Level Cap	
Population Growth (2019 to 2028)	703
Average Service Level (\$ per Capita)	\$ 12.74
Service Level Cap	\$ 8,961

Appendix C-3
Table 1
Township of Tay
Calculation of Service Standards
Fire (Buildings)

Unit Measure: Value of Building Area Per Capita & Employment Inventory (Square Feet - ft²) & Value

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/ft ²)	2018 Replacement Value
Hall 1 - Waubauskene	4,004	4,004	4,004	4,004	4,004	4,004	4,004	4,004	4,004	4,004	\$ 228	\$ 912,951
Hall 2 - Old Fort	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	-	-	\$ 225	\$ 450,000
Hall 4 - Port McNicoll	3,103	3,103	3,103	3,103	3,103	3,103	3,103	3,103	3,103	3,103	\$ 213	\$ 660,893
Hall 5 - Victoria Harbour	6,092	6,092	6,092	6,092	6,092	6,092	6,092	6,092	6,092	6,092	\$ 237	\$ 1,443,891
Hall 2 - Old Fort (new)						-	-	-	6,600	6,600	\$ 225	\$ 1,485,000
Total	15,199	19,799	19,799									
Total Value \$	\$ 3,467,735	\$ 4,502,735	\$ 4,502,735									

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Employment	1,390	1,494	1,598	1,608	1,618	1,628	1,639	1,649	1,659	1,669	
Total Historic Population & Employment	11,423	11,525	11,626	11,697	11,769	11,840	11,911	11,994	12,074	12,155	
Per Capita & Employment Service Level (\$/Capita & Employment)	\$ 303.56	\$ 300.89	\$ 298.27	\$ 296.45	\$ 294.66	\$ 292.88	\$ 291.13	\$ 289.13	\$ 372.92	\$ 370.45	\$ 311.03

Service Level Cap	
Forecast Population Growth (2019 to 2028)	703
Employment Forecast (2019 to 2028)	98
Total Forecast Population and Employment Growth	801
Average Service Level (\$ per Capita)	\$ 311.03
Service Level Cap	\$ 249,243

Appendix C-3
Table 2
Township of Tay
Calculation of Service Standards
Fire (Vehicles, Equipment and Furniture)

Unit Measure: Value of Fire Vehicles, Equipment and Furniture (Units) Per Capita & Employment

Inventory (No. of Vehicles, Equipment and Furniture) & Value

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Replacement Value (\$/unit)
Vehicles											
Tanker Truck	2	2	2	2	2	2	2	2	2	2	\$ 300,000
Rescue Van	3	3	3	3	3	3	3	3	3	3	\$ 160,000
Medium Duty Rescue (replaces one of the rescue vans)										1	\$ 260,000
Pumper Truck (1t Line)	4	4	4	4	4	4	4	4	4	4	\$ 430,000
Tanker/Pumper							1	1	1	1	\$ 430,000
Utility Van	1	1	1	1	1	1	1	1	1	1	\$ 50,000
Off Road Truck					1	1	1	1	1	1	\$ 55,000
Spills Trailer			1	1	1	1	1	1	1	1	\$ 42,000
Fire Chief Cab Vehicle	1	1	1	1	1	1	1	1	1	1	\$ 42,000
Deputy Chief/Fire Prevention Vehicle				1	1	1	1	1	1	1	\$ 38,000
Equipment											
SCBA	40	40	40	40	40	40	40	40	40	40	\$ 8,500
Bunk Gear	76	76	76	76	76	76	76	76	76	76	\$ 1,600
Generators	5	5	5	5	5	5	5	5	5	5	\$ 4,500
Portable Pumps	5	5	5	5	5	5	5	5	5	5	\$ 1,200
Ice Water Suits	16	16	16	16	16	16	16	16	16	16	\$ 900
Thermal Image Camera	3	3	3	4	4	4	4	4	4	4	\$ 14,000
Chain Saw	8	8	8	8	8	8	8	8	8	8	\$ 3,300
Port A Tank	3	3	3	3	3	3	4	4	4	4	\$ 2,500
Portable Radios	24	24	24	24	24	30	30	30	30	30	\$ 800
Pagers	70	70	70	70	70	70	70	70	70	70	\$ 550
Jaw of Life	1	1	1	1	1	1	1	1	1	1	\$ 50,000
Defibulator	4	5	5	5	5	6	6	6	6	6	\$ 4,000
Spare Tanks	40	40	40	40	40	40	40	40	40	40	\$ 1,300
Furniture											
Hall 1 - Waubaushene	1	1	1	1	1	1	1	1	1	1	\$ 40,000
Hall 2 - Old Fort	1	1	1	1	1	1	1	1	1	1	\$ 50,000
Hall 4 - Port McNicoll	1	1	1	1	1	1	1	1	1	1	\$ 25,840
Hall 5 - Victoria Harbour	1	1	1	1	1	1	1	1	1	1	\$ 50,160
Total	310	311	312	314	315	322	324	324	324	324	
Total Value \$	\$ 3,814,100	\$ 3,818,100	\$ 3,860,100	\$ 3,912,100	\$ 3,967,100	\$ 3,975,900	\$ 4,408,400	\$ 4,408,400	\$ 4,408,400	\$ 4,508,400	

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Employment	1,390	1,494	1,598	1,608	1,618	1,628	1,639	1,649	1,659	1,669	
Total Historic Population & Employment*	11,423.42	11,524.75	11,626.08	11,697.41	11,768.74	11,840.08	11,911.41	11,993.75	12,074.23	12,154.72	
Per Capita & Employment Service Level (\$/Capita & Employment)	\$ 333.88	\$ 331.30	\$ 332.02	\$ 334.44	\$ 337.09	\$ 335.80	\$ 370.10	\$ 367.56	\$ 365.11	\$ 370.92	\$ 347.82

Service Level Cap	
Forecast Population Growth (2019 to 2028)	703
Employment Forecast (2019 to 2028)	98
Total Forecast Population and Employment Growth	801
Average Service Level (\$ per Capita)	\$ 347.82
Service Level Cap	\$ 278,721

Appendix C-3
Table 3
Township of Tay
Calculation of Service Standards
Fire (Land)

Unit Measure: Value of Land Per Capita & Employment
Inventory (Hectares) & Value

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Unit Value (\$/hectare)
Land											
Hall 1 - Waubaushene	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$ 250,000
Hall 2 - Old Fort	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19		\$ 394,737
Hall 4 - Port NcNicoll	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	\$ 454,545
Hall 5 - Victoria Harbour	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	\$ 326,087
Hall 2 - Old Fort									0.85	0.85	\$ 104,347
Total	0.93	1.59	1.59								
Total Value \$	\$ 300,000	\$ 314,000	\$ 314,000								

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Employment	1,390	1,494	1,598	1,608	1,618	1,628	1,639	1,649	1,659	1,669	
Total Historic Population & Employment*	11,423	11,525	11,626	11,697	11,769	11,840	11,911	11,994	12,074	12,155	
Per Capita & Employment Service Level (\$/Capita & Employment)	\$ 26.26	\$ 26.03	\$ 25.80	\$ 25.65	\$ 25.49	\$ 25.34	\$ 25.19	\$ 25.01	\$ 26.01	\$ 25.83	\$ 25.66

Service Level Cap	
Forecast Population Growth (2019 to 2028)	703
Employment Forecast (2019 to 2028)	98
Total Forecast Population and Employment Growth	801
Average Service Level (\$ per Capita)	\$ 25.66
Service Level Cap	\$ 20,563

0

**Appendix C-4
Table 1
Township of Tay
Calculation of Service Standards
Public Works (Fleet)**

**Unit Measure: Value of Vehicles (with a useful life of 7 years or more) Per Capita and Employment
Inventory (No. of Vehicles) & Value**

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/unit)
Public Works											
2003 Tandem Axle 6 Ton Truck	1	1	1	1	1	1	1	1	1	1	\$ 250,000
2004 Tandem Axle 6 Ton Truck	1	1	1	1	1	1	1	1	1	1	\$ 250,000
2006 Tandem Axle 6 Ton Truck	1	1	1	1	1	1	1	1	1	1	\$ 250,000
2008 Tandem Axle 6 Ton Truck	1	1	1	1	1	1	1	1	1	1	\$ 250,000
- Plow/wing attachment for 2008 Tandem							1	1	1	1	\$ 50,000
2010 Tandem Truck Dump/Plow	1	1	1	1	1	1	1	1	1	1	\$ 250,000
2012/Volvo Grader - s/b 2012 Plow Truck				1	1	1	1	1	1	1	\$ 250,000
2007/2017 1/2 Ton Pick-up Truck	1	1	1	1	1	1	1	1	1	1	\$ 25,000
2010 Chev Silverado Crew Cab		1	1	1	1	1	1	1	1	1	\$ 25,000
2013 Crew Cab 1 ton Dump Truck previously in parks					1	1	1	1	1	1	\$ 70,000
2014 Chev Pickup purchased from by-law	1	1	1	1	1	1	1	1	1	1	\$ 45,000
2003/2014 1/2 Ton now 3/4 ton Pick-up Truck	1	1	1	1	1	1	1	1	1	1	\$ 45,000
2002 3/4 Ton Pick-up Truck	1	1	1	1	1	1					\$ 50,000
2015 3/4 ton 4x4 F250 Pick-up with 10' 3-way plow							1	1	1	1	\$ 45,000
2004/2018 Grader	1	1	1	1	1	1	1	1	1	1	\$ 450,000
Plow attachment for articulating tractor										1	\$ 50,000
2007/2017 4WD Tractor/Backhoe	1	1	1	1	1	1	1	1	1	1	\$ 135,000
2008 Trackless	1	1	1	1	1	1	1	1	1	1	\$ 156,000
1997 Vac Flusher Truck (purchased in 2008)	1	1	1	1	1	1	1	1	1	1	\$ 300,000
2009 New Holdand Tractor	1	1	1	1	1	1	1	1	1	1	\$ 130,000
Flail Mower/broom				1	1	1	1	1	1	1	\$ 25,000
2012 Float King 20 Ton Excavator Trailer				1	1	1	1	1	1	1	\$ 25,000
7 ton Trailer				1	1	1	1	1	1	1	\$ 20,000
2003/2013 2WD Tractor/Backhoe Loader	1	1	1	1	1	1	1	1	1	1	\$ 135,000
Baldor Generator				1	1	1	1	1	1	1	\$ 30,000
2006 Wood chipper	1	1	1	1	1	1	1	1	1	1	\$ 45,000
2002 3/4 Ton Pick-up Truck	1	1	1	1	1						\$ 50,000
1990 187 HP Grader	1	1	1								\$ 450,000
1994 Holder Tractor	1	1									\$ 130,000
1999 4 WD Frond End Loader	1	1									\$ 135,000
Total	20	21	19	23	24	23	24	24	24	25	
Total Value \$	\$ 3,531,000	\$ 3,556,000	\$ 3,291,000	\$ 3,191,000	\$ 3,261,000	\$ 3,211,000	\$ 3,256,000	\$ 3,256,000	\$ 3,256,000	\$ 3,306,000	

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population*	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Employment*	1,390	1,494	1,598	1,608	1,618	1,628	1,639	1,649	1,659	1,669	
Total Historic Population & Employment*	11,423	11,525	11,626	11,697	11,769	11,840	11,911	11,994	12,074	12,155	
Value Per (Capita & Employment)	\$ 309.10	\$ 308.55	\$ 283.07	\$ 272.80	\$ 277.09	\$ 271.20	\$ 273.35	\$ 271.47	\$ 269.67	\$ 271.99	\$ 280.83

Service Level Cap	
Forecast Population Growth (2019 to 2028)	703
Forecast Employment Forecast (2019 to 2028)	98
Total Forecast Population and Employment Growth	801
Average Service Level (\$ per Capita/Employment)	\$ 280.83
Service Level Cap	\$ 225,038

Appendix C-4
Table 2
Township of Tay
Calculation of Service Standards
Public Works (Equipment)

Unit Measure: Value of Equipment Units Per Capita and Employment Inventory (No. of Units) & Value

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/unit)
Works Garage - 450 Park Street, Victoria Harbour	1	1	1	1	1	1	1	1	1	1	\$ 193,600
Storage Building - 216 Albert Street (old Fire Hall)	1	1	1	1	1	1	1	1	-	-	\$ 22,400
Storage Building - 2201 Old Fort Road (Old Fort Firehall)									1	1	\$ 104,000
Total	2	2	2	2	2	2	2	2	2	2	2.0
Total Value \$	\$ 216,000	\$ 216,000	\$ 216,000	\$ 216,000	\$ 216,000	\$ 216,000	\$ 216,000	\$ 216,000	\$ 297,600	\$ 297,600	

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Employment	1,390	1,494	1,598	1,608	1,618	1,628	1,639	1,649	1,659	1,669	
Total Historic Population & Employment*	11,423	11,525	11,626	11,697	11,769	11,840	11,911	11,994	12,074	12,155	
Per Capita & Employment Service Level (\$/Capita & Employment)	\$ 18.91	\$ 18.74	\$ 18.58	\$ 18.47	\$ 18.35	\$ 18.24	\$ 18.13	\$ 18.01	\$ 24.65	\$ 24.48	\$ 19.66

Service Level Cap	
Forecast Population Growth (2019 to 2028)	703
Employment Forecast (2019 to 2028)	98
Total Forecast Population and Employment Growth	801
10-Year Average Service Level (\$ per Capita)	\$ 19.66
Service Level Cap	\$ 15,752

Appendix C-4
Table 3
Township of Tay
Calculation of Service Standards
Public Works (Buildings)

Unit Measure: Value of Building Area Per Capita & Employment Inventory (Square Feet - ft²) & Value

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Replacement Value
Works Garage - 450 Park Street, Victoria Harbour	13,639	13,639	13,639	13,639	13,639	13,735	13,735	13,735	13,735	13,735	\$ 3,090,316
Sand Storage Shed - 459 Park Street - Constructed in 1995	7,972	7,972	7,972	7,972	7,972	7,815	7,815	7,815	7,815	7,815	\$ 475,000
Storage Building - 216 Albert Street (old Fire Hall)	2,240	2,240	2,240	2,240	2,240	2,196	2,196	2,196			\$ 219,584
Storage Building - 2201 Old Fort Road (Old Fort Firehall)									1,400	1,400	\$ 315,525
											\$ -
Total	23,851	23,851	23,851	23,851	23,851	23,745	23,745	23,745	22,949	22,949	
Total Value \$	\$ 3,777,343	\$ 3,784,899	\$ 3,784,899	\$ 3,784,899	\$ 3,880,841	\$ 3,880,841					

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486
Employment	1,390	1,494	1,598	1,608	1,618	1,628	1,639	1,649	1,659	1,669
Total Historic Population & Employment*	11,423	11,525	11,626	11,697	11,769	11,840	11,911	11,994	12,074	12,155
Per Capita & Employment Service Level (\$/Capita & Employment)	\$ 330.67	\$ 327.76	\$ 324.90	\$ 322.92	\$ 320.96	\$ 319.67	\$ 317.75	\$ 315.57	\$ 321.42	\$ 319.29

Service Level Cap	
Forecast Population Growth (2019 to 2028)	703
Employment Forecast (2019 to 2028)	98
Total Forecast Population and Employment Growth	801
10-Year Average Service Level (\$ per Capita)	\$ 322.09
Service Level Cap	\$ 258,102

**Appendix C-4
Table 4
Township of Tay
Calculation of Service Standards
Public Works (Land)**

**Unit Measure: Value of Land Per Capita & Employment
Inventory (Hectares) & Value**

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Unit Value (\$/hectare)
Land											
Works Garage - 450 Park Street, Victoria Harbour	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	\$ 300,000
Sand Storage Shed - 459 Park Street - Constructed in 1995	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	\$ 300,000
Storage Building - 216 Albert Street (old Fire Hall)	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06			\$ 750,000
Storage Building - 2201 Old Fort Road (Old Fort Firehall)									0.01	0.01	\$ 1,119,669
Total	1.51	1.46	1.46								
Total Value \$	\$ 480,000	\$ 482,826	\$ 482,826	\$ 482,826	\$ 449,563	\$ 449,563					

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Employment	1,390	1,494	1,598	1,608	1,618	1,628	1,639	1,649	1,659	1,669	
Total Historic Population & Employment*	11,423	11,525	11,626	11,697	11,769	11,840	11,911	11,994	12,074	12,155	
Per Capita & Employment Service Level (\$/Capita & Employment)	\$ 42.02	\$ 41.65	\$ 41.29	\$ 41.03	\$ 40.79	\$ 40.78	\$ 40.53	\$ 40.26	\$ 37.23	\$ 36.99	\$ 40.26

Service Level Cap	
Forecast Population Growth (2019 to 2028)	703
Employment Forecast (2019 to 2028)	98
Total Forecast Population and Employment Growth	801
10-Year Average Service Level (\$ per Capita)	\$ 40.26
Service Level Cap	\$ 32,259

Appendix C-5
Table 1
Township of Tay
Calculation of Service Standards
Roads and Related (Roads)

Unit Measure: Value of Roads Lane Kilometres per Capita and Employment Inventory (Lane Kilometres) & Value

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/km)
High Clas Bituminous (HCB)	191	193	196	201	197	208	209	212	214	217	\$ 150,000
Low Class Bituminous (LCB)	100	116	124	122	126	119	119	116	116	113	\$ 110,000
Gravel Surface	90	73	62	59	59	55	54	54	54	54	\$ 90,000
Bridges Road	6	6	6	6	6	6	6	6	6	6	\$ 1,000,000
Bridges Trail	3	3	3	3	3	3	3	3	3	3	\$ 500,000
Culverts - Roads	5	5	5	5	5	5	5	5	5	6	\$ 400,000
Culverts - Trails	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Total	396	397	399	400							
Total Value \$	\$ 57,400,000	\$ 57,930,000	\$ 58,270,000	\$ 58,530,000	\$ 58,370,000	\$ 58,890,000	\$ 58,950,000	\$ 59,070,000	\$ 59,370,000	\$ 59,890,000	

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Population	10,033	10,031	10,028	10,089	10,150	10,212	10,273	10,345	10,415	10,486	
Employment	1,390	1,494	1,598	1,608	1,618	1,628	1,639	1,649	1,659	1,669	
Total Historic Population & Employment*	11,423	11,525	11,626	11,697	11,769	11,840	11,911	11,994	12,074	12,155	
Value Per (Capita & Employment)	\$ 5,024.76	\$ 5,026.57	\$ 5,012.01	\$ 5,003.67	\$ 4,959.75	\$ 4,973.79	\$ 4,949.04	\$ 4,925.07	\$ 4,917.08	\$ 4,927.31	\$ 4,971.90

Service Level Cap	
Forecast Population Growth (2019 to 2028)	703
Employment Forecast (2019 to 2028)	98
Total Forecast Population and Employment Growth	801
Average Service Level (\$ per Capita/Employment)	\$ 4,971.90
Service Level Cap	\$ 3,984,152

Appendix D

Net Capital Growth to be Recovered from Development Charges

Appendix D-1

Table 1

Township of Tay

General Government - Growth Related Studies

Capital Costs Included in Development Charges Calculation

Increased Service Needs due to Anticipated Development 2019-2028	Year Required	Gross Project Cost	Grants, Subsidies & Development Contributions Attributable to New Development	Net Municipal Capital Costs	Less:		Total Development Recoverable Costs Net of Stat. Deduction	Less: Adjustments	Total Development Recoverable Costs Net of Adjustments	Post Period Capacity to be Carried Forward	Total Development Adjustment Due to Service Level Cap	DC Eligible Costs		
					Benefit to Existing	Other (e.g. 10% Statutory Deduction)						Residential Share	Non-Res. Share	
					\$	\$						%	91%	9%
			\$ -	\$ -	\$ -	\$ -	10%	\$ -		\$ -				
Development Charges Study (from previous DC Study)	2023	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 3,000	10%	\$ 27,000		\$ 27,000				
Development Charges Study (New)	2028	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 3,000	10%	\$ 27,000		\$ 27,000				
Master Servicing Plans (from previous DC Study)	2019-2023	\$ 50,000	\$ -	\$ 50,000	\$ 25,000	\$ 2,500	10%	\$ 22,500		\$ 22,500				
Master Servicing Plans (New)	2024-2028	\$ 50,000	\$ -	\$ 50,000	\$ 25,000	\$ 2,500	10%	\$ 22,500		\$ 22,500				
			\$ -	\$ -	\$ -	\$ -	10%	\$ -		\$ -				
Official Plan and Zonign By-Law Review (LTFP)	2028	\$ 110,000	\$ -	\$ 110,000	\$ -	\$ 11,000	10%	\$ 99,000		\$ 99,000				
			\$ -	\$ -	\$ -	\$ -	10%	\$ -		\$ -				
Reserve Balance									\$ 20,473	\$ (20,473)				
Debt										\$ -				
Reserve Deficit										\$ -				
Credits										\$ -				
Total Estimated Capital Costs		\$ 270,000	\$ -	\$ 270,000	\$ 50,000	\$ 22,000		\$ 198,000	\$ 20,473	\$ 177,527	\$ -	\$ 177,527	\$ 162,132	\$ 15,395

Appendix D-2

Table 1

Township of Tay

Parks & Recreation

Capital Costs Included in Development Charges Calculations

Increased Service Needs due to Anticipated Development 2019-2028	Year Required	Gross Project Cost	Less: Grants, Subsidies & Development Contributions Attributable to New Development	Net Municipal Capital Costs	Less:		Total Development Recoverable Costs Net of Stat Deductions	Less: Adjustments	Total Development Cost Recoverable Net of Adjustments	Post Period Capacity to be Carried Forward	Total Development Cost Adjustment Due to Service Level Cap	DC Eligible Costs		
					Benefit to Existing	Other (e.g. 10% Statutory Deduction)						Residential Share	Non-Res. Share	
					\$	\$						%	100%	0%
Outdoor Recreation				\$ -	\$ -	\$ -	10%	\$ -		\$ -				
Parks and Trail Development	2024-2028	\$ 240,000		\$ 240,000	\$ 120,000	\$ 12,000	10%	\$ 108,000		\$ 108,000				
Provision for Vehicles and Minor Capital	2019-2023	\$ 50,000		\$ 50,000	\$ -	\$ 5,000	10%	\$ 45,000		\$ 45,000				
Provision for Vehicles and Minor Capital	2024-2028	\$ 50,000		\$ 50,000	\$ -	\$ 5,000	10%	\$ 45,000		\$ 45,000				
				\$ -	\$ -	\$ -	10%	\$ -		\$ -				
Additional Parking Lot	2019-2020	\$ 100,000		\$ 100,000	\$ -	\$ 10,000	10%	\$ 90,000		\$ 90,000				
				\$ -	\$ -	\$ -	10%	\$ -		\$ -				
Trail extention - Trestle Trail along Ney into Port McNicoll	2022-2024	\$ 120,000		\$ 120,000	\$ 60,000	\$ 6,000	10%	\$ 54,000		\$ 54,000				
				\$ -	\$ -	\$ -	10%	\$ -		\$ -				
Recreation Master Plan	2020	\$ 35,000		\$ 35,000	\$ -	\$ 3,500	10%	\$ 31,500		\$ 31,500				
				\$ -	\$ -	\$ -	10%	\$ -		\$ -				
Park Programming	2020 - 2028	\$ 550,000		\$ 550,000	\$ -	\$ 55,000	10%	\$ 495,000		\$ 495,000				
Bridgeview Park - Design/options for Community space	2022	\$ 20,000		\$ 20,000	\$ 18,740	\$ 126	10%	\$ 1,134		\$ 1,134				
First Avenue Trail	2019 / 2021	\$ 120,000		\$ 120,000	\$ 60,000	\$ 6,000	10%	\$ 54,000		\$ 54,000				
Hard Surface Rink	2022	\$ 100,000		\$ 100,000	\$ 93,700	\$ 630	10%	\$ 5,670		\$ 5,670				
										\$ -				
Reserve Balance									\$ 418,616	\$ (418,616)				
Debt										\$ -				
Reserve Deficit										\$ -				
Credits										\$ -				
Total Estimated Capital Costs		\$ 1,385,000	\$ -	\$ 1,385,000	\$ 352,440	\$ 103,256		\$ 929,304	\$ 418,616	\$ 510,688		\$ 510,688	\$ 510,688	\$ -

**Appendix D-3
Table 1
Township of Tay
Library Services**

Capital Costs Included in the Development Charge Calculation

Increased Service Needs Attributable to Anticipated Development 2019-2028	Year Required	Gross Project Cost	Grants, Subsidies & Development Contributions Attributable to New Development	Net Municipal Capital Costs	Less:			Potential DC				DC Eligible Costs		
					Benefit to Existing	Other (e.g. 10% Statutory Deduction)		Total Development Recoverable Costs Net of Stat. Deduction	Adjustments	Total Development Recoverable Costs Net of Adjustments	Post Period Capacity to be Carried Forward	Total Development Adjustment Due to Service Level Cap	Residential Share	Non-Res. Share
						\$	\$							
				\$ -	\$ -	\$ -	10%	\$ -		\$ -				
Library Materials	Various	\$ 279,500		\$ 279,500	\$ 139,750	\$ 13,975	10%	\$ 125,775		\$ 125,775				
				\$ -	\$ -	\$ -	10%	\$ -		\$ -				
Library - Expansion into Harbour Shores/Accountant's Office	2019/2020	\$ 100,000		\$ 100,000	\$ -	\$ 10,000	10%	\$ 90,000		\$ 90,000				
				\$ -	\$ -	\$ -	10%	\$ -		\$ -				
Reserve Balance									\$ 2,000	\$ (2,000)				
Debt										\$ -				
Reserve Deficit										\$ -				
Credits										\$ -				
Total Estimated Capital Costs		\$ 379,500	\$ -	\$ 379,500	\$ 139,750	\$ 23,975		\$ 215,775	\$ 2,000	\$ 213,775	\$ -	\$ 213,775	\$ 213,775	\$ -

**Appendix D-4
Table 1
Township of Tay
Fire Services**

Capital Costs Included in the Development Charge Calculation

Increased Service Needs Attributable to Anticipated Development 2019-2028	Year Required	Gross Project Cost	Grants, Subsidies & Development Contributions Attributable to New Development	Net Municipal Capital Costs	Less:			Total Development Recoverable Net of Stat. Deductions	Adjustments	Total Development Recoverable Costs Net of Adjustments	Post Period Capacity to be Carried Forward	Total Development Costs Adjustment Due to Service Level Cap	DC Eligible Costs	
					Benefit to Existing Development	Other (e.g. 10% Statutory Deduction)							Residential Share	Non-Res. Share
						\$	\$							
Fire Training Ground	2028	\$ 300,000		\$ 300,000	\$ 277,875	\$ -	0%	\$ 22,125		\$ 22,125				
Aerial Truck	2028	\$ 675,000		\$ 675,000	\$ 375,000	\$ -	0%	\$ 300,000		\$ 300,000				
Firehall Expansion in Port McNicoll	2028	\$ 2,000,000		\$ 2,000,000	\$ 1,111,112	\$ -	0%	\$ 888,888		\$ 888,888				
Fire Boat	2028	\$ 250,000		\$ 250,000	\$ 231,562	\$ -	0%	\$ 18,438		\$ 18,438				
Off-Road Side by Side	2028	\$ 30,000		\$ 30,000	\$ 27,787	\$ -	0%	\$ 2,213		\$ 2,213				
				\$ -	\$ -	\$ -	0%	\$ -		\$ -				
Fire Debt Principal	2019-2028	\$ 463,811		\$ 463,811	\$ 115,953	\$ -	0%	\$ 347,858		\$ 347,858				
Fire Debt Interest	2019-2028	\$ 366,381		\$ 366,381	\$ 91,595	\$ -	0%	\$ 274,786		\$ 274,786				
Reserve Balance														
Debt														
Reserve Deficit									\$ (12,951)	\$ 12,951				
Credits														
Total Estimated Capital Costs		\$ 4,085,192	\$ -	\$ 4,085,192	\$ 2,230,884	\$ -		\$1,854,308	-\$12,951	\$1,867,259	\$ 1,318,733	\$548,527	\$500,960	\$47,567

**Appendix D-5
Table 1
Township of Tay
Public Works**

Capital Costs Included in the Development Charge Calculation

Increased Service Needs Attributable to Anticipated Development 2019-2028	Year Required	Gross Project Cost	Grants, Subsidies & Development Contributions Attributable to New Development	Net Municipal Capital Costs	Less:			Total Development Recoverable Net of Stat. Deductions	Adjustments	Total Development Recoverable Costs Net of Adjustments	Post Period Capacity to be Carried Forward	Total Development Costs Adjustment Due to Service Level Cap	DC Eligible Costs	
					Benefit to Existing Development	Other (e.g. 10% Statutory Deduction)							Residential Share	Non-Res. Share
						\$	\$							
				\$0	\$0	\$0	0%	\$0		\$0				
Plow Truck	2028	\$250,000		\$250,000	\$0	\$0	0%	\$250,000		\$250,000				
				\$0	\$0	\$0	0%	\$0		\$0				
Principal on Debt for Storage Located at Fire Hall Expansion	2019-2028	\$98,384		\$98,384	\$34,434	\$0	0%	\$63,950		\$63,950				
Interest on Debt for Storage Located at Fire Hall Expansion	2019-2028	\$64,117		\$64,117	\$22,441	\$0	0%	\$41,676		\$41,676				
Reserve Balance									\$63,369	-\$63,369				
Debt										\$0				
Reserve Deficit										\$0				
Credits										\$0				
Total Estimated Capital Costs		\$412,501	\$0	\$412,501	\$56,875	\$0		\$355,626	\$63,369	\$292,256		\$292,256	\$266,913	\$25,344

**Appendix D-6
Table 1
Township of Tay
Roads and Related Services**

Capital Costs Included in the Development Charge Calculation

Increased Service Needs Attributable to Anticipated Development 2019-2028	Year Required	Gross Project Costs	Less: Grants, Subsidies & Development Contributions Attributable to New Development	Net Municipal Capital Costs	Less:			Total Development Recoverable Costs Net of Stat Deductions	Less: Adjustments	Total Development Recoverable Costs Net of Adjustments	Post Period Capacity to be Carried Forward	Total Development Recoverable Costs Adjustment Due to Service Level Cap	DC Eligible Costs	
					Benefit to Existing	Other (e.g. 10% Statutory Deduction)							Residential Share	Non-Res. Share
						\$	\$							
Provision for Growth Related Road Works	Various	\$ 16,064,984		\$ 16,064,984	\$14,880,168	\$ -		\$ 1,184,816		\$ 1,184,816				
				\$ -	\$ -	\$ -		\$ -		\$ -				
Bridge Expansion	2021	\$ 1,360,000		\$ 1,360,000	\$ 1,259,698	\$ -		\$ 100,302		\$ 100,302				
				\$ -	\$ -	\$ -		\$ -		\$ -				
Sidewalk Expansion	2019	\$ 172,000		\$ 172,000	\$ 159,315	\$ -		\$ 12,685		\$ 12,685				
										\$ -				
Reserve Balance									\$ 314,374	\$(314,374)				
Debt										\$ -				
Reserve Deficit										\$ -				
Credits										\$ -				
Total Estimated Capital Costs		\$ 17,596,984	\$ -	\$ 17,596,984	\$ 16,299,181	\$ -		\$ 1,297,803	\$ 314,374	\$ 983,429	\$ -	\$ 983,429	\$ 898,149	\$ 85,280

**Appendix D-7
Table 1
Township of Tay
Water Services**

Capital Costs Included in the Development Charge Calculation

Increased Service Needs Attributable to Anticipated Development 2018-2013	Year Required	Gross Project Costs	Less: Grants, Subsidies & Development Contributions Attributable to New Development	Net Capital Costs	Less:			Net Costs Benefiting New Development	Adjustments	Total Development Recoverable Costs Net of Adjustments	Post Period Capacity to be Carried Forward	Total Development Recoverable Costs Adjustment Due to Service Level Cap	DC Eligible Costs		
					Benefit to Existing	Other (e.g. 10% Statutory Deduction)							Residential Share	Non-Res. Share	
						\$	\$								%
Master Servicing Plan	2019	\$ 100,000		\$ 100,000	\$ -	\$ -		\$ 100,000		\$ 100,000					
				\$ -	\$ -	\$ -		\$ -		\$ -					
Increase Plant Capacity/Refurbish (Phase 2) - Engineering	2019	\$ 200,000		\$ 200,000	\$ 16,000	\$ -		\$ 184,000		\$ 184,000	\$ 64,400				
Increase Plant Capacity/Refurbish (Phase 2) - Construction	2020	\$ 1,400,000		\$ 1,400,000	\$ 112,000	\$ -		\$ 1,288,000		\$ 1,288,000	\$ 450,800				
				\$ -	\$ -	\$ -		\$ -		\$ -					
Additional Modules From LTFP)	2019	\$ 80,000		\$ 80,000	\$ 72,000	\$ -		\$ 8,000		\$ 8,000					
				\$ -	\$ -	\$ -		\$ -		\$ -					
New Standpipe (From LTFP)	2024	\$ 4,000,000		\$ 4,000,000	\$ 2,880,000	\$ -		\$ 1,120,000		\$ 1,120,000	\$ 392,000				
				\$ -	\$ -	\$ -		\$ -		\$ -					
Water Debt Principal	2019-2031	\$ 831,924		\$ 831,924	\$ -	\$ -		\$ 831,924		\$ 831,924					
Water Debt Interest	2019-2031	\$ 295,185		\$ 295,185	\$ -	\$ -		\$ 295,185		\$ 295,185					
										\$ -					
Reserve Balance									\$ 402,957	\$ (402,957)					
Debt										\$ -					
Reserve Deficit										\$ -					
Credits										\$ -					
Total Estimated Capital Costs		\$ 6,907,109	\$ -	\$ 6,907,109	\$ 3,080,000	\$ -	\$ -	\$ 3,827,109	\$ 402,957	\$ 3,424,152	\$ 907,200	\$ 2,516,952	\$ 2,288,244	\$ 228,707	

**Appendix D-8
Table 1
Township of Tay
Wastewater Services**

Capital Costs Included in the Development Charges Calculation

Increased Service Needs Attributable to Anticipated Development 2019-2023	Year Required	Gross Project Costs	Less: Grants, Subsidies & Development Contributions Attributable to New Development	Net Capital Costs	Less:			Net Costs Benefiting New Development	Adjustments	Total Development Recoverable Costs Net of Adjustments	Post Period Capacity to be Carried Forward	Total Development Recoverable Costs Adjustment Due to Service Level	DC Eligible Costs		
					Benefit to Existing	Other (e.g. 10% Statutory Deduction)							Residential Share	Non-Res. Share	
						\$	\$								%
Master Servicing Plan	2019	\$ 100,000		\$ 100,000	\$ -	\$ -		\$ 100,000		\$ 100,000					
				\$ -	\$ -	\$ -		\$ -		\$ -					
Increase Plant Capacity				\$ -	\$ -	\$ -		\$ -		\$ -					
Phase 2 Design	2019	\$ 500,000		\$ 500,000	\$ 345,000	\$ -		\$ 155,000		\$ 155,000	\$ 54,250				
Phase 2 Construction	2021-2022	\$ 9,000,000		\$ 9,000,000	\$ 6,210,000	\$ -		\$ 2,790,000		\$ 2,790,000	\$ 976,500				
				\$ -	\$ -	\$ -		\$ -		\$ -					
PM Sewer Plant Debt Principal	2019-2027	\$ 720,950		\$ 720,950	\$ 136,978	\$ -		\$ 583,972		\$ 583,972					
PM Sewer Plant Debt Interest	2019-2027	\$ 110,304		\$ 110,304	\$ 20,957	\$ -		\$ 89,347		\$ 89,347					
				\$ -	\$ -	\$ -		\$ -		\$ -					
VHWWTP Debt Principal	2019-2031	\$ 966,429		\$ 966,429	\$ -	\$ -		\$ 966,429		\$ 966,429					
VHWWTP Debt Interest	2019-2031	\$ 951,260		\$ 951,260	\$ -	\$ -		\$ 951,260		\$ 951,260					
										\$ -					
Reserve Balance									\$ 177,061	\$ (177,061)					
Debt										\$ -					
Reserve Deficit										\$ -					
Credits										\$ -					
Total Estimated Capital Costs		\$ 12,348,943	\$ -	\$ 12,348,943	\$ 6,712,935	\$ -		\$ 5,636,007	\$ 177,061	\$ 5,458,947	\$ 1,030,750	\$ 4,428,197	\$ 4,025,820	\$ 402,376	

Appendix E

Cash Flow Analysis & Adjusted Charges

**Appendix E-1
Table 1
Township of Tay
General Government - Growth Related Studies
Cash Analysis and Adjusted Charges**

RESIDENTIAL CASH FLOW

General Government	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Cash Balance	\$ 18,698	\$ 35,222	\$ 52,480	\$ 48,904	\$ 67,166	\$ 59,267	\$ 78,477	\$ 98,521	\$ 95,588	\$ 116,790
Residential Population Growth in New Units	103									
Receipts										
Residential Development Charge Receipts (Inflated)	\$ 15,898	\$ 16,215	\$ 16,540	\$ 16,871	\$ 17,208	\$ 17,552	\$ 17,903	\$ 18,261	\$ 18,627	\$ 18,999
Disbursements										
2019-2028 Development Charge Disbursements/Adjustments										
Uninflated	\$ -	\$ -	\$ 20,549	\$ -	\$ 24,659	\$ -	\$ -	\$ 20,549	\$ -	\$ 115,074
Inflated	\$ -	\$ -	\$ 21,379	\$ -	\$ 26,691	\$ -	\$ -	\$ 23,604	\$ -	\$ 137,524
Interest	\$ 626	\$ 1,043	\$ 1,264	\$ 1,391	\$ 1,584	\$ 1,657	\$ 2,141	\$ 2,410	\$ 2,576	\$ 1,735
Closing Cash Balance	\$ 35,222	\$ 52,480	\$ 48,904	\$ 67,166	\$ 59,267	\$ 78,477	\$ 98,521	\$ 95,588	\$ 116,790	\$ -

2018 Adjusted Residential Charge Per Capita	\$ 154.03
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**Appendix E-1
Table 2
Township of Tay
General Government - Growth Related Studies
Cash Analysis and Adjusted Charges**

NON-RESIDENTIAL CASH FLOW

General Government	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Cash Balance	\$ 1,775	\$ 3,344	\$ 4,983	\$ 4,644	\$ 6,378	\$ 5,628	\$ 7,452	\$ 9,355	\$ 9,076	\$ 11,090
Non-Residential Growth in Square Feet	697									
Receipts										
Non-Residential Development Charge Receipts (Inflated)	\$ 1,510	\$ 1,540	\$ 1,571	\$ 1,602	\$ 1,634	\$ 1,667	\$ 1,700	\$ 1,734	\$ 1,769	\$ 1,804
Disbursements										
2019-2028 Development Charge Disbursements/Adjustments										
Uninflated	\$ -	\$ -	\$ 1,951	\$ -	\$ 2,341	\$ -	\$ -	\$ 1,951	\$ -	\$ 10,926
Inflated	\$ -	\$ -	\$ 2,030	\$ -	\$ 2,534	\$ -	\$ -	\$ 2,241	\$ -	\$ 13,058
Interest	\$ 59	\$ 99	\$ 120	\$ 132	\$ 150	\$ 157	\$ 203	\$ 229	\$ 245	\$ 165
Closing Cash Balance	\$ 3,344	\$ 4,983	\$ 4,644	\$ 6,378	\$ 5,628	\$ 7,452	\$ 9,355	\$ 9,076	\$ 11,090	\$ -

2018 Adjusted Non-Residential Charge Per Square Metre	\$ 2.16
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**Appendix E-2
Table 1
Township of Tay
Parks & Recreation
Cash Analysis and Adjusted Charges**

RESIDENTIAL CASH FLOW

Parks & Recreation	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Cash Balance	\$ 418,616	\$ 388,293	\$ 304,371	\$ 259,036	\$ 252,448	\$ 193,837	\$ 192,679	\$ 191,371	\$ 12,402	\$ 6,340
Residential Population Growth in New Units	103									
Receipts										
Residential Development Charge Receipts (Inflated)	\$ 49,616	\$ 50,608	\$ 51,620	\$ 52,652	\$ 53,705	\$ 54,780	\$ 55,875	\$ 56,993	\$ 58,133	\$ 59,295
Disbursements										
2019-2028 Development Charge Disbursements/Adjustments										
Uninflated	\$ 90,000	\$ 140,500	\$ 100,000	\$ 61,804	\$ 109,000	\$ 55,000	\$ 55,000	\$ 208,000	\$ 55,000	\$ 55,000
Inflated	\$ 90,000	\$ 143,310	\$ 104,040	\$ 65,587	\$ 117,985	\$ 60,724	\$ 61,939	\$ 238,927	\$ 64,441	\$ 65,730
Interest	\$ 10,062	\$ 8,780	\$ 7,085	\$ 6,347	\$ 5,668	\$ 4,786	\$ 4,756	\$ 2,965	\$ 247	\$ 94
Closing Cash Balance	\$ 388,293	\$ 304,371	\$ 259,036	\$ 252,448	\$ 193,837	\$ 192,679	\$ 191,371	\$ 12,402	\$ 6,340	\$ -

2018 Adjusted Residential Charge Per Capita	\$ 480.72
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**Appendix E-2
Table 2
Township of Tay
Parks & Recreation
Cash Analysis and Adjusted Charges**

NON-RESIDENTIAL CASH FLOW

Parks & Recreation	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Cash Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Non-Residential Growth in Square Feet	697									
Receipts										
Non-Residential Development Charge Receipts (Inflated)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Disbursements										
2019-2028 Development Charge Disbursements/Adjustments										
Uninflated	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Inflated	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing Cash Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

2018 Adjusted Non-Residential Charge Per Square Metre	\$ -
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**Appendix E-3
Table 1
Township of Tay
Library Services
Cash Analysis and Adjusted Charges**

RESIDENTIAL CASH FLOW

Library Services	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Cash Balance	\$ 2,000	\$ (79,768)	\$ (72,499)	\$ (64,863)	\$ (56,847)	\$ (48,437)	\$ (39,621)	\$ (30,384)	\$ (20,712)	\$ (10,589)
Residential Population Growth in New Units	103	103	103	103	103	103	103	103	103	103
Receipts										
Residential Development Charge Receipts (Inflated)	\$ 21,569	\$ 22,001	\$ 22,441	\$ 22,890	\$ 23,347	\$ 23,814	\$ 24,291	\$ 24,776	\$ 25,272	\$ 25,777
Disbursements										
2019-2028 Development Charge Disbursements/Adjustments										
Uninflated	\$ 102,578	\$ 12,578	\$ 12,578	\$ 12,578	\$ 12,578	\$ 12,578	\$ 12,578	\$ 12,578	\$ 12,578	\$ 12,578
Inflated	\$ 102,578	\$ 12,829	\$ 13,086	\$ 13,347	\$ 13,614	\$ 13,887	\$ 14,164	\$ 14,448	\$ 14,737	\$ 15,031
Interest	\$ (760)	\$ (1,902)	\$ (1,719)	\$ (1,526)	\$ (1,324)	\$ (1,112)	\$ (889)	\$ (656)	\$ (412)	\$ (157)
Closing Cash Balance	\$ (79,768)	\$ (72,499)	\$ (64,863)	\$ (56,847)	\$ (48,437)	\$ (39,621)	\$ (30,384)	\$ (20,712)	\$ (10,589)	\$ -
2018 Adjusted Residential Charge Per Capita	\$ 208.98									

**Appendix E-3
Table 2
Township of Tay
Library Services
Cash Analysis and Adjusted Charges**

NON-RESIDENTIAL CASH FLOW

Library Services	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Cash Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Non-Residential Growth in Square Feet	697									
Receipts										
Non-Residential Development Charge Receipts (Inflated)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Disbursements										
2019-2028 Development Charge Disbursements/Adjustments										
Uninflated	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Inflated	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing Cash Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018 Adjusted Non-Residential Charge Per Square Metre	\$ -									

**Appendix E-4
Table 1
Township of Tay
Fire Services
Cash Analysis and Adjusted Charges**

RESIDENTIAL CASH FLOW

Fire Services	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Cash Balance	\$ (11,828)	\$ 676,695	\$ 741,283	\$ 808,439	\$ 878,246	\$ 950,791	\$ 1,026,161	\$ 1,104,447	\$ 1,185,743	\$ 1,270,145
Residential Population Growth in New Units	103	103	103	103	103	103	103	103	103	103
Receipts										
Residential Development Charge Receipts (Inflated)	\$ 46,273	\$ 47,199	\$ 48,142	\$ 49,105	\$ 50,087	\$ 51,089	\$ 52,111	\$ 53,153	\$ 54,216	\$ 55,301
Disbursements										
2019-2028 Development Charge Disbursements/Adjustments										
Uninflated	\$ (635,726)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,124,857
Inflated	\$ (635,726)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,344,308
Interest	\$ 6,524	\$ 17,389	\$ 19,013	\$ 20,702	\$ 22,457	\$ 24,281	\$ 26,175	\$ 28,143	\$ 30,186	\$ 18,864
Closing Cash Balance	\$ 676,695	\$ 741,283	\$ 808,439	\$ 878,246	\$ 950,791	\$ 1,026,161	\$ 1,104,447	\$ 1,185,743	\$ 1,270,145	\$ -
2018 Adjusted Residential Charge Per Capita	\$ 448.34			\$ -						

**Appendix E-4
Table 2
Township of Tay
Fire Services
Cash Analysis and Adjusted Charges**

NON-RESIDENTIAL CASH FLOW

Fire Services	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Cash Balance	\$ (1,123)	\$ 64,253	\$ 70,386	\$ 76,762	\$ 83,391	\$ 90,279	\$ 97,436	\$ 104,869	\$ 112,588	\$ 120,602
Non-Residential Growth in Square Feet	697	697	697	697	697	697	697	697	697	697
Receipts										
Non-Residential Development Charge Receipts (Inflated)	\$ 4,394	\$ 4,482	\$ 4,571	\$ 4,663	\$ 4,756	\$ 4,851	\$ 4,948	\$ 5,047	\$ 5,148	\$ 5,251
Disbursements										
2019-2028 Development Charge Disbursements/Adjustments										
Uninflated	\$ (60,363)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 106,807
Inflated	\$ (60,363)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 127,644
Interest	\$ 619	\$ 1,651	\$ 1,805	\$ 1,966	\$ 2,132	\$ 2,305	\$ 2,485	\$ 2,672	\$ 2,866	\$ 1,791
Closing Cash Balance	\$ 64,253	\$ 70,386	\$ 76,762	\$ 83,391	\$ 90,279	\$ 97,436	\$ 104,869	\$ 112,588	\$ 120,602	\$ -
2018 Adjusted Non-Residential Charge Per Square Metre	\$ 6.30		\$ -							

**Appendix E-5
Table 1
Township of Tay
Public Works
Cash Analysis and Adjusted Charges**

RESIDENTIAL CASH FLOW

Public Works	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Cash Balance	\$ 57,874	\$ (11,658)	\$ 15,031	\$ 42,927	\$ 72,071	\$ 102,505	\$ 134,272	\$ 167,418	\$ 201,988	\$ 238,030
Residential Population Growth in New Units	103	103	103	103	103	103	103	103	103	103
Receipts										
Residential Development Charge Receipts (Inflated)	\$ 26,190	\$ 26,714	\$ 27,248	\$ 27,793	\$ 28,349	\$ 28,916	\$ 29,494	\$ 30,084	\$ 30,685	\$ 31,299
Disbursements										
2019-2028 Development Charge Disbursements/Adjustments										
Uninflated	\$ 96,466	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 228,321
Inflated	\$ 96,466	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 272,864
Interest	\$ 744	\$ (24)	\$ 648	\$ 1,351	\$ 2,085	\$ 2,852	\$ 3,652	\$ 4,486	\$ 5,357	\$ 3,535
Closing Cash Balance	\$ (11,658.30)	\$ 15,030.93	\$ 42,927.01	\$ 72,070.89	\$ 102,504.79	\$ 134,272.17	\$ 167,417.84	\$ 201,987.92	\$ 238,029.95	\$ -

2018 Adjusted Residential Charge Per Capita	\$ 253.75
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**Appendix E-5
Table 2
Township of Tay
Public Works
Cash Analysis and Adjusted Charges**

NON-RESIDENTIAL CASH FLOW

Public Works	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Cash Balance	\$ 5,495	\$ (1,107)	\$ 1,427	\$ 4,076	\$ 6,843	\$ 9,733	\$ 12,749	\$ 15,896	\$ 19,179	\$ 22,601
Non-Residential Growth in Square Feet	697	697	697	697	697	697	697	697	697	697
Receipts										
Non-Residential Development Charge Receipts (Inflated)	\$ 2,487	\$ 2,536	\$ 2,587	\$ 2,639	\$ 2,692	\$ 2,746	\$ 2,800	\$ 2,856	\$ 2,914	\$ 2,972
Disbursements										
2019-2028 Development Charge Disbursements/Adjustments										
Uninflated	\$ 9,160	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,679
Inflated	\$ 9,160	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,909
Interest	\$ 71	\$ (2)	\$ 62	\$ 128	\$ 198	\$ 271	\$ 347	\$ 426	\$ 509	\$ 336
Closing Cash Balance	\$ (1,106.98)	\$ 1,427.19	\$ 4,075.95	\$ 6,843.19	\$ 9,732.91	\$ 12,749.26	\$ 15,896.47	\$ 19,178.94	\$ 22,601.16	\$ -

2018 Adjusted Non-Residential Charge Per Square Metre	\$ 3.57
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**Appendix E-7
Table 1
Township of Tay
Water Services
Cash Analysis and Adjusted Charges**

RESIDENTIAL CASH FLOW

Water Services	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Opening Cash Balance	\$ 366,342	\$ 85,635	\$ (934,765)	\$ (770,672)	\$ (598,728)	\$ (418,662)	\$ (1,365,642)	\$ (1,196,868)	\$ (1,019,817)	\$ (834,201)	\$ (639,721)	\$ (436,073)	\$ (222,941)
Residential Population Growth in New Units	98	98	98	98	98	98	98	98	98	98	98	98	98
Receipts													
Residential Development Charge Receipts (Inflated)	\$ 178,398	\$ 181,966	\$ 185,606	\$ 189,318	\$ 193,104	\$ 196,966	\$ 200,905	\$ 204,924	\$ 209,022	\$ 213,202	\$ 217,466	\$ 221,816	\$ 226,252
Disbursements													
2019-2031 Development Charge Disbursements/Adjustments													
Uninflated	\$ 465,393	\$ 1,170,964	\$ -	\$ -	\$ -	\$ 1,018,229	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Inflated	\$ 465,393	\$ 1,194,383	\$ -	\$ -	\$ -	\$ 1,124,207	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest													
Interest on Changes in Balance	\$ (2,870)	\$ (10,124)	\$ 1,856	\$ 1,893	\$ 1,931	\$ (9,272)	\$ 2,009	\$ 2,049	\$ 2,090	\$ 2,132	\$ 2,175	\$ 2,218	\$ 2,263
Interest on Opening Balance	\$ 9,159	\$ 2,141	\$ (23,369)	\$ (19,267)	\$ (14,968)	\$ (10,467)	\$ (34,141)	\$ (29,922)	\$ (25,495)	\$ (20,855)	\$ (15,993)	\$ (10,902)	\$ (5,574)
Interest	\$ 6,289	\$ (7,983)	\$ (21,513)	\$ (17,374)	\$ (13,037)	\$ (19,739)	\$ (32,132)	\$ (27,872)	\$ (23,405)	\$ (18,723)	\$ (13,818)	\$ (8,684)	\$ (3,311)
Closing Cash Balance	\$ 85,635	\$ (934,765)	\$ (770,672)	\$ (598,728)	\$ (418,662)	\$ (1,365,642)	\$ (1,196,868)	\$ (1,019,817)	\$ (834,201)	\$ (639,721)	\$ (436,073)	\$ (222,941)	\$ -
2018 Adjusted Residential Charge Per Capita	\$ 1,819.46												

\$ -

**Appendix E-7
Table 2
Township of Tay
Water Services
Cash Analysis and Adjusted Charges**

NON-RESIDENTIAL CASH FLOW

Water Services	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Opening Cash Balance	\$ 36,615	\$ 8,559	\$ (93,429)	\$ (77,028)	\$ (59,842)	\$ (41,844)	\$ (136,494)	\$ (119,625)	\$ (101,929)	\$ (83,377)	\$ (63,939)	\$ (43,585)	\$ (22,283)
Non-Residential Growth in Square Feet	688	688	688	688	688	688	688	688	688	688	688	688	688
Receipts													
Non-Residential Development Charge Receipts (Inflated)	\$ 17,831	\$ 18,187	\$ 18,551	\$ 18,922	\$ 19,301	\$ 19,687	\$ 20,080	\$ 20,482	\$ 20,892	\$ 21,309	\$ 21,736	\$ 22,170	\$ 22,614
Disbursements													
2019-2031 Development Charge Disbursements/Adjustments													
Uninflated	\$ 46,516	\$ 117,036	\$ -	\$ -	\$ -	\$ 101,771	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Inflated	\$ 46,516	\$ 119,377	\$ -	\$ -	\$ -	\$ 112,363	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest													
Interest on Changes in Balance	\$ (287)	\$ (1,012)	\$ 186	\$ 189	\$ 193	\$ (927)	\$ 201	\$ 205	\$ 209	\$ 213	\$ 217	\$ 222	\$ 226
Interest on Opening Balance	\$ 915	\$ 214	\$ (2,336)	\$ (1,926)	\$ (1,496)	\$ (1,046)	\$ (3,412)	\$ (2,991)	\$ (2,548)	\$ (2,084)	\$ (1,598)	\$ (1,090)	\$ (557)
Interest	\$ 629	\$ (798)	\$ (2,150)	\$ (1,736)	\$ (1,303)	\$ (1,973)	\$ (3,212)	\$ (2,786)	\$ (2,339)	\$ (1,871)	\$ (1,381)	\$ (868)	\$ (331)
Closing Cash Balance	\$ 8,559	\$ (93,429)	\$ (77,028)	\$ (59,842)	\$ (41,844)	\$ (136,494)	\$ (119,625)	\$ (101,929)	\$ (83,377)	\$ (63,939)	\$ (43,585)	\$ (22,283)	\$ -
2018 Adjusted Non-Residential Charge Per Square Metre	\$ 25.93												

\$ -

Appendix F

Operating Capital & Asset Management Cost Implications

Appendix F
Table 1
Township of Tay
Long-Term Operating Cost Impacts

Cummulative Net Operating Impacts												Total
Service	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
General Government	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Library	\$ 2,547	\$ 5,095	\$ 7,642	\$ 10,189	\$ 12,737	\$ 15,284	\$ 17,831	\$ 20,379	\$ 22,926	\$ 25,473	\$	\$ 140,104
Fire	\$ 7,020	\$ 14,039	\$ 21,059	\$ 28,078	\$ 35,098	\$ 42,117	\$ 49,137	\$ 56,156	\$ 63,176	\$ 70,195	\$	\$ 386,075
Parks and Recreation	\$ 9,169	\$ 18,339	\$ 27,508	\$ 36,677	\$ 45,846	\$ 55,016	\$ 64,185	\$ 73,354	\$ 82,523	\$ 91,693	\$	\$ 504,310
Public Works	\$ 145	\$ 216	\$ 286	\$ 356	\$ 427	\$ 497	\$ 567	\$ 638	\$ 708	\$ 778	\$	\$ 4,617
Roads and Related	\$ 16,387	\$ 32,774	\$ 49,161	\$ 65,548	\$ 81,935	\$ 98,322	\$ 114,709	\$ 131,096	\$ 147,483	\$ 163,870	\$	\$ 901,287
Water	\$ 14,773	\$ 29,547	\$ 44,320	\$ 59,094	\$ 73,867	\$ 88,640	\$ 103,414	\$ 118,187	\$ 132,961	\$ 147,734	\$	\$ 812,537
Wastewater	\$ 18,573	\$ 37,146	\$ 55,719	\$ 74,292	\$ 92,865	\$ 111,438	\$ 130,011	\$ 148,584	\$ 167,157	\$ 185,730	\$	\$ 1,021,514
Total Cummulative Net Operating Impacts	\$ 68,615	\$ 137,155	\$ 205,695	\$ 274,234	\$ 342,774	\$ 411,314	\$ 479,854	\$ 548,394	\$ 616,934	\$ 685,474	\$	\$ 3,770,442

Appendix F
Table 2
Township of Tay
Long-Term Capital Cost Implications

Cummulative Net Capital Cost Impacts												Total
By Service	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
General Government	\$ -	\$ -	\$ 27,500	\$ -	\$ 3,000	\$ -	\$ -	\$ 27,500	\$ -	\$ 14,000	\$	\$ 72,000
Library Services	\$ 25,373	\$ 15,373	\$ 15,373	\$ 15,373	\$ 15,373	\$ 15,373	\$ 15,373	\$ 15,373	\$ 15,373	\$ 15,373	\$	\$ 163,725
Fire	\$ 207,548									\$ 2,023,336	\$	\$ 2,230,884
Parks and Recreation	\$ 15,000	\$ 75,611	\$ 119,307	\$ 6,111	\$ 72,111	\$ 6,111	\$ 6,111	\$ 143,112	\$ 6,111	\$ 6,111	\$	\$ 455,696
Public Works	\$ 56,875	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$	\$ 56,875
Roads and Related	\$ 1,647,332	\$ 1,488,017	\$ 2,747,715	\$ 1,488,017	\$ 1,488,017	\$ 1,488,017	\$ 1,488,017	\$ 1,488,017	\$ 1,488,017	\$ 1,488,017	\$	\$ 16,299,181
Water	\$ 88,000	\$ 112,000				\$ 2,880,000	\$ -	\$ -	\$ -	\$ -	\$	\$ 3,080,000
Wastewater	\$ 502,935	\$ -	\$ 6,210,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$	\$ 6,712,935
Total Capital Cost Impacts	\$ 2,543,062	\$ 1,691,000	\$ 9,119,894	\$ 1,509,500	\$ 1,578,500	\$ 4,389,500	\$ 1,509,500	\$ 1,674,001	\$ 1,509,500	\$ 3,546,836	\$	\$ 29,071,296

Appendix F
Table 3
Township of Tay
Long-Term Net Lifecycle Impacts

Cummulative Net Lifecycle Impact												Total
Service	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
General Government	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Library	\$ 6,767	\$ 9,941	\$ 13,178	\$ 16,480	\$ 19,848	\$ 23,284	\$ 26,788	\$ 30,362	\$ 34,008	\$ 37,726	\$	\$ 218,383
Fire	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 227,540	\$	\$ 227,540
Parks and Recreation	\$ -	\$ 8,203	\$ 13,994	\$ 17,874	\$ 22,622	\$ 22,622	\$ 22,622	\$ 39,094	\$ 62,651	\$ 62,651	\$	\$ 272,332
Public Works	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 33,261	\$	\$ 33,261
Roads and Related	\$ 65,014	\$ 124,916	\$ 237,739	\$ 300,061	\$ 363,628	\$ 428,467	\$ 494,603	\$ 562,062	\$ 630,870	\$ 701,053	\$	\$ 3,908,414
Water	\$ 10,236	\$ 62,437	\$ 62,437	\$ 62,437	\$ 62,437	\$ 223,879	\$ 223,879	\$ 223,879	\$ 223,879	\$ 223,879	\$	\$ 1,379,381
Wastewater	\$ 18,278	\$ 18,278	\$ 360,571	\$ 360,571	\$ 360,571	\$ 360,571	\$ 360,571	\$ 360,571	\$ 360,571	\$ 360,571	\$	\$ 2,921,126
Total Cummulative Net Lifecycle Impacts	\$ 38,749	\$ 143,152	\$ 485,446	\$ 485,446	\$ 485,446	\$ 808,330	\$	\$ 8,960,436				

Appendix G

Proposed Development Charges By-Law (Draft)

THE CORPORATION OF THE TOWNSHIP OF TAY

BY-LAW NUMBER 2019-xx

A By-law to Establish Development Charges for the Corporation of the Township of Tay

WHEREAS the Township of Tay will experience growth through development and re-development;

AND WHEREAS subsection 2(1) of the Development Charges Act, 1997, S.O. 1997, c. 27 (hereinafter called the "Act") provides that the council of a municipality may pass By-laws for the imposition of development charges against land to pay for increased capital costs because of increased need for services arising from the development of the area to which the By-law applies;

AND WHEREAS the Council of The Corporation of the Township of Tay (hereinafter the "Township") held a public meeting on **January xx, 2019** to consider the enactment of a municipal-wide soft services development charge By-law, in accordance with section 12 of the Act;

AND WHEREAS the Council of the Township has given notice in accordance with section 12 of the Act, of its intention to pass a By-law under section 2 of the said Act;

AND WHEREAS a development charges background study has been prepared by **DFA Infrastructure International Inc.** dated **January xx, 2019** ("the background study"), wherein the background study indicated that the development of any land within the Township of Tay will increase the need for services as defined herein;

AND WHEREAS copies of the background study and the proposed development charges By-law were made available to the public in accordance with section 12 of the Act;

AND WHEREAS the Council of the Township has heard all persons who applied to be heard and received written submissions whether in objection to, or in support of, the development charges proposal at a public meeting held on **January xx, 2019**;

AND WHEREAS on **(INSERT DATE), 2019**, Council approved the Report titled "**Development Charges Background Study**" dated **(INSERT DATE), 2019**, thereby updating its capital forecast where appropriate and indicated that it intends to ensure that the increase in the need for services to service the anticipated development will be met;

AND WHEREAS at its meeting held on **(INSERT DATE), 2019**, Council expressed its intention that infrastructure related to post **2028** development shall be paid for by development charges or other similar charges;

AND WHEREAS Council has indicated its intent that the future excess capacity identified in the Development Charges Background Study, dated **January xx, 2019**, shall be paid for by development charges or other similar charges;

AND WHEREAS at its meeting held on **(INSERT DATE), 2019**, Council approved the background study and determined that no further public meetings were required under section 12 of the Act.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF TAY ENACTS AS FOLLOWS:

1. INTERPRETATION

1.1 In this By-law the following items shall have the corresponding meanings:

"Act" means the Development Charges Act, 1997, S.O. 1997, c. 27, as amended or any successors thereto;

"apartment unit" means any residential unit within a building containing more than four dwelling units where the units are connected by an interior corridor;

"bedroom" means a habitable room which can be used as sleeping quarters, but does not include a bathroom, living room, dining room or kitchen;

"board of education" has the same meaning as set out in the *Education Act*, R.S.O. 1990, Chap. E.2, as amended, or any successor thereof;

“Building Code Act” means the *Building Code Act*, S.O. 1992, as amended, or any successor thereof;

“capital cost” means costs incurred or proposed to be incurred by the municipality or a local board thereof directly or by others on behalf of and as authorized by the municipality or local board,

- (a) to acquire land or an interest in land, including a leasehold interest,
- (b) to improve land,
- (c) to acquire, lease, construct or improve buildings and structures,
- (d) to acquire, construct or improve facilities including,
 - (i) furniture and equipment other than computer equipment, and
 - (ii) material acquired for circulation, reference or information purposes by a library board as defined in the *Public Libraries Act*, R.S.O. 1990, Chap. P.44, as amended, or any successor thereof; and
 - (iii) rolling stock with an estimated useful life of seven years or more, and
- (e) to undertake studies in connection with any matter under the Act and any of the matters in clauses (a) to (d) above, including the development charge background study required for the provision of services designated in this By-law within or outside the municipality, including interest on borrowing for those expenditures under clauses (a) to (e) above that are growth-related;

“commercial” means any use of land, structures or buildings for the purposes of buying or selling commodities and services, but does not include industrial or agricultural uses, but does include hotels, motels, motor inns and boarding, lodging and rooming houses;

“Council” means the Council of the Township of Tay;

“development” means the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of increasing the size or usability thereof, and includes redevelopment;

“development charge” means a charge imposed with respect to this By-law;

“dwelling unit” means any part of a building or structure used, designed or intended to be used as a domestic establishment in which one or more persons may sleep and are provided with culinary and sanitary facilities for their exclusive use;

“existing” means the number, use and size that existed as of the date this By-law was passed;

“farm building” means that part of a farming operation or hobby farm operation encompassing barns, stables, silos and other ancillary development to an agricultural use, but excluding a residential use and a veterinary establishment use;

“gross floor area” means:

- (a) in the case of a residential building or structure, the total area of all floors above grade of a dwelling unit 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 from any other dwelling unit or other portion of a building; and
- (b) in the case of a non-residential building or structure, or in the case of a mixed-use building or structure in respect of the non-residential portion thereof, the total area of all building floors above or below grade measured between the outside surfaces of the exterior walls, or between the outside surfaces of exterior walls and the centre line of party walls dividing a non-residential use and a residential use, except for:
 - (i) a room or enclosed area within the building or structure above or below grade that is used exclusively for the accommodation of heating, cooling, ventilating, electrical, mechanical or telecommunications equipment that service the building;
 - (ii) loading facilities above or below grade; and
 - (iii) a part of the building or structure below grade that is used for the parking of motor vehicles or for storage or other accessory use;

“industrial” means lands, buildings or structures used or designed or intended for use for manufacturing, processing, fabricating or assembly of raw goods, warehousing or bulk storage of goods, and includes office uses and the sale of commodities to the general public where such uses are accessory to an industrial use, but does not include the sale of commodities to the general public through a warehouse club;

“institutional” means land, buildings, structures or any part thereof used by any organization, group or association for promotion of charitable, educational or benevolent objectives and not for profit or gain;

“Local Board” means a school board, public utility, commission, transportation commission, public library board, board of park management, local board of health, board of commissioners of police, planning board, or any other board, commission, committee, body or local authority established or exercising any power or authority under any general or special Act with respect to any of the affairs or purposes, including school purposes, of the municipality or any part or parts thereof;

“local services” means those services, facilities or things which are under the jurisdiction of the Township of Tay and are related to a plan of subdivision or within the area to which the plan relates in respect of the lands under Sections 41, 51 or 53 of the *Planning Act*, R.S.O. 1990, Chap. P.13, as amended, or any successor thereof;

“multiple dwellings” means all dwellings other than single-detached, semi-detached and apartment unit dwellings;

“municipality” means the Corporation of the Township of Tay;

“non-residential use” means a building or structure of any kind whatsoever used, designed or intended to be used for other than a residential use;

“Official Plan” means the Official Plan adopted for the Township, as amended and approved;

“Owner” means the owner of land or a person who has made application for an approval for the development of land upon which a development charge is imposed;

“place of worship” means that part of a building or structure that is exempt from taxation as a place of worship under the *Assessment Act*, R.S.O. 1990, Chap. A.31, as amended, or any successor thereof;

“Rate” means the interest rate established weekly by the Bank of Canada based on Treasury Bills having a term of 91 days;

“regulation” means any regulation made pursuant to the Act;

“residential dwelling” means a building, occupied or capable of being occupied as a home, residence or sleeping place by one or more persons, containing one or more dwelling units but not including motels, hotels, tents, truck campers, tourist trailers, mobile camper trailers or boarding, lodging or rooming houses;

“residential use” means the use of a building or structure or portion thereof for one or more Dwelling Units. This also includes a dwelling unit on land that is used for an Agricultural Use;

“row dwelling” means a building containing three or more attached dwelling units in a single row, each of which dwelling units has an independent entrance from the outside and is vertically separated from any abutting dwelling unit;

“semi-detached dwelling” means a dwelling unit in a residential building consisting of two dwelling units having one vertical wall, but not other parts, attached to the other dwelling unit;

“service” means a service designed in Schedule “A” to this By-law, and “services” shall have a corresponding meaning;

“servicing agreement” means an agreement between a landowner and the municipality relative to the provision of municipal services to specified land within the municipality;

“single detached dwelling unit” means a residential building consisting of one dwelling unit and not attached to another structure;

“Township” means the area within the geographic limits of the Township of Tay; and

“Zoning By-law” means the Zoning By-law of the Township of Tay or any successor thereof passed pursuant to Section 34 of the *Planning Act*, R.S.O. 1990 Chap. P.13, as amended, or any successor thereof;

2. DESIGNATION OF SERVICES

2.1 The categories of services for which development charges are imposed under this By-law are as follows:

- (a) General Services;
- (b) Library Services;
- (c) Fire Protection Services;
- (d) Park Development & Indoor Recreation Services;
- (e) Public Works (Building & Fleet);
- (f) Roads and Related Services;
- (g) Water Services; and,

(h) Wastewater Services.

2.2 The components of the services designated in section 2.1 are described in Schedule "A".

3. APPLICATION OF BY-LAW RULES

3.1 Development charges shall be payable in the amounts set out in this By-law where:

- (a) the lands are located in the area described in section 3.2; and,
- (b) the development of the lands requires any of the approvals set out in subsection 3.4.1.

Area to Which By-law Applies

3.2 Subject to section 3.3, this By-law applies to all lands in the Township of Tay whether or not the land or use thereof is exempt from taxation under s.13 or the Assessment Act.

3.3. Notwithstanding clause 3.2 above, this By-law shall not apply to lands that are owned by and used for the purposes of:

- (a) any municipality or a local board thereof; or
- (b) a board of education.

Approvals for Development

3.4.1 Development charges shall be imposed on all lands, buildings or structures that are developed for residential or non-residential uses if the development requires:

- (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 subsection 50(7) of the *Planning Act* applies;
- (d) the approval of a plan of subdivision under section 51 of the *Planning Act*;
- (e) a consent under section 53 of the *Planning Act*;
- (f) the approval of a description under section 50 of the *Condominium Act*, R.S.O. 1990, Chap. C.26, as amended, or any successor thereof; or
- (g) the issuing of a permit under the *Building Code Act* in relation to a building or structure.

3.4.2 No more than one development charge for each service designated in subsection 2.1 shall be imposed upon any lands, buildings or structures to which this By-law applies even though two or more of the actions described in subsection 3.4.1 are required before the lands, buildings or structures can be developed.

3.4.3 Despite subsection 3.4.2, if two or more of the actions described in subsection 3.4.1 occur at different times, additional development charges shall be imposed if the subsequent action has the effect of increasing the need for services.

Exemptions

3.5 Notwithstanding the provisions of this By-law, development charges shall not be imposed with respect to:

- (a) an enlargement to an existing dwelling unit;
- (b) one or two additional dwelling units in an existing single detached dwelling; or
- (c) one additional dwelling unit in any other existing residential building.

3.6 Notwithstanding subsection 3.5(b), development charges shall be imposed if the total gross floor area of the additional one or two units exceeds the gross floor area of the existing dwelling unit.

3.7 Notwithstanding section 3.5, development charges shall be imposed if the additional unit has a gross floor area greater than:

- a) in the case of a semi-detached or row dwelling, the gross floor area of the existing dwelling unit; and,
- b) in the case of any other residential building, the gross floor area of the smallest dwelling unit contained in the residential building.

Other Exemptions:

3.8.1 Notwithstanding the provision of this By-law, development charges shall not be imposed with respect to:

- (a) Industrial Buildings;
- (b) Farm buildings;
- (c) Places of Worship; and,
- (d) Commercial Development Charges will be exempt from properties zoned Village Commercial by Zoning By-law 2000-57, as amended, or its successor, in the downtown core areas of the communities of Port McNicoll, Victoria Harbour and Waubaushene as follows:
 - (i) Properties fronting on Talbot Street from Sixth Avenue to First Street, Ney Street and/or Fourth Street north of Talbot to Assiniboia Street in the community of Port McNicoll;
 - (ii) Properties fronting on Albert Street, John Street, Ellen Street, William Street from Cadeau Place to Ellen Street, and/or Richard Street from Albert Street to Ellen Street in the community of Victoria Harbour; and,
 - (iii) Properties fronting on Sturgeon Bay Road east of Ouida Street, Coldwater Road from Pine Street to Willow Street, and/or Pine Street south of Dodge Drive in the community of Waubaushene.

3.8.2 The Treasurer shall rebate the water and/or wastewater service components of the calculated development charge for developments where these services are not available within five hundred feet and servicing plans are not scheduled within five years of the building permit issuance.

Amount of Residential Charges

3.9 The development charges set out in Schedule "B" shall be imposed on residential uses of lands, buildings or structures, including a dwelling unit accessory to a non-residential use and, in the case of a mixed use building or structure, on the residential uses in the mixed use building or structure, according to the type of residential unit, and calculated with respect to each of the services according to the type of residential use.

Amount of Non-Residential Charges

3.10 The development charges set out in Schedule "B" to this By-law shall be imposed on non-residential uses of lands, buildings or structures, and, in the case of a mixed use building or structure, on the non-residential uses in the mixed use building or structure, and calculated with respect to each of the services according to the total gross floor area of the non-residential use.

Reduction of Development Charges for Redevelopment

3.11.1 Despite any other provisions of this By-law, where, as a result of the redevelopment of land, a building or structure existing on the same land within 5 years prior to the date of payment of development charges in regard to such redevelopment was, or is to be demolished, in whole or in part, or converted from one principal use to another principal use on the same land, in order to facilitate the redevelopment, the development charges otherwise payable with respect to such redevelopment shall be reduced by the following amounts:

- (a) in the case of a residential building or structure, or in the case of a mixed-use building or structure, the residential uses in the mixed-use building or structure, an amount calculated by multiplying the applicable development charge under subsection 3.9 by the number, according to type, of dwelling units that have been or will be demolished or converted to another principal use; and,
- (b) in the case of a non-residential building or structure or, in the case of mixed-use building or structure, the non-residential uses in the mixed-use building or structure, an amount calculated by multiplying the applicable development charges under subsection 3.10, by the gross floor area that has been or will be demolished or converted to another principal use.

3.11.2 Despite subsection 3.11.1, in no case shall a reduction of development charges exceed the amount of the development charges that would otherwise be payable, and no reduction of development charges is available if the existing land use is exempt under this By-law.

Time of Payment of Development Charges

- 3.12 Development charges shall be calculated and payable in full in money or by provision of services as may be agreed upon, or by credit granted by the Act, on the date that the first building permit is issued in relation to a building or structure on land to which a development charge applies, or in a manner or at a time otherwise lawfully agreed upon.
- 3.13 Where development charges apply to land in relation to which a building permit is required, the building permit shall not be issued until the development charges have been paid in full.
- 3.14 Notwithstanding subsection 3.12, the portion of development charges with respect to water services, waste water services and roads and related services shall be calculated and payable with respect to an approval of a plan of subdivision under Section 51 of the Planning Act immediately upon entering into an agreement.
- 3.15 Notwithstanding subsections 3.12, 3.13 and 3.14, an owner may enter into an agreement with the municipality to provide for the payment in full or in part of a development charge before building permit issuance or later than the issuing of a building permit, as agreed, and for the charging of interest by the Township on that part of the development charge paid after it would otherwise have been payable.

4. PAYMENT BY SERVICES

- 4.1 Despite the payment required under subsections 3.9 and 3.10, Council may, by agreement, give a credit towards a development charge in exchange for work that relates to a service to which a development charge relates under this By-law.

5. INDEXING

- 5.1 Development charges imposed pursuant to this By-law shall be adjusted annually on the first day of January without amendment to this By-law, in accordance with the third quarter of the prescribed index in the Act.

6. SCHEDULES

- 6.1 The following schedules shall form part of this By-law:
Schedule "A" - COMPONENTS OF SERVICES DESIGNATED IN SUBSECTION 2.1
Schedule "B" - SCHEDULE OF DEVELOPMENT CHARGES

7. CONFLICTS

- 7.1 Where the Township and an owner or former owner have entered into an agreement with respect to land within the area to which this By-law applies, and a conflict exists between the provisions of this By-law and such agreement, the provisions of the agreement shall prevail to the extent that there is a conflict.
- 7.2 Notwithstanding subsection 7.1, where a development which is the subject of an agreement to which subsection 7.1 applies, is subsequently the subject of one or more of the actions described in subsection 3.4.1, an additional development charge in respect of the development permitted by the action shall be calculated, payable and collected in accordance with the provisions of this By-law if the development has the effect of increasing the need for services, unless such agreement provides otherwise.

8. SEVERABILITY

- 8.1 If, for any reason, any provision of this By-law is held to be invalid, it is hereby declared to be the intention of Council that all the remainder of this By-law shall continue in full force and effect until repealed, re-enacted, amended or modified.

9. REPEAL OF CURRENT BY-LAW

- 9.1 That By-law 2014-01 be and is hereby repealed.

10. DATE BY-LAW IN FORCE

- 10.1 This By-law shall come into force and take effect immediately upon the final reading thereof.

11. DATE BY-LAW EXPIRES

11.1 This By-law shall continue in force and effect for a term not to exceed five years from the date of coming into force, unless it is extended by statute, regulation or By-law, or repealed at an earlier date.

BY-LAW READ A FIRST, SECOND, AND THIRD TIME AND FINALLY PASSED THIS XXth DAY FEBRUARY, 2019.

THE CORPORATION OF THE TOWNSHIP OF TAY

MAYOR

CLERK

SCHEDULE "A" TO BY-LAW 2019-xx

COMPONENTS OF SERVICES DESIGNATED IN SUBSECTION 2.1

100% Eligible Services

Fire Services

- Fire Vehicles
- Buildings, Land & Furnishings
- Equipment

Roads and Related

- Road Works
- Related Studies

Public Works

- Public Works Facilities
- Public Works Fleet

Wastewater Services

- Treatment Plants

Water Services

- Water Supply and Treatment Plants
- Water Storage
- Water Distribution Systems

90% Eligible Services

Parks and Recreation

- Indoor Recreation
- Outdoor Recreation

Library Services

- Library Collection Materials

General Government

- Growth Related Studies

SCHEDULE "B" TO BY-LAW 2019-xx

SCHEDULE OF DEVELOPMENT CHARGES

Service	Residential Charge By Dwelling Type				Non-Residential Charge (per square metre of Gross floor area)
	Single Detached Dwellings and Semi-Detached Dwellings	Other Multiples	Apartment Units - 2 or more Bedrooms	Apartment Units - Bachelor and 1 bedroom	
General Government	\$ 370	\$ 308	\$ 293	\$ 231	\$ 2.16
Library	\$ 502	\$ 418	\$ 397	\$ 313	\$ -
Fire	\$ 1,076	\$ 897	\$ 852	\$ 673	\$ 6.30
Parks & Recreation	\$ 1,154	\$ 961	\$ 913	\$ 721	\$ -
Public Works	\$ 609	\$ 508	\$ 482	\$ 381	\$ 3.57
Roads and Related	\$ 2,067	\$ 1,722	\$ 1,636	\$ 1,292	\$ 12.10
Sub-total Township Wide Services	\$ 5,777	\$ 4,814	\$ 4,573	\$ 3,610	\$ 24.14
Water	\$ 4,367	\$ 3,639	\$ 3,457	\$ 2,729	\$ 25.93
Wastewater	\$ 7,769	\$ 6,474	\$ 6,150	\$ 4,855	\$ 46.13
Sub-total for Water and Wastewater	\$ 12,135	\$ 10,113	\$ 9,607	\$ 7,585	\$ 72.06
TOTAL CHARGE PER FULLY SERVICED UNIT	\$ 17,912	\$ 14,927	\$ 14,180	\$ 11,195	\$ 96.20

Appendix H

Stakeholder Meeting Summary Report



DFA Infrastructure International Inc.

33 Raymond Street St. Catharines Ontario Canada L2R 2T3

Telephone: (905) 938 -0965

Fax: (905) 937-6568

January 14, 2019

Joanne Sanders
Director of Finance / Treasury
Tay Township
450 Park Road
Victoria Harbour, Ontario
L0K 2A0

Dear Joanne,

**Re: Township of Tay
2018 Development Charges (DC) Background Study & By-law
Stakeholder Meeting Summary Report**

We have prepared for inclusion in the Final Development Charges Background Study a Summary Report on the Stakeholder Meeting that was held January 8th at the Township's municipal office.

Please do not hesitate to call if you have any questions.

Respectfully Submitted by,

DFA Infrastructure International Inc.

A handwritten signature in black ink, appearing to read 'Derek Ali', is written over a light grey horizontal line.

Derek Ali, MBA, P.Eng.
President

Transmittal Letter

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1 INTRODUCTION

This report summarizes the activities and discussions related to the Stakeholder Meeting held January 8th, 2019.

The primary objectives of the Stakeholder Meeting were to:

- Provide background information on development charges;
- To present information contained in the draft background study and proposed development charge rates; and
- To obtain stakeholder's input on the proposed Municipality's development charges by-law.

A notice of the Stakeholder Meeting was prepared and posted on the Township's website on December 3rd, 2018. A copy of the notice has been appended to this report.

Two separate stakeholder sessions were held on the 8th. The first was from 1 p.m. to 3 p.m., with the second from 7 p.m. to 9 p.m. at the following location:

Municipal Office – Council Chambers
450 Park Road
Victoria Harbour, Ontario
L0K 2A0

2 PRESENTATION

The representative of DFA Infrastructure International Inc. (DFA) gave a presentation at each of the two stakeholder sessions in respect to the draft Development Charges Background Study and proposed By-law. The presentation focused on the requirements of the Development Charges Act when passing a new development charges by-law, the information and assumptions used in calculation of the proposed development charges, and a comparison of the proposed development charges to other municipalities.

3 ATTENDANCE

A total of four members of the public were in attendance at the two stakeholder sessions. Senior Township staff and a representative of DFA were also in attendance. A sign-in sheet was circulated to members of the public. Upon completion of the presentations, members of the public were invited to comment on and discuss the draft development charges background study and proposed by-law. All members of the public commented.

4 DISCUSSION

Other than a general understanding of the process for calculating development charges, the main issue being raised by the stakeholders was the proposed DC rate increases for the apartment classes of residential development. While the calculated residential rates of the single family and multiple dwelling units saw a slight decline over the current 2019 rates, the calculated rates for apartment units are seeing an increase over the current 2019 rates. It was explained to the stakeholders that the assumptions used regarding density of persons-per-units had changed from the previous study, and that was the reason for the apartment rates increases, while the single family and multiple rates were seeing decreases.

It was requested by some of the stakeholders that consideration be provided for relief from the proposed increases in the calculated apartment rates, with the possibility of grandfathering current apartment developments.

Upon completion of the discussion attendees were informed that a report on the stakeholder meeting would be drafted and included in the background study. Attendees were also informed that the Statutory Public Meeting would be held on January 23rd at 6:30 where they could make a formal presentation to members of Council on their concerns or, provide their comments in writing and send them to the attention of the Clerk.