



# Development Charges Background Study

City of Thorold

March 21, 2019

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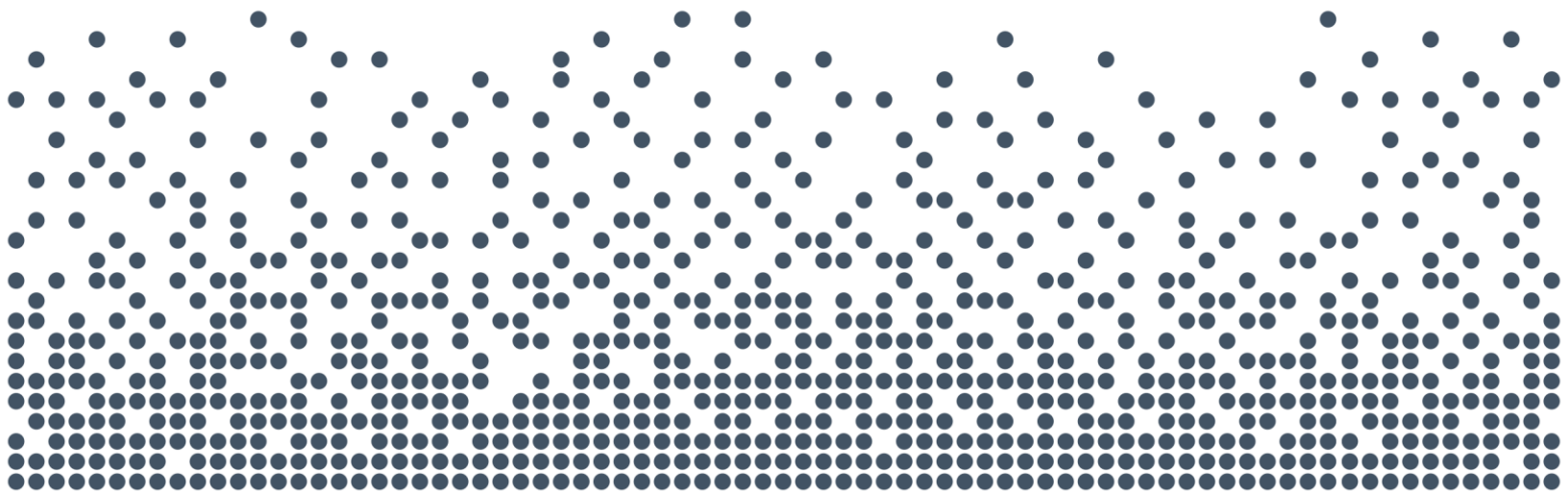
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## List of Acronyms and Abbreviations

<b>Acronym</b>	<b>Full Description of Acronym</b>
D.C.	Development charge
D.C.A.	Development Charges Act, 1997, as amended
F.I.R.	Financial Information Return
G.F.A.	Gross floor area
I.J.P.A.	Infrastructure for Jobs and Prosperity Act
L.P.A.T.	Local Planning Appeal Tribunal
N.F.P.O.W.	No Fixed Place of Work
O.M.B.	Ontario Municipal Board
O.P.A.	Official Plan Amendment
O.Reg.	Ontario Regulation
P.O.A.	Provincial Offences Act
P.P.U.	Persons per unit
S.D.E.	Single detached equivalent
S.D.U.	Single detached unit
s.s.	Subsection
S.W.M.	Stormwater management
sq.ft.	square foot
sq.m.	square metre





# Executive Summary





# Executive Summary

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

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

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

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



- 5) Net costs are then allocated between residential and non-residential benefit; and
  - 6) Net costs divided by growth to provide the D.C. charge.
3. A number of changes to the D.C. process need to be addressed as a result of Bill 73. These changes have been incorporated throughout the report and in the updated draft by-law, as necessary. These items include:
- a. Area-rating: Council must consider the use of area-specific charges.
  - b. Asset Management Plan for New Infrastructure: The D.C. background study must include an asset management plan that deals with all assets proposed to be funded, in whole or in part, by D.C.s. The asset management plan must show that the assets are financially sustainable over their full lifecycle.
  - c. 60-day Circulation Period: The D.C. background study must be released to the public at least 60-days prior to passage of the D.C. by-law.
  - d. Timing of Collection of Development Charges: The D.C.A. now requires D.C.s to be collected at the time of the first building permit.
4. The growth forecast (Chapter 3) on which the City-wide D.C. is based, projects the following population, housing and non-residential floor area for the 10-year (2019 to 2023) and 13-year (2019 to 2031) periods.

Measure	10 Year	13 Year	13 Year Urban	Rolling Meadows
	2019-2028	2019-2031	2019-Urban 2031	2019-2031
(Net) Population Increase	2,694	3,065	3,126	1,441
Residential Unit Increase	1,243	1,431	1,393	499
Non-Residential Gross Floor Area Increase (ft <sup>2</sup> )	529,400	586,600	586,600	76,000

Source: Watson & Associates Economists Ltd. Forecast 2019

5. On June 3, 2014, the City of Thorold passed By-law 74-2014 under the D.C.A. The by-law imposes D.C.s on residential and non-residential uses and will expire on June 3, 2019. The City is undertaking a D.C. public process and anticipates passing a new by-law in advance of the expiry date. The mandatory public



meeting has been set for April 16, 2019 with adoption of the by-law on May 21, 2019.

6. The City's D.C.s currently in effect (excluding area-specific charges) are \$13,136 for single detached dwelling units for full services and non-residential charges for commercial/institutional are \$5.99 per sq.ft. while industrial charges are \$1.99 per sq.ft. This report has undertaken a recalculation of the charge based on future identified needs (presented in Schedule ES-1 for residential and non-residential). Charges have been provided on a City-wide basis for all services except water and wastewater services, which are provided for urban development. The corresponding single detached unit charge is \$14,549 for full services. The non-residential charge (which is being presented as one uniform charge for all non-residential development) is \$6.14 per square foot of building area for full services. These rates are submitted to Council for its consideration.
7. In addition to the City-wide charges, the City currently imposes area-specific D.C.s in the areas of Rolling Meadows and the Brock Business Park. The single detached charge for wastewater services in Rolling Meadows adds an additional \$320 to the City-wide charge and no addition to the non-residential rate. The wastewater charge for Brock Business Park adds an additional \$1,276 for single detached dwelling units and an additional \$0.60 per square foot of non-residential development to the City's existing City-wide D.C. The special area charge for the Brock Business Park was established under By-law 64-2017 and is not currently under review in this background study and draft by-law. This study has undertaken updates to the area-specific charge for Rolling Meadows and the resulting charge is \$200 for single detached dwelling and a corresponding non-residential charge of \$0.09 per square foot of building area. These rates are submitted to Council for its consideration.
8. The D.C.A. requires a summary be provided of the gross capital costs and the net costs to be recovered over the life of the by-law. This calculation is provided by service and is presented in Table 6-6. A summary of these costs is provided below:



Total gross expenditures planned over the next five years	\$ 35,986,616
Less:	
Benefit to existing development	\$ 8,441,175
Post planning period benefit	\$ 4,598,461
Ineligible re: Level of Service	\$ -
Mandatory 10% deduction for certain services	\$ 929,229
Grants, subsidies and other contributions	\$ -
<b>Net Costs to be recovered from development charges</b>	<b>\$ 22,017,751</b>

This suggests that for the non-D.C. cost (benefit to existing development, mandatory 10% deduction, and the grants, subsidies and other contributions), \$9.37 million (or an annual amount of \$1.87 million) will need to be contributed from taxes and rates, or other sources. With respect to the post period benefit amount of \$4.59 million, it will be included in subsequent D.C. study updates to reflect the portion of capital that benefits growth in the post period D.C. forecasts.

Based on the above table, the City plans to spend \$35.99 million over the next five years, of which \$22.02 million (61%) is recoverable from D.C.s. Of this net amount, \$18.65 million is recoverable from residential development and \$3.37 million from non-residential development. It is noted also that any exemptions or reductions in the charges would reduce this recovery further.

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

The following services are calculated based on an urban 13-year forecast (note that for Rolling Meadows it is based on the growth anticipated within the area):

- Rolling Meadows – Wastewater Services;
- Wastewater Services; and
- Water Services.

The following City-wide services are calculated based on a 13-year forecast;

- Services Related to a Highway; and
- Fire Protection Services.

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



- Municipal Parking Spaces;
- Indoor Recreation Services;
- Outdoor Recreation Services;
- Library Services; and
- Administration.

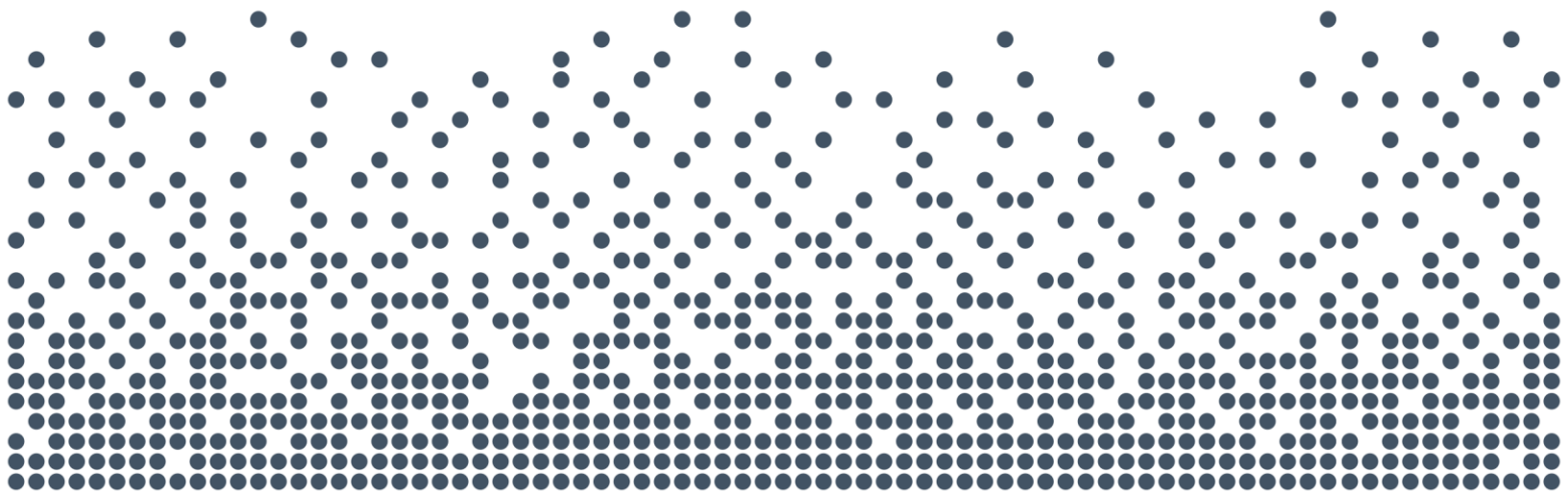
Council will consider the findings and recommendations provided in the report and, in conjunction with public input, approve such policies and rates it deems appropriate. These directions will refine the draft D.C. by-law which is appended in Appendix G. These decisions may include:

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



Table ES-1  
Schedule of Development Charges

Service	RESIDENTIAL					NON-RESIDENTIAL
	Single and Semi-Detached Dwelling	Other Multiples	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Special Care/Special Dwelling Units	(per sq.ft. of Gross Floor Area)
<b>City Wide Services:</b>						
Services Related to a Highway	5,135	3,396	3,316	2,028	1,836	3.02
Municipal Parking Spaces	113	75	73	45	40	0.06
Fire Protection Services	2,072	1,370	1,338	818	741	1.22
Parks and Recreation	4,270	2,824	2,757	1,686	1,526	0.49
Library Services	596	394	385	235	213	0.06
Administration	673	445	435	266	241	0.38
<b>Total City Wide Services</b>	<b>12,859</b>	<b>8,504</b>	<b>8,304</b>	<b>5,078</b>	<b>4,597</b>	<b>5.23</b>
<b>Urban Services:</b>						
Wastewater Services	735	486	475	290	263	0.40
Water Services	955	632	617	377	341	0.51
<b>Total Urban Services</b>	<b>1,690</b>	<b>1,118</b>	<b>1,092</b>	<b>667</b>	<b>604</b>	<b>0.91</b>
<b>GRAND TOTAL CITY WIDE</b>	<b>12,859</b>	<b>8,504</b>	<b>8,304</b>	<b>5,078</b>	<b>4,597</b>	<b>5.23</b>
<b>GRAND TOTAL CITY WIDE + URBAN AREA</b>	<b>14,549</b>	<b>9,622</b>	<b>9,396</b>	<b>5,745</b>	<b>5,201</b>	<b>6.14</b>
<b>Area Specific Services:</b>						
Wastewater Services - Rolling Meadows	200	132	129	79	71	0.09
<b>Total Area Specific Services</b>	<b>14,749</b>	<b>9,754</b>	<b>9,525</b>	<b>5,824</b>	<b>5,272</b>	<b>6.23</b>



# Report





# Chapter 1

## Introduction





# 1. Introduction

## 1.1 Purpose of this Document

---

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

The City retained Watson & Associates Economists Ltd. (Watson), to undertake the D.C.s (D.C.) study process throughout 2018 and 2019. Watson worked with City staff in preparing the D.C. analysis and policy recommendations.

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

This report has been prepared, in the first instance, to meet the statutory requirements applicable to the City's D.C. background study, as summarized in Chapter 4. It also addresses the requirement for "rules" (contained in Chapter 7) and the proposed by-law to be made available as part of the approval process (included as Appendix G).

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

Finally, it addresses post-adoption implementation requirements (Chapter 8) which are critical to the successful application of the new policy.

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

## 1.2 Summary of the Process

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The public meeting required under Section 12 of the D.C.A., has been scheduled for April 16, 2019. Its purpose is to present the study to the public and to solicit public

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input. The meeting is also being held to answer any questions regarding the study's purpose, methodology and the proposed modifications to the City's D.C.s.

In accordance with the legislation, the background study and proposed D.C. by-law will be available for public review on March 21, 2019.

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

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

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

Figure 1-1  
Schedule of Key D.C. Process Dates for the City of Thorold

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



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

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

### 1.3.1 Area Rating

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

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

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

### 1.3.2 Asset Management Plan for New Infrastructure

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



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

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

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

This D.C. study is being provided to the public on March 21, 2019 to ensure the new requirements for release of the study is met.

### ***1.3.4 Timing of Collection of D.C.s***

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

### ***1.3.5 Other Changes***

It is also noted that a number of other changes were made through Bill 73 and O.Reg. 428/15 including changes to the way in which Transit D.C. service standards are calculated, the inclusion of Waste Diversion and the ability for collection of additional levies; however, these sections do not impact the City's D.C.



# Chapter 2

## Current City of Thorold Policy





## 2. Current City of Thorold Policy

### 2.1 Schedule of Charges

On June 3, 2014, the City of Thorold passed By-law, 74-2014 under the D.C.A. The by-law imposes D.C.s for residential and non-residential uses.

By-law 64-2017 was passed on June 6, 2017, which set out area-specific charges for wastewater services for Brock Business Park. This background study does not include any updates to the Brock Business Park D.C.

The table below provides the rates currently in effect, as at June 4, 2018.

Table 2-1  
City of Thorold  
Current D.C. Rates

Service	Residential				Non-Residential	
	Single & Semi Detached	Multiples	Apartments - 2 Bedrooms +	Apartments - Bachelor & 1 Bedroom	Commercial/ Institutional (per sq.ft.)	Industrial (per sq.ft.)
<b>City-Wide Services</b>						
Services Related to a Highway	3,508	2,420	2,167	1,463	2.38	0.79
Fire Protection Services	1,582	1,092	975	659	1.07	0.36
Parks and Recreation	4,402	3,034	2,718	1,836	0.48	0.15
Library Services	541	374	334	226	0.06	0.02
Administration	786	541	486	327	0.55	0.18
<b>Total City-Wide Services</b>	<b>10,819</b>	<b>7,461</b>	<b>6,680</b>	<b>4,511</b>	<b>4.54</b>	<b>1.50</b>
<b>Urban Services</b>						
Wastewater Services	1,413	973	873	589	0.88	0.29
Water Services	904	624	559	377	0.57	0.20
<b>Total Urban Services</b>	<b>2,317</b>	<b>1,597</b>	<b>1,432</b>	<b>966</b>	<b>1.45</b>	<b>0.49</b>
<b>Grand Total City-Wide &amp; Urban Services</b>	<b>13,136</b>	<b>9,058</b>	<b>8,112</b>	<b>5,477</b>	<b>5.99</b>	<b>1.99</b>
<b>Area Specific Services</b>						
Rolling Meadows Wastewater Services	320	221	198	133	-	-
<b>Total Rolling Meadows</b>	<b>13,456</b>	<b>9,279</b>	<b>8,310</b>	<b>5,610</b>	<b>5.99</b>	<b>1.99</b>
<b>Area Specific Services</b>						
Brock Business Park Wastewater Services	1,276	880	788	532	0.60	0.60
<b>Total Brock Business Park</b>	<b>14,412</b>	<b>9,938</b>	<b>8,900</b>	<b>6,009</b>	<b>6.59</b>	<b>2.59</b>

### 2.2 Services Covered

The following services are covered under By-laws 74-2014 and 64-2017:

By-law 74-2014:

- Roads and Related;
- Fire Protection Services;



- Parks and Recreation;
- Library Services;
- Administration;
- Wastewater Services;
- Water Services; and
- Rolling Meadows Wastewater Services.

By-law 64-2017:

- Brock Business Park Wastewater Services.

## 2.3 Timing of D.C. Calculation and Payment

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D.C.s are calculated and payable in full on the date the first building permit is issued in relation to a building or structure or land to which the D.C. applies. The City may require an owner to enter into an agreement for all or part of a D.C. to be paid before or after it otherwise would be payable.

## 2.4 Indexing

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By-law 74-2014 provides for the annual indexing of charges on the by-law anniversary date each year, without amendment to the by-law, in accordance with the prescribed index in the Act.

## 2.5 Redevelopment Allowance

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Where there is a redevelopment of land on which there was formerly erected a building or structure that has been demolished a credit shall be allowed based on the following:

1. A credit shall be allowed, provided that the demolition permit was issued within five years prior to issuance of the building permit or the entering of a subdivision agreement with the City;
2. The credit is calculated by multiplying the number and type of dwelling units being, or the non-residential total floor area, being converted or demolished by the relevant D.C. in effect on the date the D.C. is payable; and



3. The amount of the credit shall not exceed the total D.C. otherwise payable with respect to the development.

## 2.6 Exemptions

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The following non-statutory exemptions are provided under By-law 74-2014:

- A hospital under the Public Hospitals Act;
- Buildings or structures owned by a college or university used for teaching purposes;
- A place of worship;
- Non-residential farm building constructed for bona fide farm uses;
- Temporary buildings or structures;
- Development occurring within the designated central urban areas is exempt from 50% of the applicable charge. An additional 50% exemption is provided where in the opinion of City Council, the development meets the applicable number of criteria specified in Schedule G of the by-law; and
- Development occurring in Brownfields is exempt from 75% of the applicable charge. An additional 25% exemption is provided where in the opinion of City Council, the development meets the applicable number of criteria specified in Schedule G of the by-law.





# Chapter 3

## Anticipated Development in the City of Thorold





## 3. Anticipated Development in the City of Thorold

### 3.1 Requirement of the Act

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The growth forecast contained in this chapter (with supplemental tables in Appendix A) provides for the anticipated development for which the City of Thorold will be required to provide services, over a 10-year (early-2019 to early-2029), and longer time horizon to mid-2031.

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

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

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The D.C. growth forecast has been derived from the Niagara Region Municipal Comprehensive Review (M.C.R.) Phase 3 Strategic Growth Option Summary Report, November 2016, prepared by Hemson Consulting Ltd. In compiling the growth forecast, the following additional information sources were consulted to assess the residential and non-residential development potential for the City of Thorold over the forecast period, including:

- The City of Thorold Development Charges Background Study, Watson & Associates Economists Ltd., May 6, 2014;
- Historical residential and non-residential building permit data over the 2008-2018 period;
- Residential and employment Census data;
- Residential land supply opportunities (in the development process) as provided by the City of Thorold Planning and Building Services Department;
- Non-residential land supply opportunities as provided by the City of Thorold; and



- Discussions with City of Thorold staff regarding anticipated residential and non-residential development in the City of Thorold and Rolling Meadows Secondary Planning Area.

### 3.3 Summary of Growth Forecast

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

As identified in Table 3-1 and Appendix A, *Schedule 1*, the City's population is anticipated to reach approximately 22,860 by early-2029 and 23,230 by mid-2031, resulting in an increase of 2,690 and 3,070 persons, respectively, over the 10-year and longer term (2019 to 2031) forecast periods .<sup>1</sup>

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<sup>1</sup> The population figures used in the calculation of the 2019 D.C. exclude the net Census undercount, which is estimated at approximately 2.7%.

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Figure 3-1  
Population and Household Forecast Model

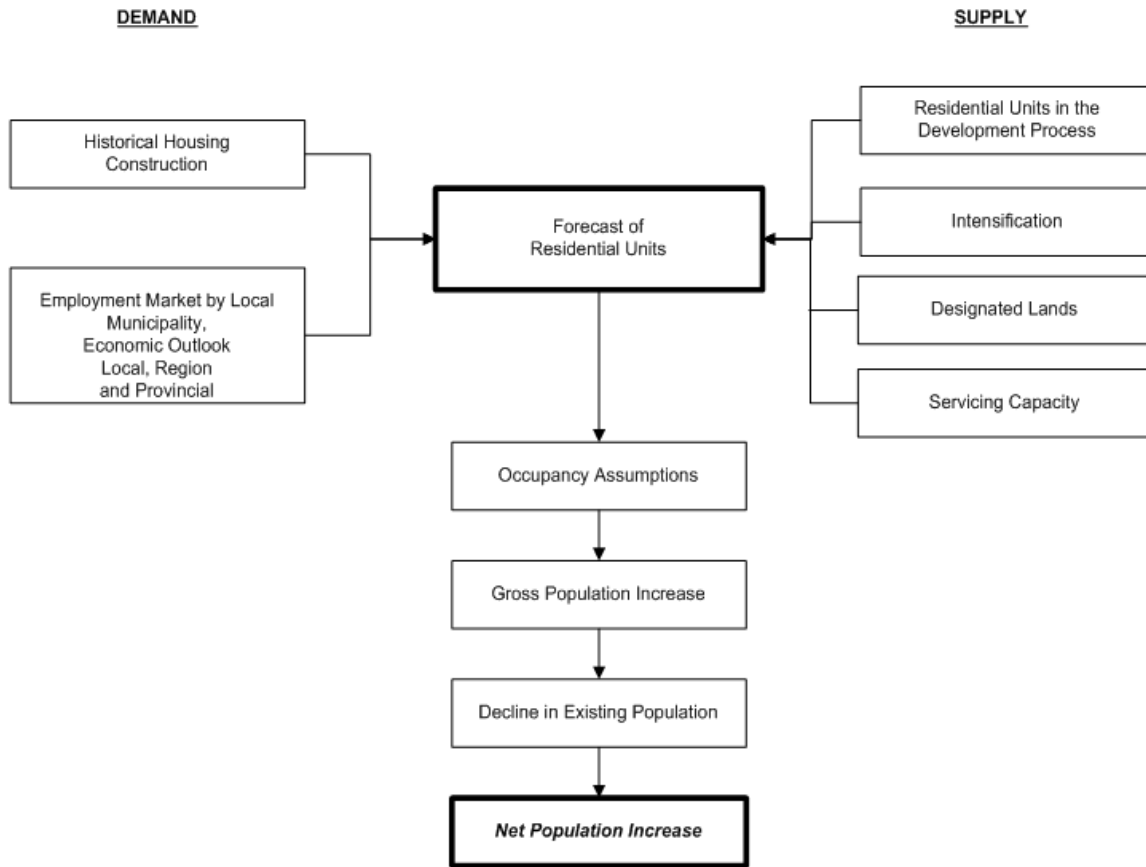




Table 3-1  
City of Thorold  
Residential Growth Forecast Summary

	Year	Population (Including Census Undercount) <sup>1</sup>	Excluding Census Undercount			Housing Units				Person Per Unit (P.P.U.): Total Population/ Total Households	
			Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi- Detached	Multiple Dwellings <sup>2</sup>	Apartments <sup>3</sup>	Other		Total Households
Historical	<i>Mid 2006</i>	18,720	18,224	119	18,105	5,650	480	850	75	7,055	2.583
	<i>Mid 2011</i>	18,420	17,931	391	17,540	5,672	449	937	24	7,082	2.532
	<i>Mid 2016</i>	19,310	18,801	251	18,550	5,885	515	1,045	15	7,460	2.520
Forecast	<i>Early 2019</i>	20,710	20,162	271	19,891	6,291	682	1,065	15	8,053	2.504
	<i>Early 2029</i>	23,470	22,856	307	22,549	7,198	916	1,167	15	9,297	2.459
	<i>Mid 2031</i>	23,850	23,227	310	22,917	7,335	938	1,196	15	9,484	2.449
Incremental	<b>Mid 2006 - Mid 2011</b>	<b>-300</b>	<b>-293</b>	<b>272</b>	<b>-565</b>	<b>22</b>	<b>-31</b>	<b>87</b>	<b>-51</b>	<b>27</b>	
	<b>Mid 2011 - Mid 2016</b>	<b>890</b>	<b>870</b>	<b>-140</b>	<b>1,010</b>	<b>213</b>	<b>66</b>	<b>108</b>	<b>-9</b>	<b>378</b>	
	<b>Mid 2016 - Early 2019</b>	<b>1,400</b>	<b>1,361</b>	<b>20</b>	<b>1,341</b>	<b>406</b>	<b>167</b>	<b>20</b>	<b>0</b>	<b>593</b>	
	<b>Early 2019 - Early 2029</b>	<b>2,760</b>	<b>2,694</b>	<b>36</b>	<b>2,658</b>	<b>907</b>	<b>234</b>	<b>102</b>	<b>0</b>	<b>1,244</b>	
	<b>Early 2019 - Mid 2031</b>	<b>3,140</b>	<b>3,065</b>	<b>39</b>	<b>3,026</b>	<b>1,044</b>	<b>256</b>	<b>131</b>	<b>0</b>	<b>1,431</b>	

Derived from the Niagara Region Municipal Comprehensive Review Strategic Growth Option, November 2016, for the City of Thorold by Watson & Associates Economists Ltd., 2019.

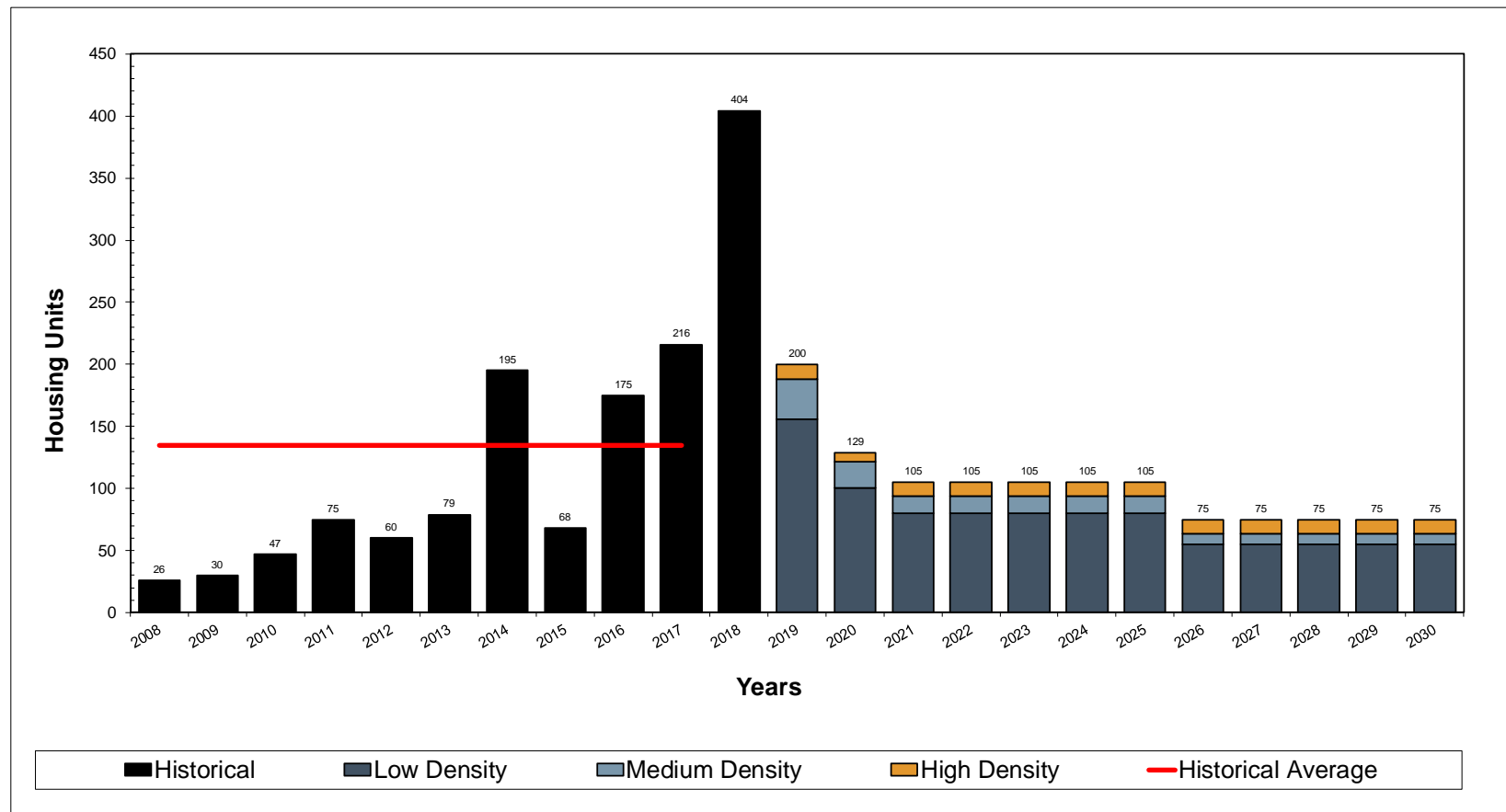
<sup>1</sup> Census undercount estimated at approximately 2.7%. Note: Population including the undercount has been rounded.

<sup>2</sup> Includes townhouses and apartments in duplexes.

<sup>3</sup> Includes bachelor, 1-bedroom and 2-bedroom+ apartments.



Figure 3-2  
City of Thorold  
Annual Housing Forecast



Source: Historical housing activity derived from City of Thorold building permit data , 2008-2017, and 2018 estimated based on October year-to-date building permit data  
1. Growth forecast represents calendar year.



## 1. Unit Mix (Appendix A – Schedules 1, 6 and 7)

- The unit mix for the City was derived from a detailed review of historical development activity (as per Schedule 7), as well as active residential development applications (as per Schedule 6) and discussions with municipal staff regarding anticipated development trends for the City.
- Based on the above indicators, the 2019 to 2031 household growth forecast is comprised of a unit mix of 73% low density (single detached and semi-detached), 18% medium density (multiples except apartments) and 9% high density (bachelor, 1-bedroom and 2-bedroom apartments).

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

- Schedule 2 summarizes the anticipated amount, type and location of development for the City of Thorold.
- In accordance with forecast demand and available land supply, the percentage of forecast housing growth between 2019 and 2031 by development location is summarized below.

<b>Development Location</b>	<b>Percentage Housing Growth, 2019-2031</b>
<i>Urban</i>	
Rolling Meadows – Beaver Creek CSO	3%
Rolling Meadows – Allanburg Sewer Oversizing & Sewer Extension <sup>1</sup>	35%
Remaining Urban	62%
<b>Urban Total</b>	<b>97%</b>
<i>Rural</i>	
<b>Rural Total</b>	3%
<b>Total</b>	<b>100%</b>

<sup>1</sup> Allanburg Sewer Oversizing & Sewer Extension services both Beaver Creek and Allanburg area specifics in Rolling Meadows. Beaver Creek CSO units are also captured in the Allanburg Sewer Oversizing & Sewer extension.



### 3. Planning Period

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

### 4. Population in New Units (Appendix A - Schedules 3, 4 and 5)

- The number of housing units to be constructed in the City of Thorold during the short- and long-term periods is presented on Figure 3-2. Over the 2019 to 2031 forecast period, the City is anticipated to average approximately 115 new housing units per year.
- The institutional population<sup>1</sup> is anticipated to grow by 39 persons between 2019 to 2031.
- Population in new units is derived from Schedules 3, 4, and 5, which incorporate historical development activity, anticipated units (see unit mix discussion) and average persons per unit (P.P.U.) by dwelling type for new units.<sup>1</sup>
- Schedules 8a and 8b summarize the P.P.U. for the new housing units by age and type of dwelling based on a 2016 custom Census data. The total calculated P.P.U. for all density types has been adjusted to account for the downward P.P.U. trend which has been recently experienced in both new and older units. Forecasted 15-year average P.P.U.s by dwelling type are as follows:
  - Low density: 3.077
  - Medium density: 2.035
  - High density<sup>2</sup>: 1.702

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

<sup>2</sup> Includes bachelor, 1-bedroom and 2 or more bedroom apartments



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

- Existing households for 2019 are based on the 2016 Census households, plus estimated residential units constructed between mid-2016 and mid-2019 assuming a 6-month lag between construction and occupancy (see Schedule 3).
- The decline in average occupancy levels for existing housing units is calculated in Schedules 3 through 5, by aging the existing population over the forecast period. The forecast population decline in existing households over the 2019 to 2031 forecast period is approximately 930.

## 6. Employment (Appendix A, Schedules 10a, 10b, 10c, 11 and 12)

- Employment projections are largely based on the activity rate method, which is defined as the number of jobs in a municipality divided by the number of residents. Key employment sectors include primary, industrial, commercial/ population-related, institutional, and work at home, which are considered individually below.
- 2016 employment data<sup>1</sup> (place of work) for the City of Thorold is outlined in Schedule 10a. The 2016 employment base is comprised of the following sectors:
  - 105 primary (1%);
  - 460 work at home employment (7%);
  - 1,875 industrial (27%);
  - 2,430 commercial/population related (34%); and
  - 2,205 institutional (31%).
- 2016 employment by usual place of work, including work at home, is estimated at 7,075. An additional 980 employees have been identified for the City in 2016 that have no fixed place of work (N.F.P.O.W.).<sup>2</sup> The 2016 employment base, including N.F.P.O.W., totals approximately 8,055.

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<sup>1</sup> 2016 employment is based on Statistics Canada 2016 Place of Work Employment dataset by Watson & Associates Economists Ltd.

<sup>2</sup> Statistics Canada defines "No Fixed Place of Work" (N.F.P.O.W.) employees as, "persons who do not go from home to the same work place location at the beginning of



- Total employment, including work at home and N.F.P.O.W., for the City of Thorold is anticipated to reach approximately 9,280 by 2029 and 9,390 by 2031. This represents an employment increase of 960 for the 10-year forecast period, and 1,060 for the 2019 to 2031 forecast period.
- Schedule 10b, Appendix A, summarizes the employment forecast, excluding work at home employment and N.F.P.O.W. employment, which is the basis for the D.C. employment forecast. The impact on municipal services from work at home employees has already been included in the population forecast. The need for municipal services related to N.F.P.O.W. employees has largely been included in the employment forecast by usual place of work (i.e. employment and gross floor area generated from N.F.P.O.W. construction employment). Furthermore, since these employees have no fixed work address, they cannot be captured in the non-residential gross floor area (G.F.A.) calculation.
- Total employment for the City of Thorold (excluding work at home and N.F.P.O.W. employment) is anticipated to reach approximately 7,510 by 2029 and 7,590 by 2031. This represents an employment increase of 730 and 810 over the 10-year and 2019 to 2031 forecast periods, respectively.

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

- Square footage estimates were calculated in Schedule 10b based on the following employee density assumptions:
  - 1,200 sq.ft. per employee for industrial;
  - 500 sq.ft. per employee for commercial/population-related; and
  - 700 sq.ft. per employee for institutional employment.
- The City-wide incremental Gross Floor Area (G.F.A.) increase is anticipated to be 529,400 sq.ft. over the 10-year forecast period and 586,600 sq.ft. over the 2019 to 2031 forecast period.
- In terms of percentage growth, the 2019 to 2031 incremental G.F.A. forecast by sector is broken down as follows:

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each shift. Such persons include building and landscape contractors, travelling salespersons, independent truck drivers, etc.”

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1. industrial – 53%;
2. commercial/population-related – 43%; and
3. institutional – 4%.

8. Geographic Location of Non-Residential Development (Appendix A, Schedule 10c)

- Schedule 10c summarizes the anticipated amount, type and location of non-residential development for the City of Thorold by area.
- In accordance with forecast demand and available land supply, the percentage of forecast total non-residential growth between 2019 and 2031 by development location is summarized below.

<b>Development Location</b>	<b>Percentage Total Non-Residential Growth G.F.A., 2019-2031</b>
<i>Urban</i>	
Rolling Meadows – Beaver Creek CSO	0%
Rolling Meadows – Allanburg Sewer Oversizing & Sewer Extension	13%
Remaining Urban	83%
<b>Urban Total</b>	<b>96%</b>
<i>Rural</i>	
<b>Rural Total</b>	4%
<b>Total</b>	<b>100%</b>



# Chapter 4

## The Approach to the Calculation of the Charge





## 4. The Approach to the Calculation of the Charge

### 4.1 Introduction

---

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

### 4.2 Services Potentially Involved

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

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

### 4.3 Increase in the Need for Service

---

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



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

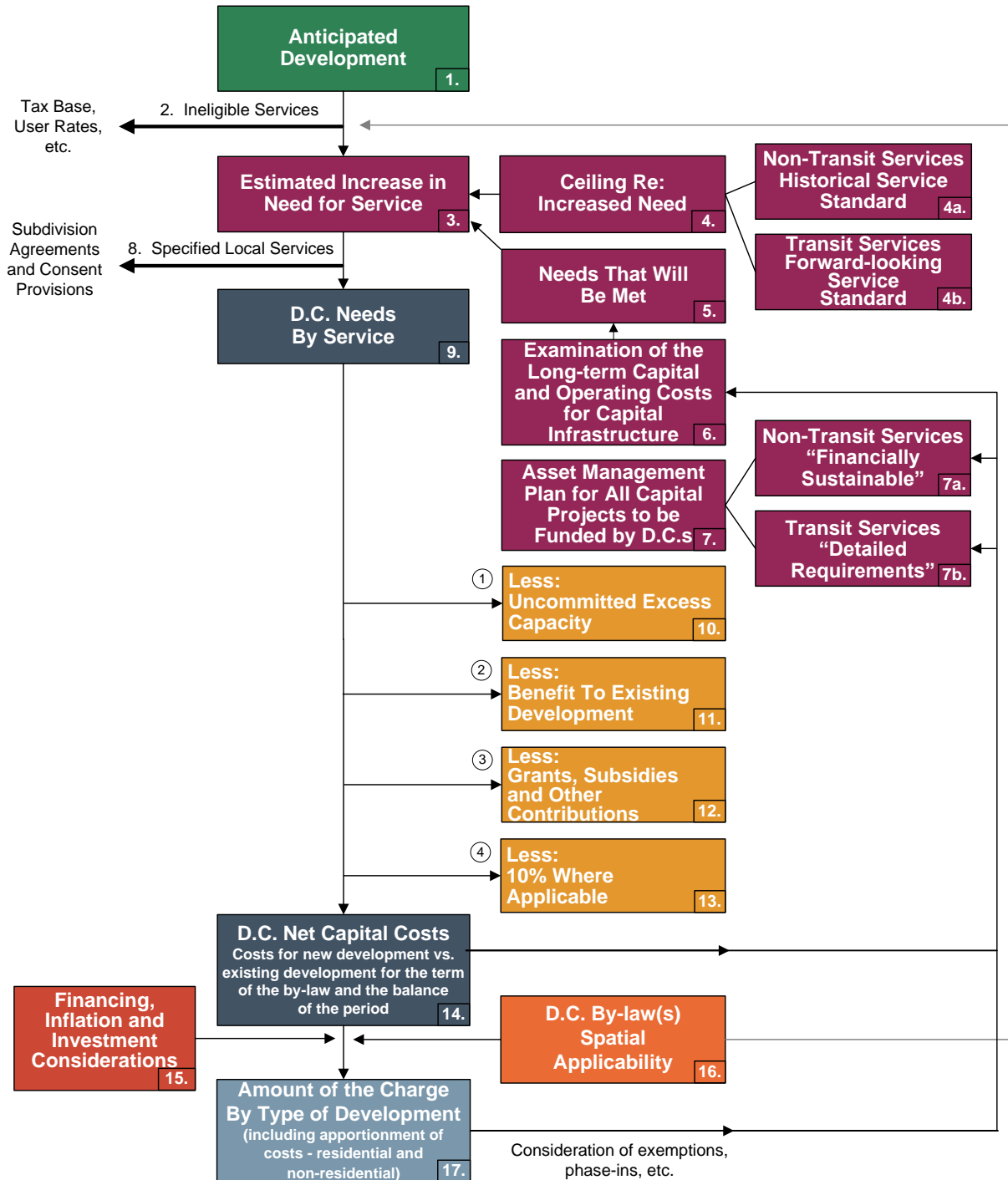




Table 4-1  
Categories of Municipal Services to be Addressed as Part of the Calculation

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

<sup>1</sup>with 7+ year life time

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



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
5. Outdoor Recreation Services (i.e. Parks and Open Space)	Ineligible	5.1 Acquisition of land for parks, woodlots and E.S.A.s	0
	Yes	5.2 Development of area municipal parks	90
	Yes	5.3 Development of district parks	90
	Yes	5.4 Development of municipal-wide parks	90
	Yes	5.5 Development of special purpose parks	90
	Yes	5.6 Parks rolling stock <sup>1</sup> and yards	90
6. Indoor Recreation Services	Yes	6.1 Arenas, indoor pools, fitness facilities, community centres, etc. (including land)	90
	Yes	6.2 Recreation vehicles and equipment <sup>1</sup>	90
7. Library Services	Yes	7.1 Public library space (incl. furniture and equipment)	90
	n/a	7.2 Library vehicles <sup>1</sup>	90
	Yes	7.3 Library materials	90
8. Electrical Power Services	Ineligible	8.1 Electrical substations	0
	Ineligible	8.2 Electrical distribution system	0
	Ineligible	8.3 Electrical system rolling stock	0
9. Provision of Cultural, Entertainment and Tourism Facilities and Convention Centres	Ineligible	9.1 Cultural space (e.g. art galleries, museums and theatres)	0
	Ineligible	9.2 Tourism facilities and convention centres	0
10. Wastewater Services	n/a	10.1 Treatment plants	100
	Yes	10.2 Sewage trunks	100
	No	10.3 Local systems	0
	Yes	10.4 Vehicles and equipment <sup>1</sup>	100

<sup>1</sup>with 7+ year life time



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
11. Water Supply Services	n/a	11.1 Treatment plants	100
	Yes	11.2 Distribution systems	100
	n/a	11.3 Local systems	0
	Yes	11.4 Vehicles and equipment <sup>1</sup>	100
12. Waste Management Services	Ineligible	12.1 Landfill collection, transfer vehicles and equipment	0
	Ineligible	12.2 Landfills and other disposal facilities	0
	n/a	12.3 Waste diversion facilities	90
	n/a	12.4 Waste diversion vehicles and equipment <sup>1</sup>	90
13. Police Services	n/a	13.1 Police detachments	100
	n/a	13.2 Police rolling stock <sup>1</sup>	100
	n/a	13.3 Small equipment and gear	100
14. Homes for the Aged	n/a	14.1 Homes for the aged space	90
	n/a	14.2 Vehicles <sup>1</sup>	90
15. Child Care	n/a	15.1 Child care space	90
	n/a	15.2 Vehicles <sup>1</sup>	90
16. Health	n/a	16.1 Health department space	90
	n/a	16.2 Health department vehicles <sup>1</sup>	90
17. Social Housing	n/a	17.1 Social Housing space	90
18. Provincial Offences Act (P.O.A.)	n/a	18.1 P.O.A. space	90
19. Social Services	n/a	19.1 Social service space	90
20. Ambulance	n/a	20.1 Ambulance station space	90
	n/a	20.2 Vehicles <sup>1</sup>	90
21. Hospital Provision	Ineligible	21.1 Hospital capital contributions	0

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<sup>1</sup>with 7+ year life time



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
22. Provision of Headquarters for the General Administration of Municipalities and Area Municipal Boards	Ineligible	22.1 Office space	0
	Ineligible	22.2 Office furniture	0
	Ineligible	22.3 Computer equipment	0
23. Other Services	Yes	23.1 Studies in connection with acquiring buildings, rolling stock, materials and equipment, and improving land <sup>2</sup> and facilities, including the D.C. background study cost	0-100
	Yes	23.2 Interest on money borrowed to pay for growth-related capital	0-100

<sup>1</sup>with a 7+ year life time

<sup>2</sup>same percentage as service component to which it pertains

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



## 4.4 Local Service Policy

---

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

## 4.5 Capital Forecast

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

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

The capital costs include:

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

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



## 4.6 Treatment of Credits

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

## 4.7 Existing Reserve Funds

---

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

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

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

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

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



The City's D.C. reserve fund balance (adjusted) by service at December 31, 2018 is shown below:

Service	Totals	Commitments / Adjustments	Adjusted Totals
Services Related to a Highway	\$2,215,515	(\$400,000)	\$1,815,515
Municipal Parking Spaces	\$0	\$0	\$0
Fire Protection Services	\$1,243,007	\$0	\$1,243,007
Parks and Recreation	\$2,222,544	\$0	\$2,222,544
Library Services	\$524,032	\$0	\$524,032
Administration	\$720,090	(\$200,374)	\$519,716
Wastewater Services	\$968,284	\$0	\$968,284
Water Services	\$758,393	\$0	\$758,393
Wastewater Services - Rolling Meadows	\$87,319	\$0	\$87,319
<b>Total</b>	<b>\$8,739,184</b>	<b>(\$600,374)</b>	<b>\$8,138,811</b>

## 4.8 Deductions

---

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

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

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

### 4.8.1 Reduction Required by Level of Service Ceiling

This is designed to ensure that the increase in need included in 4.3 does "...not include an increase that would result in the level of service (for the additional development increment) exceeding the average level of the service provided in the Municipality over the 10-year period immediately preceding the preparation of the background study..." O.Reg. 82.98 (s.4) goes further to indicate that "...both the quantity and quality of a service shall be taken into account in determining the level of service and the average level of service."



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

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

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

#### ***4.8.2 Reduction for Uncommitted Excess Capacity***

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

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

#### ***4.8.3 Reduction for Benefit to Existing Development***

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



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

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

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

In the case of services such as recreation facilities, community parks, libraries, etc., the service is typically provided on a City-wide system basis. For example, facilities of the same type may provide different services (i.e. leisure pool vs. competitive pool), different programs (i.e. hockey vs. figure skating) and different time availability for the same service (i.e. leisure skating available on Wednesday in one arena and Thursday in another). As a result, residents will travel to different facilities to access the services they want at the times they wish to use them, and facility location generally does not correlate directly with residence location. Even where it does, displacing users from an existing facility to a new facility frees up capacity for use by others and generally results in only a very limited benefit to existing development. Further, where an increase in demand is not met for a number of years, a negative service impact to existing development is involved for a portion of the planning period.



#### **4.8.4 Reduction for Anticipated Grants, Subsidies and Other Contributions**

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

#### **4.8.5 The 10% Reduction**

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

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

### **4.9 Municipal-wide vs. Area Rating**

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

### **4.10 Allocation of Development**

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This step involves relating the costs involved to anticipated development for each period under consideration and using allocations between residential and non-residential



development and between one type of development and another, to arrive at a schedule of charges.

## 4.11 Asset Management

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

## 4.12 Transit

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

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



3. An identification of the anticipated excess capacity that would exist at the end of the 10-year period immediately following the preparation of the background study.
4. An assessment of ridership forecasts for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study, categorized by development types, and whether the forecasted ridership will be from existing or planned development.
5. An assessment of the ridership capacity for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study.

C. A new forward-looking service standard (as per 6.1(2) of the Regulations):

1. The service is a discrete service.
2. No portion of the service that is intended to benefit anticipated development after the 10-year period immediately following the preparation of the background study may be included in the estimate.
3. No portion of the service that is anticipated to exist as excess capacity at the end of the 10-year period immediately following the preparation of the background study may be included in the estimate.

D. A very detailed asset management strategy and reporting requirements (section 6.1(3) of the Regulation) that includes lifecycle costs, action plans that will enable the assets to be sustainable, summary of how to achieve the proposed level of service, discussion on procurement measures and risk.

The City does not currently provide City-wide transit services. Therefore, the above calculations and reporting requirements are not required.



# Chapter 5

## D.C.-Eligible Cost Analysis by Service





## 5. D.C.-Eligible Cost Analysis by Service

### 5.1 Introduction

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

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

### 5.2 Service Levels and 10-Year Capital Costs for D.C. Calculation

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

#### 5.2.1 *Parking Spaces*

The City currently provides 364 parking spaces and two (2) pay and display machines on 5.98 acres of land. This equates to \$95 per capita in parking services which provides \$256,711 in D.C. eligible funding over the 10-year forecast period.

The City has identified two (2) additional parking lots and two (2) new pay and display machines. These projects are estimated to cost \$330,000. Of this total amount, \$150,000 is attributable to existing development. After the 10% mandatory deduction, \$162,000 has been included in the D.C. calculations.



The growth-related costs for parking have been allocated 79% residential and 21% non-residential based on the incremental growth in population to employment, for the 10-year forecast period.



**Infrastructure Costs Included in the Development Charges Calculation**

City of Thorold  
Service Parking Spaces

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Subtotal	Less:	Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share  79%	Non- Residential Share  21%
	<b>2019-2028</b>												
1	Towpath and Sullivan Public Lot (18 Spaces)	2019	150,000	-		150,000	75,000		75,000	7,500	67,500	53,325	14,175
2	New Parking Lot (Lot 3)	2020	150,000	-		150,000	75,000		75,000	7,500	67,500	53,325	14,175
3	Pay and Display Machines (2)	2020	30,000	-		30,000	-		30,000	3,000	27,000	21,330	5,670
	<b>Total</b>		<b>330,000</b>	<b>-</b>	<b>-</b>	<b>330,000</b>	<b>150,000</b>	<b>-</b>	<b>180,000</b>	<b>18,000</b>	<b>162,000</b>	<b>127,980</b>	<b>34,020</b>



## **5.2.2 Parks and Recreation**

### **5.2.2.1 Outdoor Recreation**

The City currently has 103.36 acres of parkland within its jurisdiction. These parks consist of various sized city, community and neighbourhood parks. The City has sustained the current level of service over the historical 10-year period (2009-2018), with an average of 5.6 acres of parkland 1,000 population. The City also provides 0.4 km of trails per 1,000 population and 0.36 amenities per capita. Including parkland, parkland amenities (e.g. ball diamonds, playground equipment, soccer fields, etc.), and park trails, the level of service provided is approximately \$1,254 per capita. When applied over the forecast period, this average level of service translates into a D.C.-eligible amount of \$3,378,761.

Based on the projected growth over the 10-year forecast period, the City has identified \$3,434,000 in future growth capital costs for parkland development. These projects include, the development of additional parks throughout the City. An allocation for the benefit of existing developments of \$49,000 has been made, along with the deduction of \$1,068,201 to recognize the reserve fund balance surplus. The net growth capital cost after the mandatory 10% deduction and the allocation of reserve balance of \$1,978,299 for inclusion in the D.C.

The City's Park and Recreation department currently operates and maintains 43 vehicles and equipment, which has provided a current level of service over the 10-year historical period (2009-2018) of 2.2 vehicles and equipment per 1,000 population. This translates to an investment of \$88 per capita and a total D.C.-eligible amount of \$236,129.

To support the growth in parkland, the City has identified the need for \$230,000 in parks vehicles, including two riding mowers. The total D.C.-eligible amount included in the calculations after the 10% mandatory deduction is \$207,000.

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





**Infrastructure Costs Included in the Development Charges Calculation**

City of Thorold  
Service: Parks Vehicles and Equipment

Prj.No	Increased Service Needs Attributable to Anticipated Development  2019-2028	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Subtotal	Less:	Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share 95%	Non-Residential Share 5%
1	Provision for Parks Vehicles	2019-2024	150,000	-		150,000	-		150,000	15,000	135,000	128,250	6,750
2	Provision for Two Riding Mowers	2019	80,000	-		80,000	-		80,000	8,000	72,000	68,400	3,600
	<b>Total</b>		<b>230,000</b>	<b>-</b>	<b>-</b>	<b>230,000</b>	<b>-</b>	<b>-</b>	<b>230,000</b>	<b>23,000</b>	<b>207,000</b>	<b>196,650</b>	<b>10,350</b>



### 5.2.2.2 *Indoor Recreation Services*

With respect to recreation facilities, there are currently several facilities provided by the City amounting to a total of 94,350 sq.ft. of space. The average historical level of service for the previous ten years has been approximately 4.74 sq.ft. of space per capita or an investment of \$1,262 per capita. Based on this service standard, the City would be eligible to collect \$3,400,663 from D.C.s for recreation facility space.

The City has provided for a new Parks building, as well as a provision for future additional recreation facilities. The gross capital cost of these projects is \$5,100,000, with \$600,000 benefiting existing development. Further, a deduction in the amount of \$1,154,344 has been made to reflect the balance in the D.C. reserve fund. Therefore, the balance before the mandatory 10% deduction is \$3,345,656. The net growth capital cost after the mandatory 10% deduction of \$2,895,656 has been included in the D.C.

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





### **5.2.3 Library Services**

The City currently provides library services from the Main Branch which totals 11,500 sq.ft. in space. Over the past ten years, the average level of service was 0.63 sq.ft. of space per capita or an investment of \$193 per capita. Based on the service standard over the past ten years, the City would be eligible to collect a total of \$519,107 from D.C.s for library facilities.

A provision for additional library space and the cost for library vending machines have been identified for inclusion in the D.C. for library facilities due to growth. The gross cost of these items has been included at a total of \$980,000. A deduction of \$524,032 has been made to account for the existing reserve fund balance. Therefore, the net growth capital cost after the mandatory 10% deduction is \$357,968.

The City's library has an inventory of collection materials totalling 83,765 items. These collection items include various materials including books, periodicals, e-books, video games, etc., all of which have a total value of \$2.7 million. Over the past ten years, the average level of service was 4.57 collection items per capita or an investment of \$145 per capita. Based on this service standard, the City would be eligible to collect approximately \$391,896 from D.C.s for library collection items (over the 10-year period).

A provision for additional library collection materials has been identified at a gross cost of \$390,000 over the forecast period. With the mandatory 10% deduction, the net growth capital cost to be collected from D.C.s is \$351,000.

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





**Infrastructure Costs Included in the Development Charges Calculation**

City of Thorold  
 Service: Library Collection Materials

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Subtotal	Less:	Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share	Non-Residential Share
2019-2028											95%	5%	
1	Provision for Materials	2019-2028	390,000	-		390,000	-		390,000	39,000	351,000	333,450	17,550
	<b>Total</b>		<b>390,000</b>	<b>-</b>	<b>-</b>	<b>390,000</b>	<b>-</b>	<b>-</b>	<b>390,000</b>	<b>39,000</b>	<b>351,000</b>	<b>333,450</b>	<b>17,550</b>



## **5.2.4 Administration**

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

- Transportation Master Plan;
- D.C. Studies;
- Official Plan Study;
- Comprehensive Zoning By-law;
- Pollution Control Plan Update;
- Water Service Master Plan;
- Parks & Recreation Master Plan;
- Library Expansion and Community Needs Study;
- Chestnut Hall Design Study;
- Rolling Meadows Secondary Plan Update;
- Port Robinson West Studies; and
- Other growth-related studies.

The cost of these studies is \$1,980,000, of which \$398,500 is attributable to existing benefit. A deduction of \$519,716 has been made to account for the reserve fund balance surplus. The net growth-related capital cost, after the mandatory 10% deduction and the application of the existing reserve balance, is \$962,334 and has been included in the D.C.

These costs have been allocated 79% residential and 21% non-residential based on the incremental growth in population to employment for the 10-year forecast period.



### Infrastructure Costs Included in the Development Charges Calculation

City of Thorold  
Service: Administration Studies

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Subtotal	Less:	Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share	Non-Residential Share
2019-2028											79%	21%	
1	Transportation Master Plan	2019	205,000	-		205,000	20,500		184,500	-	184,500	145,755	38,745
2	Development Charge Study General+All Area Specific	2019	55,000	-		55,000	-		55,000	5,500	49,500	39,105	10,395
3	Official Plan Study	2021	200,000	-		200,000	66,000		134,000	13,400	120,600	95,274	25,326
4	Comprehensive Zoning By-law	2023	150,000	-		150,000	49,500		100,500	10,050	90,450	71,456	18,995
5	Transportation Master Plan (Update)	2024	125,000	-		125,000	12,500		112,500	-	112,500	88,875	23,625
6	Pollution Control Plan (Update)	2020	250,000	-		250,000	187,500		62,500	6,250	56,250	44,438	11,813
7	Water Service Master Plan	2019	110,000	-		110,000	-		110,000	-	110,000	86,900	23,100
8	Parks & Rec Master Plan	2024	75,000	-		75,000	52,500		22,500	2,250	20,250	15,998	4,253
9	Development Charge Study General+All Area Specific	2023	55,000	-		55,000	-		55,000	5,500	49,500	39,105	10,395
10	Library Expansion and Community Needs Study	2019	50,000	-		50,000	10,000		40,000	4,000	36,000	28,440	7,560
11	Design for Chestnut Hall	2019	25,000	-		25,000	-		25,000	2,500	22,500	17,775	4,725
12	Rolling Meadows Secondary Plan Update	2020	150,000	-		150,000	-		150,000	15,000	135,000	106,650	28,350
13	Port Robinson West Secondary Plan - Neighbourhood Plan	2019	150,000	-		150,000	-		150,000	15,000	135,000	106,650	28,350
14	Port Robinson West Subwatershed Study	2024	180,000	-		180,000	-		180,000	-	180,000	142,200	37,800
15	Port Robinson West Phase 2 Secondary Plan	2025	200,000	-		200,000	-		200,000	20,000	180,000	142,200	37,800
16	Reserve Fund Adjustment	Reserve		-		-	519,716		(519,716)		(519,716)	(410,576)	(109,140)
	<b>Total</b>		<b>1,980,000</b>	<b>-</b>	<b>-</b>	<b>1,980,000</b>	<b>918,216</b>	<b>-</b>	<b>1,061,784</b>	<b>99,450</b>	<b>962,334</b>	<b>760,243</b>	<b>202,090</b>



## 5.3 Service Levels and 13-Year Capital Costs for Thorold's D.C. Calculation

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This section evaluates the development-related capital requirements for those services with 13-year (2019-2031) capital costs.

### 5.3.1 Services Related to a Highway

Thorold owns and maintains 68.01 km of roads with 336.11 acres of associated land, as well as 5 traffic signals and signalized crosswalks. This provides an average level of investment of \$10,060 per capita, resulting in a D.C.-eligible recovery amount of \$30,833,287 over the 13-year forecast period.

With respect to future needs, the identified road-related works totalling \$19,249,700. There are twelve road projects in total including road urbanizations, multi-use paths, and provisions for crosswalks and traffic signals. A deduction for existing benefit of \$1,431,675 has been made, along with a deduction of \$8,856,000 for works that are to benefit growth beyond the 2031 period. Additionally, \$1,815,515 has been deducted to account for the City's existing reserve fund balance. Therefore, the total growth-related cost to be included in the D.C. \$7,146,510.

The City Public Works department operates out of four facilities totalling 26,520 sq.ft. of building area, providing an average level of service of \$264 per capita. This level of service provides the City with a maximum D.C.-eligible amount for recovery over the 13-year forecast period of \$810,601.

Expansions to the existing Public Works building and administrative space have been identified over the forecast period. The total cost of these projects is \$5,500,000, of which \$1,290,000 is post period benefit and \$3,400,000 will benefit existing development. Therefore, the net amount included in the D.C. is \$810,000.

The Public Works Department have an inventory of 33 vehicles and major equipment totalling \$3,702,300. The inventory provides for a per capita standard of \$204. Over the forecast period, the D.C.-eligible amount for vehicles and equipment is \$526,762.



Additional vehicle and equipment items have been identified for the forecast period amounting to \$485,000 of growth-related capital and has been included in the D.C. calculation.

The residential/non-residential allocation for services related to a highway is based on a 79%/21% split, based on the incremental growth in population to employment for the 13-year forecast period.



### Infrastructure Costs Included in the Development Charges Calculation

City of Thorold  
Service: Roads

Prj .No	Increased Service Needs Attributable to Anticipated Development  2019-2031	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 79%	Non-Residential Share 21%
1	Decew Road Urbanization (Beaverdams to Merrittville HWY) - Phase 2	2020	1,350,000	-		1,350,000	135,000		1,215,000	959,850	255,150
2	Kottmeier Road Urbanization (Port Robinson to Merritt) (Developer to Front End)	2019	1,492,500	-		1,492,500	149,250		1,343,250	1,061,168	282,083
3	Intersection improvement (Kottmeier and Port Robinson) (Developer to Front End)	2019	1,500,000	-		1,500,000	150,000		1,350,000	1,066,500	283,500
4	Port Robinson Urbanization (406 to Egerter)	2025	2,108,300	-		2,108,300	-		2,108,300	1,665,557	442,743
5	Port Robinson Urbanization (406 to Cataract)	2035	3,044,700	3,044,700		-	-		-	-	-
6	Merritt Road Urbanization (Niagara to Cataract)	2035	1,254,600	1,254,600		-	-		-	-	-
7	Egerter Road Urbanization (Port Robinson to Towpath)	2030	1,224,000	-		1,224,000	-		1,224,000	966,960	257,040
8	Cataract Road Urbanization (Port Robinson to Merritt)	2040	1,514,700	1,514,700		-	-		-	-	-
9	Rail to Trail Multi Use Path	2020	1,329,900	-		1,329,900	997,425		332,475	262,655	69,820
10	Uppers Lane (from Hwy 58 to Townline Rd) - for Secondary Plan Area	2030	4,056,000	3,042,000		1,014,000	-		1,014,000	801,060	212,940
11	Provision for Traffic Signals and Streetlights	2025	300,000	-		300,000	-		300,000	237,000	63,000
12	Provision for Signalized Crosswalks	2022	75,000	-		75,000	-		75,000	59,250	15,750
13	Reserve Fund Adjustment	Reserve	-	-		-	1,815,515		(1,815,515)	(1,434,257)	(381,258)
	<b>Total</b>		<b>19,249,700</b>	<b>8,856,000</b>	<b>-</b>	<b>10,393,700</b>	<b>3,247,190</b>	<b>-</b>	<b>7,146,510</b>	<b>5,645,743</b>	<b>1,500,767</b>



### Infrastructure Costs Included in the Development Charges Calculation

City of Thorold  
 Service: Depots and Domes

Prj.No	Increased Service Needs Attributable to Anticipated Development  2019-2031	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 79%	Non-Residential Share 21%
1	Expansion of Public Works Building	2019-2022	5,000,000	1,290,000		3,710,000	3,150,000		560,000	442,400	117,600
2	Expansion of Administrative Space (8 Carleton)	2019	500,000	-		500,000	250,000		250,000	197,500	52,500
	<b>Total</b>		<b>5,500,000</b>	<b>1,290,000</b>	<b>-</b>	<b>4,210,000</b>	<b>3,400,000</b>	<b>-</b>	<b>810,000</b>	<b>639,900</b>	<b>170,100</b>



**Infrastructure Costs Included in the Development Charges Calculation**

City of Thorold  
 Service: Roads and Related Vehicles

Prj.No	Increased Service Needs Attributable to Anticipated Development  2019-2031	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 79%	Non-Residential Share 21%
1	Pickup (PW)	2019	35,000	-		35,000	-		35,000	27,650	7,350
2	Mini Van	2019	30,000	-		30,000	-		30,000	23,700	6,300
3	INTL Dump(S&P)	2020	250,000	-		250,000	-		250,000	197,500	52,500
4	Trackless Sidewalk Plow	2020	170,000	-		170,000	-		170,000	134,300	35,700
	<b>Total</b>		<b>485,000</b>	<b>-</b>	<b>-</b>	<b>485,000</b>	<b>-</b>	<b>-</b>	<b>485,000</b>	<b>383,150</b>	<b>101,850</b>



### **5.3.2 Fire Protection Services**

The Thorold Fire Department currently operates out of 33,081 sq.ft. of facility space, providing for a per capita average level of service of 1.79 sq.ft. per capita or \$545 per capita. This level of service provides the City with a maximum D.C.-eligible amount for recovery over the forecast period of \$1,669,659

Eight projects have been identified to service growth, such as a new headquarters (including associated land, furniture and equipment), a new station 3 and other equipment for a total capital cost of \$9,695,000. \$2,832,980 of this amount has been attributed to growth beyond the 2031 period and \$3,952,000 is attributed as benefitting existing development. A further deduction of \$1,243,007 to recognize the existing reserve fund balance has also been made, resulting in a growth capital cost of \$1,667,013 being included in the D.C.

The fire department has a current inventory of 18 vehicles. The total D.C.-eligible amount calculated for fire vehicles over the forecast period is \$1,386,974, based on a standard of \$453 per capita.

New vehicles have been identified at a gross capital cost of \$1,440,000 of which \$60,000 benefits growth beyond the 2019-2031 forecast period. Therefore, the resulting D.C.-eligible amount of \$1,380,000 is included in the D.C. calculation.

The fire department provides 410 items of equipment and gear for the use in fire services. This results in a calculated average level of service for the historical 10-year period of \$118 per capita, providing for a D.C.-eligible amount over the forecast period of \$361,088 for small equipment and gear.

Based on growth-related needs, the fire department has identified the need for additional equipment and gear for firefighters (e.g. bunker gear, a defibrillator, thermal imaging cameras, etc.). The gross capital cost for the related equipment is \$1,267,200, of which \$908,600 is attributable to growth beyond the 2019-2031 forecast period. Therefore, the D.C. amount of \$358,600 has been included in the calculations.

These costs are shared between residential and non-residential based on the population to employment ratio over the forecast period, resulting in 79% being



allocated to residential development and 21% being allocated to non-residential development.



### Infrastructure Costs Included in the D.C. Calculation

City of Thorold  
Service: Fire Facilities

Prj .No	Increased Service Needs Attributable to Anticipated Development  2019-2031	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Developmen t	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share  79%	Non- Residential Share  21%
1	New Headquarters (15,000 sq ft)	2022	5,000,000	1,730,000		3,270,000	2,352,000		918,000	725,220	192,780
2	Land for New Headquarters	2019	1,200,000	-		1,200,000	-		1,200,000	948,000	252,000
3	Engineering and Architectural Design	2019	290,000	-		290,000	-		290,000	229,100	60,900
4	Furniture and Equipment for New HQ	2022	230,000	79,580		150,420	-		150,420	118,832	31,588
5	Equipment for New HQ (Generator, SCBA Fill Station and Compressor)	2021	400,000	138,400		261,600	-		261,600	206,664	54,936
6	Communication and Other Equipment	2022	450,000	360,000		90,000	-		90,000	71,100	18,900
7	New Station 3 - Design	2026	125,000	125,000		-	-		-	-	-
8	New Station 3 - Construction	2027	2,000,000	400,000		1,600,000	1,600,000		-	-	-
9	Reserve Fund Balance	Reserve	-	-		-	1,243,007		(1,243,007)	(981,976)	(261,032)
	<b>Total</b>		<b>9,695,000</b>	<b>2,832,980</b>	<b>-</b>	<b>6,862,020</b>	<b>5,195,007</b>	<b>-</b>	<b>1,667,013</b>	<b>1,316,940</b>	<b>350,073</b>

Note 1: The value of the existing Station 1 has formed the basis of the BTE for the New Headquarters and has been summarized on project 1 (New Headquarters are Projects 1 to 5)

Note 2: The value of the existing Station 3 has formed the basis of the BTE for the New Station 3 and has been summarized on project 8 (New Station 3 are Projects 7 and 8)







## 5.4 Service Levels and Urban 18-Year Capital Costs for Thorold's D.C. Calculation

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This section evaluates the development-related capital requirements for those services with urban 13-year capital costs.

### 5.4.1 Wastewater Services

The wastewater service capital cost for inclusion in the D.C. is \$2,250,000. The projects which have been identified includes: modifications to trunk sanitary for Port Wellar, the Port Dalhousie system, Port Robinson, and a private side sewer disconnection. The private side sewer disconnection has a 25% benefit to existing development, or \$125,000. With the application of the reserve fund balance of \$968,284, the total D.C.-eligible amount is \$1,156,716.

The growth-related costs have been allocated between residential and non-residential development based on incremental growth in population to employment over the urban 2031 forecast period. This split results in an 80% allocation to residential and a 20% allocation to non-residential.





### **5.4.2 Water Services**

The water services capital cost for inclusion in the D.C. is \$2,260,000. The projects identified are a provision for watermain upsizing and watermain looping at Highway #20. A deduction of \$758,393 has been made to account for the existing reserve fund balance, resulting in a total D.C.-eligible amount of \$1,501,607.

The growth-related costs have been allocated between residential and non-residential development based on incremental growth in population to employment over the urban 2031 forecast period. This split results in an 80% allocation to residential and a 20% allocation to non-residential.





## 5.5 Area-Specific Calculation for the Rolling Meadows Development Area – Wastewater Services

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This section evaluates the development-related capital requirements for wastewater services within the Rolling Meadows development area.

### 5.5.1 *Wastewater Services*

The wastewater service capital costs for inclusion in the D.C. relates to the Allanburg Sewer Oversizing and a Sanitary Sewer Extension, totalling \$1,000,000. Of this amount, a post period benefit of \$812,101 has been calculated to account for the total capacity of the oversizing relative to the identified growth in the forecast. A further deduction in the amount of \$87,319 has been made to account for the existing reserve fund balance, resulting in a net D.C. amount of \$100,580 to be included in the calculations.

The Rolling Meadows projects are allocated 93% residential and 7% non-residential based on the incremental growth in population to employment within the Rolling Meadows area over the 2031 forecast period.







# Chapter 6

## D.C. Calculation





## 6. D.C. Calculation

Table 6-1 calculates the proposed D.C. to be imposed on anticipated development within the Rolling Meadows area for wastewater services based upon an urban-2031 horizon. Table 6-2 calculates the proposed uniform D.C. to be imposed for water and wastewater services on anticipated development in the City based upon an urban-2031 horizon. Table 6-3 calculates the proposed uniform D.C. to be imposed on anticipated development in the City for city-wide services over a 13-year (2031) planning horizon. Table 6-4 calculates the proposed uniform D.C. to be imposed on anticipated development in the City for city-wide services over a 10-year planning horizon.

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

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

For the residential calculations, the total cost is divided by the "gross" (new resident) population to determine the per capita amount. The eligible D.C. cost calculations set out in Chapter 5 are based on the net anticipated population increase (the forecast new unit population less the anticipated decline in existing units). The cost per capita is then multiplied by the average occupancy of the new units (Appendix A, Schedule 5) to calculate the charge in Tables 6-1, through 6-4.

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

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



Table 6-1  
City of Thorold  
Development Charge Calculation  
Rolling Meadows Area-Specific Services  
2019-Urban 2031

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
1 <u>Wastewater Services - Rolling Meadows</u>				
1.1 Allanburg Sewer Oversizing & Sewer Extension	93,540	7,041	200	0.09
	93,540	7,041	200	0.09
<b>TOTAL</b>	<b>\$93,540</b>	<b>\$7,041</b>	<b>\$200</b>	<b>0.09</b>
D.C.-Eligible Capital Cost	\$93,540	\$7,041		
Buildout Gross Population/GFA Growth (sq.ft.)	1,440	76,000		
<b>Cost Per Capita/Non-Residential GFA (sq.ft.)</b>	<b>\$64.96</b>	<b>\$0.09</b>		
<b>By Residential Unit Type</b>				
	<b>P.P.U.</b>			
Single and Semi-Detached Dwelling	3.077	\$200		
Apartments - 2 Bedrooms +	1.987	\$129		
Apartments - Bachelor and 1 Bedroom	1.215	\$79		
Other Multiples	2.035	\$132		
Special Care/Special Dwelling Units	1.100	\$71		



Table 6-2  
City of Thorold  
Development Charge Calculation  
City-Wide Urban Services  
2019-Urban 2031

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
2. <u>Wastewater Services</u>				
2.1 Sewers	925,373	231,343	735	0.40
	925,373	231,343	735	0.40
3. <u>Water Services</u>				
3.1 Storage and distribution systems	1,201,286	300,321	955	0.51
	1,201,286	300,321	955	0.51
<b>TOTAL</b>	<b>\$2,126,658</b>	<b>\$531,665</b>	<b>\$1,690</b>	<b>0.91</b>
D.C.-Eligible Capital Cost	\$2,126,658	\$531,665		
Buildout Gross Population/GFA Growth (sq.ft.)	3,871	586,600		
<b>Cost Per Capita/Non-Residential GFA (sq.ft.)</b>	<b>\$549.38</b>	<b>\$0.91</b>		
<b>By Residential Unit Type</b>	<b>P.P.U.</b>			
Single and Semi-Detached Dwelling	3.077	\$1,690		
Apartments - 2 Bedrooms +	1.987	\$1,092		
Apartments - Bachelor and 1 Bedroom	1.215	\$667		
Other Multiples	2.035	\$1,118		
Special Care/Special Dwelling Units	1.100	\$604		



Table 6-3  
City of Thorold  
Development Charge Calculation  
City-Wide Services  
2019-2031

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
4. <u>Services Related to a Highway</u>				
4.1 Roads	5,645,743	1,500,767	4,347	2.56
4.2 Depots and Domes	639,900	170,100	493	0.29
4.3 PW Rolling Stock	383,150	101,850	295	0.17
	6,668,793	1,772,717	5,135	3.02
5. <u>Fire Protection Services</u>				
5.1 Fire facilities	1,316,940	350,073	1,014	0.60
5.2 Fire vehicles	1,090,200	289,800	840	0.49
5.3 Small equipment and gear	283,294	75,306	218	0.13
	2,690,434	715,179	2,072	1.22
<b>TOTAL</b>	<b>\$9,359,227</b>	<b>\$2,487,896</b>	<b>\$7,207</b>	<b>\$4.24</b>
D.C.-Eligible Capital Cost	\$9,359,227	\$2,487,896		
20-Year Gross Population/GFA Growth (sq.ft.)	3,996	586,600		
<b>Cost Per Capita/Non-Residential GFA (sq.ft.)</b>	<b>\$2,342.15</b>	<b>\$4.24</b>		
<b>By Residential Unit Type</b>				
	<b>P.P.U.</b>			
Single and Semi-Detached Dwelling	3.077	\$7,207		
Apartments - 2 Bedrooms +	1.987	\$4,654		
Apartments - Bachelor and 1 Bedroom	1.215	\$2,846		
Other Multiples	2.035	\$4,766		
Special Care/Special Dwelling Units	1.100	\$2,576		



Table 6-4  
City of Thorold  
Development Charge Calculation  
City-Wide Services  
2019-2028

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
6. <u>Municipal Parking</u>				
6.1 Municipal Parking Spaces	127,980	34,020	113	0.06
	127,980	34,020	113	0.06
7. <u>Outdoor Recreation Services</u>				
7.1 Parkland development, amenities & trails	1,879,384	98,915	1,663	0.19
7.2 Parks vehicles and equipment	196,650	10,350	174	0.02
	2,076,034	109,265	1,837	0.21
8. <u>Indoor Recreation Services</u>				
8.1 Recreation facilities	2,750,873	144,783	2,433	0.28
	2,750,873	144,783	2,433	0.28
9. <u>Library Services</u>				
9.1 Library facilities	340,070	17,898	301	0.03
9.2 Library materials	333,450	17,550	295	0.03
	673,520	35,448	596	0.06
10. <u>Administration</u>				
10.1 Studies	760,243	202,090	673	0.38
<b>TOTAL</b>	<b>\$6,388,651</b>	<b>\$525,606</b>	<b>\$5,652</b>	<b>\$0.99</b>
D.C.-Eligible Capital Cost	\$6,388,651	\$525,606		
10-Year Gross Population/GFA Growth (sq.ft.)	3,478	529,400		
<b>Cost Per Capita/Non-Residential GFA (sq.ft.)</b>	<b>\$1,836.87</b>	<b>\$0.99</b>		
<b>By Residential Unit Type</b>	<b>P.P.U.</b>			
Single and Semi-Detached Dwelling	3.077	\$5,652		
Apartments - 2 Bedrooms +	1.987	\$3,650		
Apartments - Bachelor and 1 Bedroom	1.215	\$2,232		
Other Multiples	2.035	\$3,738		
Special Care/Special Dwelling Units	1.100	\$2,021		



Table 6-5  
City of Thorold  
Development Charge Calculation  
Total All Services

	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
<b>Rolling Meadows 2031</b>	93,540	7,041	200	0.09
<b>Urban-wide Services 2031</b>	2,126,658	531,665	1,690	0.91
<b>Municipal-wide Services 2031</b>	9,359,227	2,487,896	7,207	4.24
<b>Municipal-wide Services 10 Year</b>	6,388,651	525,606	5,652	0.99
<b>TOTAL</b>	<b>17,968,076</b>	<b>3,552,207</b>	<b>14,749</b>	<b>6.23</b>



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

Service	Total Gross Cost	Sources of Financing						
		Tax Base or Other Non-D.C. Source				Post D.C. Period Benefit	D.C. Reserve Fund	
		Other Deductions	Benefit to Existing	Other Funding	Legislated Reduction		Residential	Non-Residential
1. Wastewater Services - Rolling Meadows 1.1 Allanburg Sewer Oversizing & Sewer Extension	666,667	0	0	0	0	541,401	116,497	8,769
2. Wastewater Services 2.1 Treatment plants & Sewers	2,250,000	0	125,000	0	0	0	1,700,000	425,000
3. Water Services 3.1 Treatment, storage and distribution systems	1,260,000	0	0	0	0	0	1,008,000	252,000
4. Services Related to a Highway 4.1 Roads	5,747,400	0	1,431,675	0	0	0	3,409,423	906,302
4.2 Depots and Domes	5,500,000	0	3,400,000	0	0	1,290,000	639,900	170,100
4.3 PW Rolling Stock	485,000	0	0	0	0	0	383,150	101,850
5. Fire Protection Services 5.1 Fire facilities	7,570,000	0	2,352,000	0	0	2,307,980	2,298,916	611,104
5.2 Fire vehicles	1,062,500	0	0	0	0	40,200	807,617	214,683
5.3 Small equipment and gear	725,760	0	0	0	0	418,880	242,435	64,445
6. Municipal Parking 6.1 Municipal Parking Spaces	330,000	0	150,000	0	18,000	0	127,980	34,020
7. Outdoor Recreation Services 7.1 Parkland development, amenities & trails	2,953,733	0	49,000	0	290,473	0	2,483,547	130,713
7.2 Parks vehicles and equipment	205,000	0	0	0	20,500	0	175,275	9,225
8. Indoor Recreation Services 8.1 Recreation facilities	5,100,000	0	600,000	0	450,000	0	3,847,500	202,500
9. Library Services 9.1 Library facilities	535,556	0	0	0	53,556	0	457,900	24,100
9.2 Library materials	195,000	0	0	0	19,500	0	166,725	8,775
10. Administration 10.1 Studies	1,400,000	0	333,500	0	77,200	0	781,547	207,753
<b>Total Expenditures &amp; Revenues</b>	<b>\$35,986,616</b>	<b>\$0</b>	<b>\$8,441,175</b>	<b>\$0</b>	<b>\$929,229</b>	<b>\$4,598,461</b>	<b>\$18,646,412</b>	<b>\$3,371,339</b>





# Chapter 7

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





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

### 7.1 Introduction

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

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

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

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

- the total of all D.C.s that would be imposed on anticipated development must not exceed the capital costs determined under 5(1) 2-8 for all services involved;
- if the rules expressly identify a type of development, they must not provide for it to pay D.C.s that exceed the capital costs that arise from the increase in the need for service for that type of development; however, this requirement does not relate to any particular development; and
- if the rules provide for a type of development to have a lower D.C. than is allowed, the rules for determining D.C.s may not provide for any resulting shortfall to be made up via other development.

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

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



## 7.2 D.C. By-law Structure

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### It is recommended that:

- the City uses a uniform City-wide D.C. calculation for all non-water and wastewater services;
- water and wastewater services be imposed on the urban service areas of the City;
- Wastewater services be imposed on the Rolling Meadows Development service area of the City; and
- one Municipal D.C. by-law be used for all services.

## 7.3 D.C. By-law Rules

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

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

#### ***7.3.1 Payment in any Particular Case***

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

- a) the passing of a zoning by-law or of an amendment to a zoning by-law under section 34 of the Planning Act;
- b) the approval of a minor variance under section 45 of the Planning Act;
- c) a conveyance of land to which a by-law passed under section 50(7) of the Planning Act applies;
- d) the approval of a plan of subdivision under section 51 of the Planning Act;
- e) a consent under section 53 of the Planning Act;
- f) the approval of a description under section 50 of the Condominium Act; or



- g) the issuing of a building permit under the Building Code Act in relation to a building or structure.

### **7.3.2 Determination of the Amount of the Charge**

The following conventions be adopted:

- 1) Costs allocated to residential uses will be assigned to different types of residential units based on the average occupancy for each housing type constructed during the previous decade. Costs allocated to non-residential uses will be assigned based on the amount of square feet of gross floor area constructed for eligible uses (i.e. industrial, commercial and institutional).
- 2) Costs allocated to residential and non-residential uses are based upon a number of conventions, as may be suited to each municipal circumstance, e.g.
  - for Administration and Parking Spaces, the costs have been based on a population vs. employment growth ratio (79%/21%) for residential and non-residential, respectively) over the 10-year forecast period;
  - for Indoor and Outdoor Recreation and Library services, a 5% non-residential attribution has been made to recognize use by the non-residential sector;
  - for Fire protection services, and Services related to a highway, a 79% residential/21% non-residential attribution has been made based on a population vs. employment growth ratio over the 13-year forecast period;
  - for Water and Wastewater services an 80% residential/20% non-residential allocation has been made based on population vs. employment growth over the 13-year urban forecast period; and
  - for Wastewater services in Rolling Meadows, a 93% residential/7% non-residential attribution has been made based on population vs. employment growth over the 13-year urban forecast period within this area.

### **7.3.3 Application to Redevelopment of Land (Demolition and Conversion)**

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



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

The demolition credit is allowed only if the land was improved by occupied structures and if the demolition permit related to the site was issued within 5 years from the issuance of a building permit. The credit can, in no case, exceed the amount of D.C.s that would otherwise be payable.

### **7.3.4 Exemptions (full or partial)**

#### a) Statutory exemptions

- industrial building additions of up to and including 50% of the existing gross floor area (defined in O.Reg. 82/98, s.1) of the building; for industrial building additions which exceed 50% of the existing gross floor area, only the portion of the addition in excess of 50% is subject to D.C.s (s.4(3)) of the D.C.A.;
- buildings or structures owned by and used for the purposes of any municipality, local board or Board of Education (s.3);
- residential development that results only in the enlargement of an existing dwelling unit, or that results only in the creation of up to two additional dwelling units (based on prescribed limits set out in s.2 of O.Reg. 82/98).

#### b) Non-statutory exemptions

- Agricultural uses as well as farm building and other ancillary development to an agricultural use excluding any residential, commercial or industrial uses;
- Buildings or structures used as hospitals governed by the *Public Hospitals Act*, R.S.O. 1990, c. P. 40;
- Buildings or structures used as a place of worship;
- Buildings or structures, related to classrooms or administration space, owned by a college of applied arts and technology established pursuant to the Ministry of Training, Colleges and Universities Act, RSO 1990, c. M.19, and used for teaching of programs of study leading to a post



secondary certificate or diploma, a graduate certificate or a bachelor degree, but does not include student residences, commercial uses on site, or any other space not directly related for the purposes of education.

### **7.3.5 Phasing in**

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

### **7.3.6 Timing of Collection**

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

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

### **7.3.7 Indexing**

Indexing of the D.C.s shall be implemented on a mandatory basis annually on January 1st of each year, commencing on January 1, 2020, in accordance with the Statistics Canada Quarterly, Non-Residential Building Construction Price Index (Table 18-10-0135-01)<sup>1</sup> for the most recent year-over-year period.

### **7.3.8 The Applicable Areas**

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

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

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



- Rolling Meadows Wastewater Services – the full residential and non-residential charge will be imposed on all lands within the Rolling Meadows development.

## 7.4 Other D.C. By-law Provisions

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It is recommended that:

### ***7.4.1 Categories of Services for Reserve Fund and Credit Purposes***

The City's D.C. collections are currently reserved in eight separate reserve funds: Roads and Related, Fire Protection Services, Parks & Recreation Services, Library Services, Administration, Water Services, Wastewater Services and Wastewater Services (Rolling Meadows). It is recommended that the City continue with this breakdown of the D.C. reserve funds under the new 2019 by-law and add a new reserve fund for parking spaces. Appendix D outlines the reserve fund policies that the City is required to follow as per the D.C.A.

### ***7.4.2 By-law In-force Date***

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

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

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

### ***7.4.4 Area Rating***

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

1. Section 2(9) of the Act now requires a municipality to implement area-specific D.C.s for either specific services which are prescribed and/or for specific municipalities which are to be regulated (note that at this time, no municipalities or services are prescribed by the Regulations).



2. Section 10(2)c.1 of the D.C.A. requires that “the development charges background study shall include consideration of the use of more than one development charge by-law to reflect different needs for services in different areas.”

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

At present, the City’s by-law does provide for area-rating with respect to water and wastewater. All other City services are recovered based on a uniform, City-wide basis. There have been several reasons why they have not been imposed including:

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



example, arenas located in different parts of the City will be used by residents from all areas depending on the programming of the facility (i.e. a public skate is available each night, but at a different arena; hence usage of any one facility at any given time is based on programming availability).

For the reasons noted above, it is recommended that Council continue the D.C. approach to calculate the charges on an area specific basis for water and wastewater, while all other services be charged on a uniform City-wide basis.

## 7.5 Other Recommendations

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### **It is recommended that Council:**

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

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

“Continue the D.C. approach to calculate the non-water/wastewater charges on a uniform City-wide basis for all services;”

“Continue the D.C. approach of an urban-area charge basis for water and wastewater services;”

“Continue the D.C. approach on an area-specific basis for wastewater services within the Rolling Meadows Development Area;”

“Approve the capital project listing set out in Chapter 5 of the D.C.s Background Study dated March 21, 2019, subject to further annual review during the capital budget process;”

“Approve the D.C.s Background Study dated March 21, 2019, as amended (if applicable);”

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



“Approve the D.C. By-law as set out in Appendix G, subject to refinements recommended prior to By-law adoption.”





# Chapter 8

## By-law Implementation





## 8. By-law Implementation

### 8.1 Public Consultation Process

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#### **8.1.1 Introduction**

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

#### **8.1.2 Public Meeting of Council**

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

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

If a proposed by-law is changed following such a meeting, Council must determine whether a further meeting (under this section) is necessary (i.e. if the proposed by-law which is proposed for adoption has been changed in any respect, Council should formally consider whether an additional public meeting is required, incorporating this determination as part of the final by-law or associated resolution. It is noted that Council's decision, once made about not requiring a further public meeting, is final and not subject to review by a Court or the Local Planning Appeal Tribunal (L.P.A.T.) (formerly the Ontario Municipal Board (O.M.B.)).

#### **8.1.3 Other Consultation Activity**

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



1. The first grouping is the residential development community, consisting of land developers and builders, who are typically responsible for generating the majority of the D.C. revenues. Others, such as realtors, are directly impacted by D.C. policy. They are, therefore, potentially interested in all aspects of the charge, particularly the quantum by unit type, projects to be funded by the D.C. and the timing thereof, and City policy with respect to development agreements, D.C. credits and front-ending requirements.
2. The second public grouping embraces the public at large and includes taxpayer coalition groups and others interested in public policy.
3. The third grouping is the industrial/commercial/institutional development sector, consisting of land developers and major owners or organizations with significant construction plans, such as hotels, entertainment complexes, shopping centres, offices, industrial buildings and institutions. Also involved are organizations such as Industry Associations, the Chamber of Commerce, the Board of Trade and the Economic Development Agencies, who are all potentially interested in City D.C. policy. Their primary concern is frequently with the quantum of the charge, gross floor area exclusions such as basements, mechanical or indoor parking areas, or exemptions and phase-in or capping provisions in order to moderate the impact.

## 8.2 Anticipated Impact of the Charge on Development

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

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



## 8.3 Implementation Requirements

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### 8.3.1 Introduction

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

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

The sections which follow overview the requirements in each case.

### 8.3.2 Notice of Passage

In accordance with s.13 of the D.C.A., when a D.C. by-law is passed, the City Clerk shall give written notice of the passing and of the last day for appealing the by-law (the day that is 40 days after the day it was passed). Such notice must be given no later than 20 days after the day the by-law is passed (i.e. as of the day of newspaper publication or the mailing of the notice).

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

- notice may be given by publication in a newspaper which is (in the Clerk's opinion) of sufficient circulation to give the public reasonable notice, or by personal service, fax or mail to every owner of land in the area to which the by-law relates;
- s.s.10(4) lists the persons/organizations who must be given notice; and
- s.s.10(5) lists the eight items which the notice must cover.

### 8.3.3 By-law Pamphlet

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

- a description of the general purpose of the D.C.s;



- the “rules” for determining if a charge is payable in a particular case and for determining the amount of the charge;
- the services to which the D.C.s relate; and
- a general description of the general purpose of the Treasurer’s statement and where it may be received by the public.

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

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

### **8.3.4 Appeals**

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

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

### **8.3.5 Complaints**

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

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

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



### **8.3.6 Credits**

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

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

### **8.3.7 Front-Ending Agreements**

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

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

### **8.3.8 Severance and Subdivision Agreement Conditions**

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

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

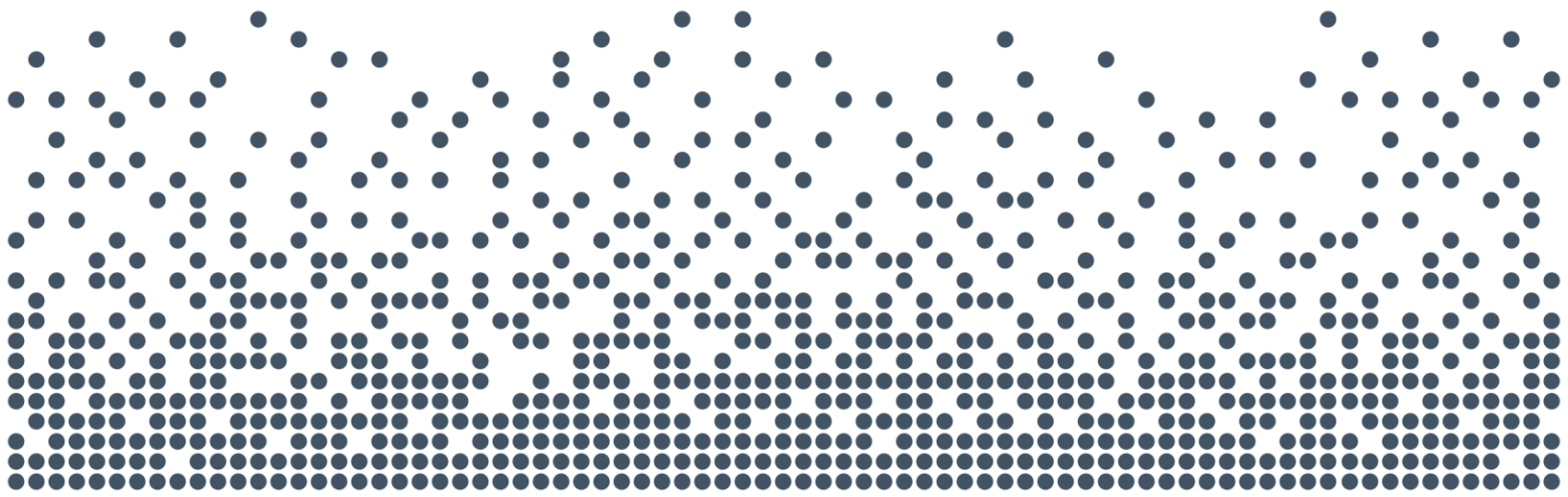


It is also noted that s.s.59(4) of the D.C.A. requires that the municipal approval authority for a draft plan of subdivision under s.s.51(31) of the Planning Act, use its power to impose conditions to ensure that the first purchaser of newly subdivided land is informed of all the D.C.s related to the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

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

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

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



# Appendices





# Appendix A

## Background Information on Residential and Non- Residential Growth Forecast





**Schedule 1  
City of Thorold  
Residential Growth Forecast Summary**

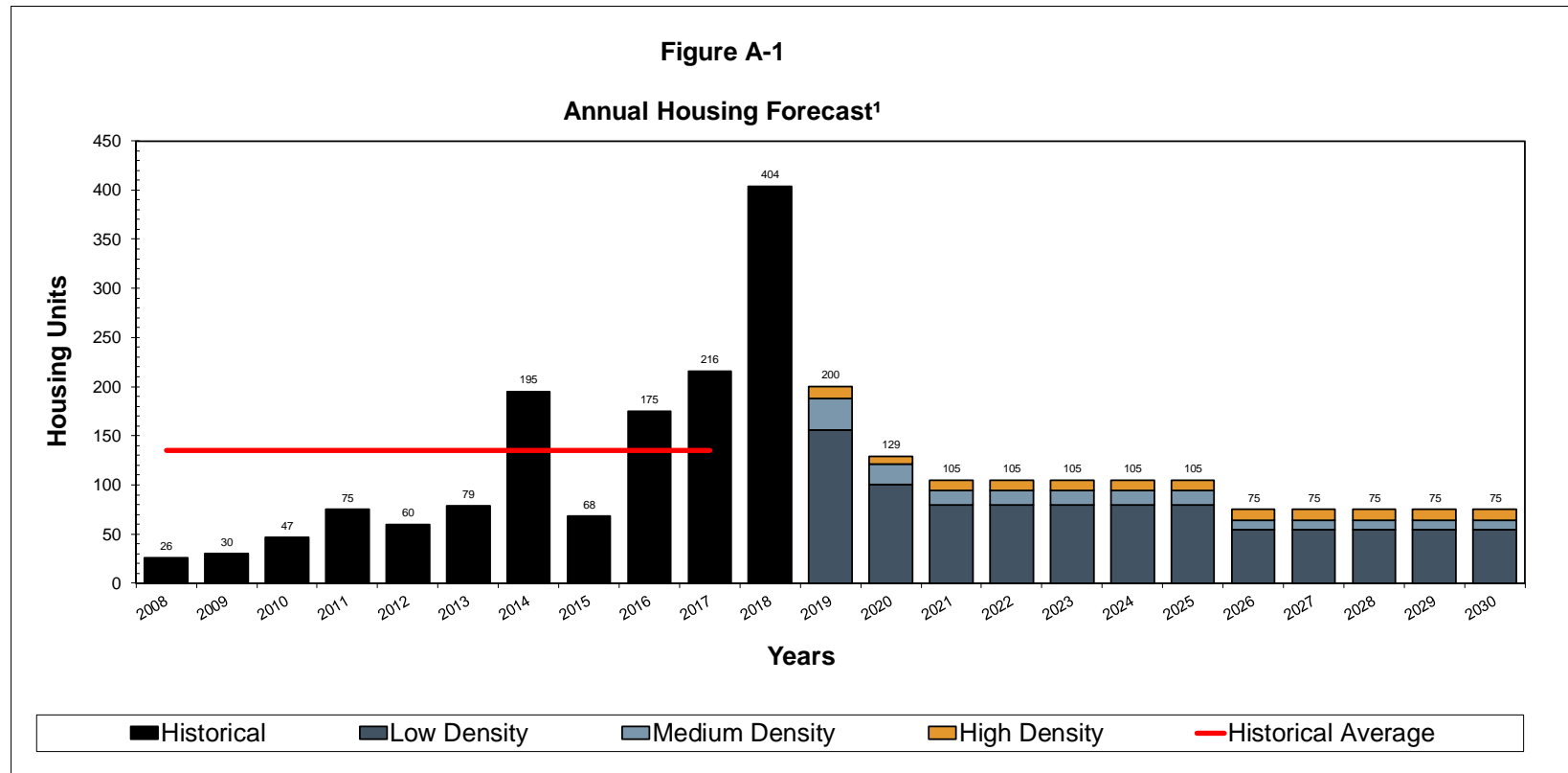
	Year	Population (Including Census Undercount) <sup>1</sup>	Excluding Census Undercount			Housing Units					Person Per Unit (P.P.U.): Total Population/ Total Households
			Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi- Detached	Multiple Dwellings <sup>2</sup>	Apartments <sup>3</sup>	Other	Total Households	
Historical	<i>Mid 2006</i>	18,720	18,224	119	18,105	5,650	480	850	75	7,055	2.583
	<i>Mid 2011</i>	18,420	17,931	391	17,540	5,672	449	937	24	7,082	2.532
	<i>Mid 2016</i>	19,310	18,801	251	18,550	5,885	515	1,045	15	7,460	2.520
Forecast	<i>Early 2019</i>	20,710	20,162	271	19,891	6,291	682	1,065	15	8,053	2.504
	<i>Early 2029</i>	23,470	22,856	307	22,549	7,198	916	1,167	15	9,297	2.459
	<i>Mid 2031</i>	23,850	23,227	310	22,917	7,335	938	1,196	15	9,484	2.449
Incremental	<b>Mid 2006 - Mid 2011</b>	<b>-300</b>	<b>-293</b>	<b>272</b>	<b>-565</b>	<b>22</b>	<b>-31</b>	<b>87</b>	<b>-51</b>	<b>27</b>	
	<b>Mid 2011 - Mid 2016</b>	<b>890</b>	<b>870</b>	<b>-140</b>	<b>1,010</b>	<b>213</b>	<b>66</b>	<b>108</b>	<b>-9</b>	<b>378</b>	
	<b>Mid 2016 - Early 2019</b>	<b>1,400</b>	<b>1,361</b>	<b>20</b>	<b>1,341</b>	<b>406</b>	<b>167</b>	<b>20</b>	<b>0</b>	<b>593</b>	
	<b>Early 2019 - Early 2029</b>	<b>2,760</b>	<b>2,694</b>	<b>36</b>	<b>2,658</b>	<b>907</b>	<b>234</b>	<b>102</b>	<b>0</b>	<b>1,244</b>	
	<b>Early 2019 - Mid 2031</b>	<b>3,140</b>	<b>3,065</b>	<b>39</b>	<b>3,026</b>	<b>1,044</b>	<b>256</b>	<b>131</b>	<b>0</b>	<b>1,431</b>	

Derived from the Niagara Region Municipal Comprehensive Review Strategic Growth Option, November 2016, for the City of Thorold by Watson & Associates Economists Ltd., 2019.

<sup>1</sup> Census undercount estimated at approximately 2.7%. Note: Population including the undercount has been rounded.

<sup>2</sup> Includes townhouses and apartments in duplexes.

<sup>3</sup> Includes bachelor, 1-bedroom and 2-bedroom+ apartments.



Source: Historical housing activity derived from City of Thorold building permit data , 2008-2017, and 2018 estimated based on October year-to-date building permit data  
1. Growth forecast represents calendar year.



**Schedule 2**  
**City of Thorold**  
**Estimate of the Anticipated Amount, Type and Location of**  
**Residential Development for Which Development Charges can be Imposed**

Development Location	Timing	Single & Semi-Detached	Multiples <sup>1</sup>	Apartments <sup>2</sup>	Total Residential Units	Gross Population In New Units	Existing Unit Population Change	Net Population Increase, Excluding Institutional	Institutional Population	Net Population Including Institutional
Urban	2019 - 2029	877	234	102	1,214	3,350	(627)	2,723	29	2,752
	2019 - 2031	1,006	256	131	1,393	3,840	(746)	3,094	31	3,126
Rolling Meadows - Beaver Creek CSO <sup>3</sup> 4	2019 - 2029	39	0	0	39	120	0	120	0	120
	2019 - 2031	39	0	0	39	120	0	120	0	120
Rolling Meadows - Allanburg Sewer Oversizing & Sewer Extension <sup>5</sup>	2019 - 2029	355	79	0	434	1,253	0	1,253	0	1,253
	2019 - 2031	408	91	0	499	1,441	0	1,441	0	1,441
Remaining Urban	2019 - 2029	522	155	102	780	2,097	(627)	1,470	29	1,498
	2019 - 2031	598	165	131	894	2,400	(746)	1,654	31	1,685
Rural	2019 - 2029	30	0	0	30	92	(157)	(64)	7	(57)
	2019 - 2031	38	0	0	38	117	(186)	(69)	8	(61)
City of Thorold	2019 - 2029	907	234	102	1,244	3,442	(784)	2,658	36	2,694
	2019 - 2031	1,044	256	131	1,431	3,957	(932)	3,025	39	3,065

Source: Watson & Associates Economists Ltd., 2019.

<sup>1</sup> Includes townhouses and apartments in duplexes.

<sup>2</sup> Includes accessory apartments, bachelor, 1-bedroom and 2-bedroom+ apartments.

<sup>3</sup> Rolling Meadows - Beaver Creek CSO units are presented as single detached equivalent (SDE). Total SDE based on housing occupancy ratio of medium and high density households to low density households.

<sup>4</sup> Anticipated amount and type of residential development in Rolling Meadows based on units with development applications in Phases 1-12.

<sup>5</sup> Allanburg Sewer Oversizing & Sewer Extension services both Beaver Creek and Allanburg area specifics in Rolling Meadows. Beaver Creek CSO units are also captured in the Allanburg Sewer Oversizing & Sewer extension.

Note: Numbers may not add to totals due to rounding.



**Schedule 3  
City of Thorold  
Current Year Growth Forecast  
Early 2016 to Early 2019**

		Population
Mid 2016 Population		18,801
Occupants of New Housing Units, Mid 2016 to Early 2019	<i>Units (2)</i>	593
	<i>multiplied by P.P.U. (3)</i>	2,983
	<i>gross population increase</i>	1,769
		1,769
Occupants of New Equivalent Institutional Units, Mid 2016 to Early 2019	<i>Units</i>	18
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	19
		19
Decline in Housing Unit Occupancy, Mid 2016 to Early 2019	<i>Units (4)</i>	7,460
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.057
	<i>total decline in population</i>	-427
		-427
Population Estimate to Early 2019		20,162
<i>Net Population Increase, Mid 2016 to Early 2019</i>		<i>1,361</i>

(1) 2016 population based on Statistics Canada Census unadjusted for Census undercount.

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

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

Structural Type	Persons Per Unit <sup>1</sup> (P.P.U.)	% Distribution of Estimated Units <sup>2</sup>	Weighted Persons Per Unit Average
<i>Singles &amp; Semi Detached</i>	3.375	68%	2.311
<i>Multiples (6)</i>	2.189	28%	0.616
<i>Apartments (7)</i>	1.669	3%	0.056
Total		100%	2.983

<sup>1</sup> Based on 2016 Census custom database

<sup>2</sup> Based on Building permit/completion activity

(4) 2016 households taken from Statistics Canada Census.

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

(6) Includes townhouses and apartments in duplexes.

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

Note: Numbers may not add to totals due to rounding.



**Schedule 4  
City of Thorold  
Ten Year Growth Forecast  
Early 2019 to Early 2029**

		Population
Early 2019 Population		20,162
Occupants of New Housing Units, Early 2019 to Early 2029	<i>Units (2)</i>	1,244
	<i>multiplied by P.P.U. (3)</i>	2,768
	<i>gross population increase</i>	3,442
Occupants of New Equivalent Institutional Units, Early 2019 to Early 2029	<i>Units</i>	33
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	36
Decline in Housing Unit Occupancy, Early 2019 to Early 2029	<i>Units (4)</i>	8,053
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.097
	<i>total decline in population</i>	-784
Population Estimate to Early 2029		22,856
<i>Net Population Increase, Early 2019 to Early 2029</i>		2,694

(1) Early 2019 Population based on:

2016 Population (18,801) + Mid 2016 to Early 2019 estimated housing units to beginning of forecast period (593 x 2.983 = 1,769) + (18 x 1.100 = 19) + (7,460 x -0.057 = -427) = 20,162

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

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

Structural Type	Persons Per Unit <sup>1</sup> (P.P.U.)	% Distribution of Estimated Units <sup>2</sup>	Weighted Persons Per Unit Average
<i>Singles &amp; Semi Detached</i>	3.077	73%	2.246
<i>Multiples (6)</i>	2.035	19%	0.382
<i>Apartments (7)</i>	1.702	8%	0.140
<i>one bedroom or less</i>	1.215		
<i>two bedrooms or more</i>	1.987		
<b>Total</b>		100%	2.768

<sup>1</sup> Persons per unit based on adjusted Statistics Canada Custom 2016 Census database.

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

(4) Early 2019 households based upon 7,460 (2016 Census) + 593 (Mid 2016 to Early 2019 unit estimate) = 8,053

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

(6) Includes townhouses and apartments in duplexes.

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

Note: Numbers may not add to totals due to rounding.



**Schedule 5  
City of Thorold  
2031 Growth Forecast  
Early 2019 to Mid 2031**

		Population
Early 2019 Population		20,162
Occupants of New Housing Units, Early 2019 to Mid 2031	<i>Units (2)</i>	1,431
	<i>multiplied by P.P.U. (3)</i>	2,765
	<i>gross population increase</i>	3,957
Occupants of New Equivalent Institutional Units, Early 2019 to Mid 2031	<i>Units</i>	36
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	40
Decline in Housing Unit Occupancy, Early 2019 to Mid 2031	<i>Units (4)</i>	8,053
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.116
	<i>total decline in population</i>	-932
Population Estimate to Mid 2031		23,227
<i>Net Population Increase, Early 2019 to Mid 2031</i>		3,065

(1) Early 2019 Population based on:

2016 Population (18,801) + Mid 2016 to Early 2019 estimated housing units to beginning of forecast period (593 x 2.983 = 1,769) + (18 x 1.100 = 19) + (7,460 x -0.057 = -427) = 20,162

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

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

Structural Type	Persons Per Unit <sup>1</sup> (P.P.U.)	% Distribution of Estimated Units <sup>2</sup>	Weighted Persons Per Unit Average
<i>Singles &amp; Semi Detached</i>	3.077	73%	2.246
<i>Multiples (6)</i>	2.035	18%	0.364
<i>Apartments (7)</i>	1.702	9%	0.155
<i>one bedroom or less</i>	1.215		
<i>two bedrooms or more</i>	1.987		
<b>Total</b>		100%	2.765

<sup>1</sup> Persons per unit based on adjusted Statistics Canada Custom 2016 Census database.

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

(4) Early 2019 households based upon 7,460 (2016 Census) + 593 (Mid 2016 to Early 2019 unit estimate) = 8,053

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

(6) Includes townhouses and apartments in duplexes.

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

Note: Numbers may not add to totals due to rounding.



**Schedule 6**  
**City of Thorold**  
**Summary of Active Development Applications as of 2018**

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples <sup>1</sup>	Apartments <sup>2</sup>	Total
Registered Not Built	1,134	416	0	<b>1,550</b>
<i>% Breakdown</i>	<i>73%</i>	<i>27%</i>	<i>0%</i>	<i>100%</i>
Draft Plans Approved	407	134	35	<b>576</b>
<i>% Breakdown</i>	<i>71%</i>	<i>23%</i>	<i>6%</i>	<i>100%</i>
Application Under Review	120	24	168	<b>312</b>
<i>% Breakdown</i>	<i>38%</i>	<i>8%</i>	<i>54%</i>	<i>100%</i>
<b>Total</b>	<b>1,661</b>	<b>574</b>	<b>203</b>	<b>2,438</b>
<i>% Breakdown</i>	<i>68%</i>	<i>24%</i>	<i>8%</i>	<i>100%</i>

Source: City of Thorold Planning and Building Services Department, November 2018.

<sup>1</sup> Includes townhomes and apartments in duplexes.

<sup>2</sup> Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 7

City of Thorold  
 Historical Residential Building Permits  
 Years 2008 to 2017

Year	Residential Building Permits			
	Singles & Semi Detached	Multiples <sup>1</sup>	Apartments <sup>2</sup>	Total
2008	22	0	4	26
2009	25	0	5	30
2010	39	0	8	47
2011	58	13	4	75
2012	47	9	4	60
Sub-total	191	22	25	238
<b>Average (2008 - 2012)</b>	<b>38</b>	<b>4</b>	<b>5</b>	<b>48</b>
% Breakdown	80.3%	9.2%	10.5%	100.0%
2013	55	23	1	79
2014	92	12	91	195
2015	41	27	0	68
2016	122	33	20	175
2017	169	47	0	216
Sub-total	479	142	112	733
<b>Average (2013 - 2017)</b>	<b>96</b>	<b>28</b>	<b>22</b>	<b>147</b>
% Breakdown	65.3%	19.4%	15.3%	100.0%
2008 - 2017				
Total	670	164	137	971
<b>Average</b>	<b>67</b>	<b>16</b>	<b>14</b>	<b>97</b>
% Breakdown	69.0%	16.9%	14.1%	100.0%

Source: City of Thorold Building Department.

<sup>1</sup> Includes townhouses and apartments in duplexes.

<sup>2</sup> Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



**Schedule 8a  
City of Thorold  
Persons Per Unit By Age and Type of Dwelling  
(2016 Census)**

Age of Dwelling	Singles and Semi-Detached						15 Year Average	15 Year Forecast <sup>1</sup>
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	-	-	-	3.774	-	<b>3.375</b>		
6-10	-	-	-	3.375	-	<b>2.865</b>		
11-15	-	-	-	3.242	-	<b>3.082</b>	3.107	3.077
16-20	-	-	-	3.149	-	<b>3.085</b>		
20-25	-	-	-	3.136	-	<b>3.154</b>		
25-35	-	-	-	2.987	4.529	<b>3.087</b>		
35+	-	1.571	1.788	2.449	3.442	<b>2.368</b>		
<b>Total</b>	-	<b>1.680</b>	<b>1.838</b>	<b>2.717</b>	<b>3.745</b>	<b>2.625</b>		

Age of Dwelling	All Density Types					
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total
1-5	-	-	-	3.106	-	<b>3.136</b>
6-10	-	-	-	3.107	-	<b>2.681</b>
11-15	-	-	-	3.000	-	<b>2.966</b>
16-20	-	-	1.818	3.160	-	<b>2.942</b>
20-25	-	-	-	3.204	-	<b>3.000</b>
25-35	-	1.130	-	3.075	4.389	<b>2.896</b>
35+	-	1.229	1.819	2.493	3.279	<b>2.244</b>
<b>Total</b>	<b>1.000</b>	<b>1.254</b>	<b>1.833</b>	<b>2.735</b>	<b>3.549</b>	<b>2.482</b>

<sup>1</sup> PPU has been forecasted based on 2001 to 2016 historical trends.

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

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



**Schedule 8b  
Niagara Region  
Persons Per Unit By Age and Type of Dwelling  
(2016 Census)**

Age of Dwelling	Multiples <sup>1</sup>						15 Year Average	15 Year Forecast <sup>1</sup>
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	-	1.647	1.726	2.424	-	<b>2.189</b>		
6-10	-	1.231	1.807	2.275	-	<b>1.997</b>		
11-15	-	1.529	1.675	2.432	-	<b>2.111</b>	2.099	2.035
16-20	-	1.500	1.914	2.494	-	<b>2.208</b>		
20-25	-	1.360	1.748	2.726	3.143	<b>2.296</b>		
25-35	-	1.292	2.000	2.640	2.750	<b>2.404</b>		
35+	-	1.216	1.823	2.630	3.407	<b>2.176</b>		
<b>Total</b>	-	<b>1.275</b>	<b>1.814</b>	<b>2.562</b>	<b>3.243</b>	<b>2.197</b>		

Age of Dwelling	Apartments <sup>2</sup>						15 Year Average	15 Year Forecast <sup>1</sup>
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	-	1.317	1.652	2.783	-	<b>1.669</b>		
6-10	-	1.178	1.721	3.067	-	<b>1.685</b>		
11-15	-	1.381	1.865	2.632	-	<b>1.817</b>	1.724	1.702
16-20	-	1.241	1.847	2.652	-	<b>1.686</b>		
20-25	-	1.224	1.780	2.974	-	<b>1.668</b>		
25-35	0.800	1.199	1.729	3.082	-	<b>1.589</b>		
35+	1.085	1.167	1.740	2.616	2.550	<b>1.562</b>		
<b>Total</b>	<b>0.892</b>	<b>1.185</b>	<b>1.746</b>	<b>2.716</b>	<b>2.875</b>	<b>1.589</b>		

Age of Dwelling	All Density Types					
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total
1-5	-	1.411	1.792	2.879	4.380	<b>2.604</b>
6-10	-	1.337	1.821	2.966	4.291	<b>2.688</b>
11-15	-	1.447	1.836	2.931	4.284	<b>2.745</b>
16-20	-	1.430	1.868	2.895	3.934	<b>2.656</b>
20-25	-	1.253	1.799	2.895	3.934	<b>2.515</b>
25-35	-	1.231	1.818	2.787	3.648	<b>2.497</b>
35+	1.250	1.219	1.790	2.539	3.725	<b>2.272</b>
<b>Total</b>	<b>1.250</b>	<b>1.242</b>	<b>1.800</b>	<b>2.658</b>	<b>3.841</b>	<b>2.383</b>

<sup>1</sup> Includes townhouses and apartments in duplexes.

<sup>2</sup> Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

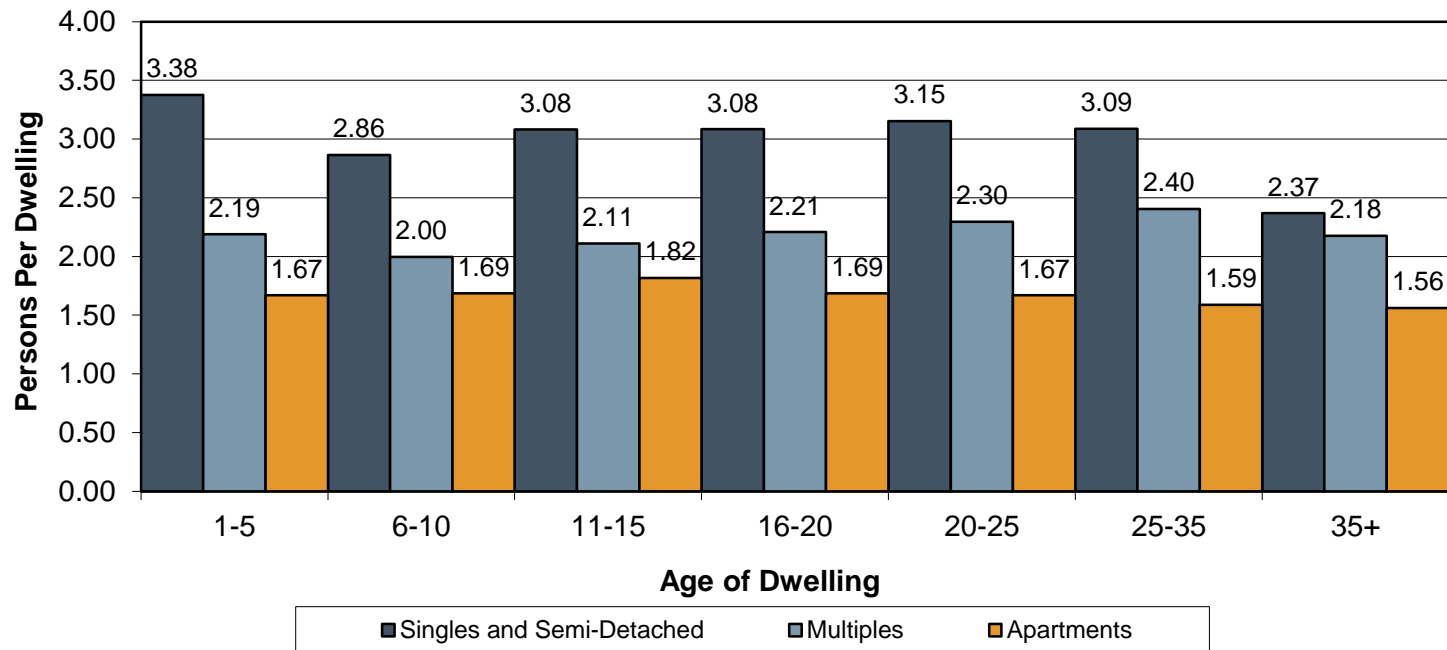
<sup>3</sup> PPU has been forecasted based on 2001 to 2016 trends.

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

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



**Schedule 9  
City of Thorold  
Persons Per Unit By Structural Type and Age of Dwelling  
(2016 Census)**



Multiple and Apartment P.P.U.s are based on Niagara Region.



**Schedule 10a  
City of Thorold  
Employment Forecast, 2019 to 2031**

Period	Population	Activity Rate								Employment								Employment Total (Excluding Work at Home)
		Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total	N.F.P.O.W. <sup>1</sup>	Total Including NFPOW	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total	N.F.P.O.W. <sup>1</sup>	Total Employment (Including N.F.P.O.W.)	
<b>Mid 2016</b>	18,801	0.006	0.024	0.100	0.129	0.117	0.376	0.052	0.428	105	460	1,875	2,430	2,205	7,075	980	8,055	6,615
<b>Early 2019</b>	20,162	0.005	0.024	0.098	0.123	0.110	0.361	0.052	0.413	105	493	1,981	2,471	2,225	7,275	1,051	8,326	6,782
<b>Early 2029</b>	22,856	0.005	0.025	0.097	0.128	0.099	0.354	0.052	0.406	111	582	2,215	2,929	2,253	8,090	1,191	9,281	7,508
<b>Mid 2031</b>	23,227	0.005	0.025	0.096	0.128	0.097	0.352	0.052	0.404	112	592	2,239	2,976	2,260	8,179	1,211	9,390	7,587
<b>Incremental Change</b>																		
<b>Mid 2016 - Early 2019</b>	1,361	-0.0004	0.0000	-0.0015	-0.0067	-0.0069	-0.0155	0.0000	-0.0155	0	33	106	41	20	200	71	271	167
<b>Early 2019 - Early 2029</b>	2,694	-0.0004	0.0010	-0.0013	0.0056	-0.0118	-0.0069	0.0000	-0.0069	6	89	234	458	28	815	140	955	726
<b>Early 2019 - Mid 2031</b>	3,065	-0.0004	0.0010	-0.0019	0.0056	-0.0131	-0.0088	0.0000	-0.0088	7	99	258	505	35	904	160	1,064	805
<b>Annual Average</b>																		
<b>Mid 2016 - Early 2019</b>	544	-0.0002	0.0000	-0.0006	-0.0027	-0.0028	-0.0062	0.0000	-0.0062	0	13	42	16	8	80	28	108	67
<b>Early 2019 - Early 2029</b>	269	-0.00004	0.00010	-0.00013	0.00056	-0.00118	-0.00069	0.00000	-0.00069	1	9	23	46	3	82	14	96	73
<b>Early 2019 - Mid 2031</b>	245	-0.00003	0.00008	-0.00015	0.00045	-0.00105	-0.00070	0.00000	-0.00070	1	8	21	40	3	72	13	85	64

Derived from the Niagara Region Municipal Comprehensive Review Strategic Growth Option, November 2016, for the City of Thorold by Watson & Associates Economists Ltd., 2019.

<sup>1</sup> Statistics Canada defines non fixed place of work (N.F.P.O.W.) employees as "persons who do not go from home to the same work place location at the beginning of each shift". Such persons include building and landscape contractors, travelling salespersons, independent truck drivers, etc.



**Schedule 10b  
City of Thorold  
Employment & Gross Floor Area (G.F.A) Forecast, 2019 to 2031**

Period	Population	Employment					Gross Floor Area in Square Feet (Estimated) <sup>1</sup>			
		Primary	Industrial	Commercial/ Population Related	Institutional	Total	Industrial	Commercial/ Population Related	Institutional	Total
<b>Mid 2016</b>	18,801	105	1,875	2,430	2,205	6,615				
<b>Early 2019</b>	20,162	105	1,981	2,471	2,225	6,782				
<b>Early 2029</b>	22,856	111	2,215	2,929	2,253	7,508				
<b>Mid 2031</b>	23,227	112	2,239	2,976	2,260	7,587				
<b>Incremental Change</b>										
<b>Mid 2016 - Early 2019</b>	1,361	0	106	41	20	167	127,200	20,500	14,000	161,700
<b>Early 2019 - Early 2029</b>	2,694	6	234	458	28	726	280,800	229,000	19,600	529,400
<b>Early 2019 - Mid 2031</b>	3,065	7	258	505	35	805	309,600	252,500	24,500	586,600
<b>Annual Average</b>										
<b>Mid 2016 - Early 2019</b>	544	0	42	16	8	67	50,880	8,200	5,600	64,680
<b>Early 2019 - Early 2029</b>	269	1	23	46	3	73	28,080	22,900	1,960	52,940
<b>Early 2019 - Mid 2031</b>	245	1	21	40	3	64	24,768	20,200	1,960	46,928

Derived from the Niagara Region Municipal Comprehensive Review Strategic Growth Option, November 2016, for the City of Thorold by Watson & Associates Economists Ltd., 2019.

<sup>1</sup> Square Foot Per Employee Assumptions

Industrial 1,200  
Commercial/ Population Related 500  
Institutional 700

\* Reflects Early 2019 to Mid 2031 forecast period

Note: Numbers may not add to totals due to rounding.



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

Development Location	Timing	Industrial G.F.A. S.F. <sup>1</sup>	Commercial G.F.A. S.F. <sup>1</sup>	Institutional G.F.A. S.F. <sup>1</sup>	Total Non-Residential G.F.A. S.F.	Employment Increase <sup>2</sup>
Urban	2019 - 2029	266,400	222,500	19,600	508,500	695
	2019 - 2031	294,000	245,000	24,500	563,500	770
Rolling Meadows - Beaver Creek CSO	2019 - 2029	-	-	-	-	-
	2019 - 2031	-	-	-	-	-
Rolling Meadows - Allanburg Sewer Oversizing & Sewer Extension	2019 - 2029	27,600	24,000	9,100	60,700	84
	2019 - 2031	34,800	30,000	11,200	76,000	105
Remaining Urban	2019 - 2029	238,800	198,500	10,500	447,800	611
	2019 - 2031	259,200	215,000	13,300	487,500	665
Rural	2019 - 2029	14,400	6,500	-	20,900	31
	2019 - 2031	15,600	7,500	-	23,100	35
City of Thorold	2019 - 2029	280,800	229,000	19,600	529,400	726
	2019 - 2031	309,600	252,500	24,500	586,600	805

Source: Watson & Associates Economists Ltd., 2019.

<sup>1</sup> Employment Increase does not include No Fixed Place of Work.

<sup>2</sup> Square feet per employee assumptions:

Industrial	1,200
Commercial	500
Institutional	700

\*Reflects Early 2019 to Mid 2031 forecast period

Note: Numbers may not add to totals due to rounding.



**Schedule 11**  
**City of Thorold**  
**Non-Residential Construction Value**  
**Years 2007 to 2016**  
**(000's 2018 \$)**

YEAR	Industrial				Commercial				Institutional				Total			
	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total
2007	45	23	0	69	2,290	1,021	0	3,310	194	398	0	592	2,529	1,442	0	3,972
2008	0	0	2,850	2,850	961	1,452	342	2,755	192	985	342	1,518	1,153	2,437	3,534	7,124
2009	0	452	452	904	3,770	2,052	0	5,822	0	96	0	96	3,770	2,600	452	6,822
2010	641	335	0	976	2,152	1,652	0	3,804	20	166	0	186	2,813	2,153	0	4,966
2011	104	152	0	257	1,180	267	2,230	3,677	0	15	0	15	1,285	434	2,230	3,949
2012	139	375	3,484	3,999	19,263	2,974	536	22,772	196	0	858	1,054	19,598	3,349	4,878	27,825
2013	268	431	0	700	483	1,021	0	1,504	34	2,602	0	2,635	785	4,054	0	4,839
2014	2,373	1,333	0	3,706	2,051	62	0	2,113	1,865	15	0	1,880	6,288	1,411	0	7,699
2015	415	67	2,091	2,573	4,532	893	0	5,425	1,352	0	0	1,352	6,299	959	2,091	9,350
2016	883	171	0	1,054	791	1,549	0	2,340	41	1,134	0	1,174	1,715	2,853	0	4,568
<b>Subtotal</b>	<b>4,869</b>	<b>3,339</b>	<b>8,877</b>	<b>17,086</b>	<b>37,472</b>	<b>12,943</b>	<b>3,108</b>	<b>53,524</b>	<b>3,893</b>	<b>5,411</b>	<b>1,200</b>	<b>10,504</b>	<b>46,235</b>	<b>21,693</b>	<b>13,185</b>	<b>81,114</b>
Percent of Total	28%	20%	52%	100%	70%	24%	6%	100%	37%	52%	11%	100%	57%	27%	16%	100%
<b>Average</b>	<b>609</b>	<b>371</b>	<b>2,219</b>	<b>1,709</b>	<b>3,747</b>	<b>1,294</b>	<b>1,036</b>	<b>5,352</b>	<b>487</b>	<b>676</b>	<b>600</b>	<b>1,050</b>	<b>4,623</b>	<b>2,169</b>	<b>2,637</b>	<b>8,111</b>
2007 - 2011 Period Total				5,055				19,369				2,408				26,833
<b>2007 - 2011 Average</b>				<b>1,011</b>				<b>3,874</b>				<b>482</b>				<b>5,367</b>
% Breakdown				18.8%				72.2%				9.0%				100.0%
2012 - 2016 Period Total				12,031				34,154				8,096				54,281
<b>2012 - 2016 Average</b>				<b>2,406</b>				<b>6,831</b>				<b>1,619</b>				<b>10,856</b>
% Breakdown				22.2%				62.9%				14.9%				100.0%
2007 - 2016 Period Total				17,086				53,524				10,504				81,114
<b>2007 - 2016 Average</b>				<b>1,709</b>				<b>5,352</b>				<b>1,050</b>				<b>8,111</b>
% Breakdown				21.1%				66.0%				12.9%				100.0%

Source: Statistics Canada Publication, 64-001-XIB

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



**Schedule 12  
City of Thorold**

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

NAICS	Employment & Gross Floor Area (G.F.A) Forecast, 2016 To Buildout	Year			Change			Comments
		2006	2011	2016	96-01	06-11	11-16	
<b>Employment by industry</b>								
<b>Primary Industry Employment</b>								
11	<i>Agriculture, forestry, fishing and hunting</i>	100	60	125		-40	65	Categories which relate to local land-based resources
21	<i>Mining and oil and gas extraction</i>	10	0	10		-10	10	
<b>Sub-total</b>		<b>110</b>	<b>60</b>	<b>135</b>	<b>0</b>	<b>-50</b>	<b>75</b>	
<b>Industrial and Other Employment</b>								
22	<i>Utilities</i>	255	265	215		10	-50	Categories which relate primarily to industrial land supply and demand
23	<i>Construction</i>	520	450	415		-70	-35	
31-33	<i>Manufacturing</i>	1,325	380	565		-945	185	
41	<i>Wholesale trade</i>	395	330	320		-65	-10	
48-49	<i>Transportation and warehousing</i>	270	230	235		-40	5	
56	<i>Administrative and support</i>	238	183	238		-55	55	
<b>Sub-total</b>		<b>3,003</b>	<b>1,838</b>	<b>1,988</b>	<b>-238</b>	<b>-1,165</b>	<b>150</b>	
<b>Population Related Employment</b>								
44-45	<i>Retail trade</i>	640	565	735		-75	170	Categories which relate primarily to population growth within the municipality
51	<i>Information and cultural industries</i>	125	120	135		-5	15	
52	<i>Finance and insurance</i>	200	125	145		-75	20	
53	<i>Real estate and rental and leasing</i>	70	95	145		25	50	
54	<i>Professional, scientific and technical services</i>	415	340	470		-75	130	
55	<i>Management of companies and enterprises</i>	15	0	0		-15	0	
56	<i>Administrative and support</i>	238	183	238		-55	55	
71	<i>Arts, entertainment and recreation</i>	60	25	70		-35	45	
72	<i>Accommodation and food services</i>	270	300	335		30	35	
81	<i>Other services (except public administration)</i>	430	345	405		-85	60	
<b>Sub-total</b>		<b>2,463</b>	<b>2,098</b>	<b>2,678</b>	<b>-238</b>	<b>-365</b>	<b>580</b>	
<b>Institutional</b>								
61	<i>Educational services</i>	290	375	255		85	-120	
62	<i>Health care and social assistance</i>	625	830	1,075		205	245	
91	<i>Public administration</i>	785	1,050	945		265	-105	
<b>Sub-total</b>		<b>1,700</b>	<b>2,255</b>	<b>2,275</b>	<b>0</b>	<b>555</b>	<b>20</b>	
<b>Total Employment</b>		<b>7,275</b>	<b>6,250</b>	<b>7,075</b>	<b>-475</b>	<b>-1,025</b>	<b>825</b>	
<b>Population</b>		<b>18,224</b>	<b>17,931</b>	<b>18,801</b>	<b>176</b>	<b>-293</b>	<b>870</b>	
<b>Employment to Population Ratio</b>								
<b>Industrial and Other Employment</b>		<b>0.16</b>	<b>0.10</b>	<b>0.11</b>	<b>-0.01</b>	<b>-0.06</b>	<b>0.00</b>	
<b>Population Related Employment</b>		<b>0.14</b>	<b>0.12</b>	<b>0.14</b>	<b>-0.01</b>	<b>-0.02</b>	<b>0.03</b>	
<b>Institutional Employment</b>		<b>0.09</b>	<b>0.13</b>	<b>0.12</b>	<b>0.00</b>	<b>0.03</b>	<b>0.00</b>	
<b>Primary Industry Employment</b>		<b>0.01</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
<b>Total</b>		<b>0.40</b>	<b>0.35</b>	<b>0.38</b>	<b>-0.03</b>	<b>-0.05</b>	<b>0.03</b>	

Source: Statistics Canada Employment by Place of Work

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



# Appendix B

## Level of Service





**APPENDIX B - LEVEL OF SERVICE CEILING  
CITY OF THOROLD**

SUMMARY OF SERVICE STANDARDS AS PER DEVELOPMENT CHARGES ACT, 1997, AS AMENDED							
Service Category	Sub-Component	10 Year Average Service Standard					Maximum Ceiling LOS
		Cost (per capita)	Quantity (per capita)		Quality (per capita)		
Services Related to a Highway	Roads	\$10,019.60	0.0037	km of roadways	2,708,000	per km	30,710,074
	Traffic Signals & Streetlights	\$40.20	0.0002	No. of Traffic Signals and Streetlights	201,000	per item	123,213
	Depots and Domes	\$264.47	1.4193	ft <sup>2</sup> of building area	186	per sq.ft.	810,601
	Roads and Related Vehicles	\$204.49	0.0017	No. of vehicles and equipment	120,288	per vehicle	626,762
Fire Protection Services	Fire Facilities	\$544.75	1.7912	ft <sup>2</sup> of building area	304	per sq.ft.	1,669,659
	Fire Vehicles	\$452.52	0.0009	No. of vehicles	502,800	per vehicle	1,386,974
	Fire Small Equipment and Gear	\$117.81	0.0219	No. of equipment and gear	5,379	per Firefighter	361,088
Municipal Parking Spaces	Parking Spaces	\$95.29	0.0187	No. of spaces	5,096	per space	256,711
Parks & Recreation	Parkland Development	\$383.14	0.0056	Acres of Parkland	68,418	per acre	1,032,179
	Parkland Amenities	\$599.60	0.3610	No. of parkland amenities	1,661	per amenity	1,615,322
	Parkland Trails	\$271.44	0.0004	Paths and Trails	678,600	per trail	731,259
	Parks Vehicles and Equipment	\$87.65	0.0022	No. of vehicles and equipment	39,841	per vehicle	236,129
	Indoor Recreation Facilities	\$1,262.31	4.7368	ft <sup>2</sup> of building area	266	per sq.ft.	3,400,663
Library	Library Facilities	\$192.69	0.6277	ft <sup>2</sup> of building area	307	per sq.ft.	519,107
	Library Collection Materials	\$145.47	4.5722	No. of library collection items	32	per collection item	391,896







**City of Thorold  
Service Standard Calculation Sheet**

Service: Depots and Domes  
Unit Measure: ft<sup>2</sup> of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Works Barn	17,280	17,280	17,280	17,280	17,280	17,280	17,280	17,280	17,280	17,280	\$165	\$193
Offices	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	\$196	\$227
Salt Storage Quonset	1,400	1,400	1,400	-	-	-	-	-	-	-	\$37	\$52
Fabric Salt Storage Building	-	-	-	2,400	2,400	2,400	2,400	2,400	2,400	2,400	\$48	\$64
Parks Barn	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	\$166	\$194
<b>Total</b>	<b>25,520</b>	<b>25,520</b>	<b>25,520</b>	<b>26,520</b>	<b>26,520</b>	<b>26,520</b>	<b>26,520</b>	<b>26,520</b>	<b>26,520</b>	<b>26,520</b>		

Population	18,072	17,976	17,931	18,071	18,169	18,316	18,691	18,801	19,155	19,665
Per Capita Standard	1.4121	1.4197	1.4232	1.4675	1.4596	1.4479	1.4189	1.4106	1.3845	1.3486

10 Year Average	2009-2018
Quantity Standard	1.4193
Quality Standard	\$186
Service Standard	\$264

D.C. Amount (before deductions)	2031
Forecast Population	3,065
\$ per Capita	\$264
Eligible Amount	\$810,601



**City of Thorold  
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
<b>VANS</b>											
DODGE 1-Ton Van	1	1	1	1	1	1	1	1	1	1	\$35,000
CHEV 1-Ton Van	1	1	1	1	1	1	1	1	1	1	\$35,000
FORD 1-Ton Van	1	1	1	1	1	1	1	1	1	1	\$35,000
<b>TRUCKS</b>											
FORD F-150 Pickup	1	1	1	1	1	1	1	1	1	1	\$35,000
DODGE RAM Pickup	1	1	1	1	1	1	1	1	1	1	\$35,000
DODGE RAM Pickup	1	1	1	1	1	1	1	1	1	1	\$35,000
FORD F-450 Pickup - Water Truck	1	1	1	1	1	1	1	1	1	1	\$98,000
CHEVEROLET Crew Cab Dump	1	1	1	1	1	1	1	1	1	1	\$68,200
DODGE Crew Cab	1	1	1	1	1	1	1	1	1	1	\$36,700
FORD F-350 Crew Cab Dump	1	1	1	1	1	1	1	1	1	1	\$68,200
FORD F-350 Crew Cab Dump	1	1	1	1	1	1	1	1	1	1	\$68,200
CHEV SILVERADO Pickup	-	-	-	1	1	1	1	1	1	1	\$35,000
<b>SANDERS AND PLOWS</b>											
INTL Dump(S&P)	1	1	1	1	1	1	1	1	1	1	\$250,100
INTL Dump(S&P)	1	1	1	1	1	1	1	1	1	1	\$250,100
INTL Dump(S & P)-Side Tilt	1	1	1	1	1	1	1	1	1	1	\$250,100
FRHT Dump(S & P)	1	1	1	1	1	1	1	1	1	1	\$250,100
INTL Dump(S & P) -Tandem	1	1	1	1	1	1	1	1	1	1	\$272,800
FRHT Dump(S & P)	1	1	1	1	1	1	1	1	1	1	\$250,100
<b>SPECIALTY</b>											
JOHN DEERE Backhoe	1	1	1	1	1	1	1	1	1	1	\$122,500
Hoe Ram	1	1	1	1	1	1	1	1	1	1	\$50,900
Vibratory Plate	1	1	1	1	1	1	1	1	1	1	\$25,500
CHAMPION Grader(P)	1	1	1	1	1	1	1	-	-	-	\$306,300
Sidewalk Grinder	1	1	1	1	1	1	1	1	1	1	\$12,300
CASE 521E Loader(P)	1	1	1	1	1	1	1	1	1	1	\$196,100
CAT 924H Loader(P)	1	1	1	1	1	1	1	1	1	1	\$196,100
TYMCO DST-6 Street Sweeper	1	1	1	1	1	1	1	1	1	1	\$330,800
FORD Indust Tractor	1	1	1	1	1	1	1	1	1	1	\$200,000



**City of Thorold  
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
FORD Indust Tractor	1	1	1	1	1	1	1	1	1	1	\$200,000
Equipment Trailers (3)	3	3	3	3	3	3	3	3	3	3	\$10,000
Chev Cargo Van 3/4 Ton	-	-	-	-	-	-	-	-	-	1	\$30,000
Dodge Mini Van	-	-	-	-	-	-	1	1	1	1	\$30,000
Trackless Sidewalk Plow	-	-	-	-	-	1	1	1	1	1	\$170,500
<b>Total</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>31</b>	<b>31</b>	<b>32</b>	<b>33</b>	<b>32</b>	<b>32</b>	<b>33</b>	

Population	18,072	17,976	17,931	18,071	18,169	18,316	18,691	18,801	19,155	19,665
Per Capita Standard	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0018	0.0017	0.0017	0.0017

10 Year Average	2009-2018
Quantity Standard	0.0017
Quality Standard	\$120,288
Service Standard	\$204

D.C. Amount (before deductions)	2031
Forecast Population	3,065
\$ per Capita	\$204
Eligible Amount	\$626,762



**City of Thorold  
Service Standard Calculation Sheet**

Service: Fire Facilities  
Unit Measure: ft<sup>2</sup> of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bid'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Station #1	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	\$245	\$294
* Station #2	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	\$276	\$330
* Station #2	(2,719)	(2,719)	(2,719)	(2,719)	(2,719)	(2,719)	(2,719)	(2,719)	(2,719)	(2,719)	\$276	\$330
Station #3	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	\$221	\$266
New Station #4	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	\$256	\$307
* Station 2 - 19.7% of space relates to Ambulance												
<b>Total</b>	<b>33,081</b>	<b>33,081</b>	<b>33,081</b>	<b>33,081</b>	<b>33,081</b>	<b>33,081</b>	<b>33,081</b>	<b>33,081</b>	<b>33,081</b>	<b>33,081</b>		

Population	18,072	17,976	17,931	18,071	18,169	18,316	18,691	18,801	19,155	19,665
Per Capita Standard	1.8305	1.8403	1.8449	1.8306	1.8208	1.8061	1.7699	1.7596	1.7270	1.6822

10 Year Average	2009-2018
Quantity Standard	1.7912
Quality Standard	\$304
Service Standard	\$545

D.C. Amount (before deductions)	2031
Forecast Population	3,065
\$ per Capita	\$545
Eligible Amount	\$1,669,659



**City of Thorold  
Service Standard Calculation Sheet**

Service: Fire Vehicles  
Unit Measure: No. of vehicles

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
Tankers	2	2	2	2	2	2	2	2	2	2	\$500,000
Pumpers (light duty commercial)/HazMat Unit	1	1	1	1	1	1	1	1	1	1	\$275,000
Pumpers (heavy duty custom)	5	5	5	5	5	5	5	5	5	5	\$700,000
Pumper Telesquirt/Aerial Ladder	1	1	1	1	1	1	1	1	1	1	\$1,300,000
Staff Vehicles, Sedans, Wagons, Vans, Pickup	2	2	2	2	2	2	2	2	2	3	\$60,000
Boat and Trailer	1	1	1	1	1	1	1	1	1	1	\$43,200
Heavy Rescue	4	4	4	4	4	4	4	4	4	4	\$500,000
Pumper/Light Rescue	1	1	1	1	1	1	1	1	1	1	\$113,700
<b>Total</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>18</b>	

Population	18,072	17,976	17,931	18,071	18,169	18,316	18,691	18,801	19,155	19,665
Per Capita Standard	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009

10 Year Average	2009-2018
Quantity Standard	0.0009
Quality Standard	\$502,800
Service Standard	\$453

D.C. Amount (before deductions)	2031
Forecast Population	3,065
\$ per Capita	\$453
Eligible Amount	\$1,386,974



**City of Thorold  
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Personal Fire Fighter Equipment	130	130	130	130	130	130	130	130	130	130	\$5,100
Communications Equipment	1	1	1	1	1	1	1	1	1	1	\$371,200
Other Station Equipment (General Portable Pumps)	1	1	1	1	1	1	1	1	1	1	\$259,600
Jaws Of Life - Hydraulic	4	4	4	4	4	4	4	4	4	4	\$61,300
Defibrillator (SAED)	2	2	2	2	2	2	2	2	2	2	\$24,600
Defibrillator (AED)	5	5	5	5	5	5	5	5	5	5	\$6,100
Vehicle Exhaust Extractor Stn 1	1	1	1	1	1	1	1	1	1	1	\$39,200
Air Compress-Purify	1	1	1	1	1	1	1	1	1	1	\$80,000
Self Contained Breathing Apparatus	40	40	40	40	40	40	40	40	40	40	\$6,100
SCBA Air Cylinders	90	90	90	90	90	90	90	90	90	90	\$900
SCBA Personal Masks	80	130	130	130	130	130	130	130	130	130	\$300
Fixed Generator	-	1	1	1	1	1	1	1	1	1	\$34,900
Thermal Imaging Cameras	4	4	4	4	4	4	4	4	4	4	\$11,000
<b>Total</b>	<b>359</b>	<b>410</b>	<b>410</b>	<b>410</b>	<b>410</b>	<b>410</b>	<b>410</b>	<b>410</b>	<b>410</b>	<b>410</b>	

Population	18,072	17,976	17,931	18,071	18,169	18,316	18,691	18,801	19,155	19,665
Per Capita Standard	0.0199	0.0228	0.0229	0.0227	0.0226	0.0224	0.0219	0.0218	0.0214	0.0208

10 Year Average	2009-2018
Quantity Standard	0.0219
Quality Standard	\$5,379
Service Standard	\$118

D.C. Amount (before deductions)	2031
Forecast Population	3,065
\$ per Capita	\$118
Eligible Amount	\$361,088



**City of Thorold  
Service Standard Calculation Sheet**

Service: Parking Spaces  
Unit Measure: No. of spaces

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/space)
<b>Municipal Parking Lots:</b>											
Towpath and Sullivan Public Lot	80	80	80	80	80	80	80	80	80	80	\$2,500
Market Square (Ormand/Clairmont)	50	50	50	50	50	50	50	50	50	50	\$2,500
Albert Street - Old Fire Hall 1	35	35	35	35	35	35	35	35	35	35	\$2,500
Front Street (near St. David's - across from Arena)	80	80	80	80	80	80	80	80	80	80	\$2,500
Front and McNamara	80	80	80	80	80	80	80	80	80	80	\$2,500
Towpath and Albeert	-	-	-	-	-	39	39	39	39	39	\$2,500
Pay and Display Machines	-	-	-	-	-	-	-	-	-	2	\$15,000
Land (Acres)	5.98	5.98	5.98	5.98	5.98	5.98	5.98	5.98	5.98	5.98	\$150,000
<b>Total</b>	<b>325</b>	<b>325</b>	<b>325</b>	<b>325</b>	<b>325</b>	<b>364</b>	<b>364</b>	<b>364</b>	<b>364</b>	<b>366</b>	

Population	18,072	17,976	17,931	18,071	18,169	18,316	18,691	18,801	19,155	19,665
Per Capita Standard	0.0180	0.0181	0.0181	0.0180	0.0179	0.0199	0.0195	0.0194	0.0190	0.0186

10 Year Average	2009-2018
Quantity Standard	0.0187
Quality Standard	\$5,096
Service Standard	\$95

D.C. Amount (before deductions)	10 Year
Forecast Population	2,694
\$ per Capita	\$95
Eligible Amount	\$256,711



**City of Thorold  
Service Standard Calculation Sheet**

Service: Parkland Development  
Unit Measure: Acres of Parkland

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Acre)
<b>Neighbourhood Parks</b>											
Hutt Park	8.90	8.90	8.90	8.90	8.90	8.90	8.90	8.90	8.90	8.90	\$68,900
McAdam Park	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	\$68,900
Port Robinson	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	\$68,900
Martin Street	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	\$68,900
Lock 7 Parkette	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	\$68,900
Beaverdarms Park	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	\$68,900
Allanburg Community Park	-	-	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	\$68,900
Winterberry Park	-	-	-	1.23	1.23	1.23	1.23	1.23	1.23	1.23	\$68,900
<b>Community Parks</b>											
Mel Stewart	26.93	26.93	26.93	26.93	26.93	26.93	26.93	26.93	26.93	26.93	\$68,900
Allanburg	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	\$68,900
South Confederation Heights	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	\$68,900
Sullivan	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	\$68,900
McMillan	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	\$68,900
C.E. Grose	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	\$68,900
Richmond St Park	-	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	\$68,900
<b>City-Wide Parks</b>											
Battle of Beaverarms	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	\$68,900
J.C. Centennial	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	\$68,900
Memorial	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	\$68,900
<b>Total</b>	<b>100.03</b>	<b>101.53</b>	<b>102.13</b>	<b>103.36</b>	<b>103.36</b>	<b>103.36</b>	<b>103.36</b>	<b>103.36</b>	<b>103.36</b>	<b>103.36</b>	

Population	18,072	17,976	17,931	18,071	18,169	18,316	18,691	18,801	19,155	19,665
Per Capita Standard	0.0055	0.0056	0.0057	0.0057	0.0057	0.0056	0.0055	0.0055	0.0054	0.0053

10 Year Average	2009-2018
Quantity Standard	0.0056
Quality Standard	\$68,418
Service Standard	\$383

D.C. Amount (before deductions)	10 Year
Forecast Population	2,694
\$ per Capita	\$383
Eligible Amount	\$1,032,179



**City of Thorold  
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Senior Soccer - Lit (C.E. Grose)	1	1	1	1	1	1	1	1	1	1	\$255,000
Senior Soccer - Unlit (South Confederation)	1	1	1	1	1	1	1	1	1	1	\$153,500
Softball - Lit (Sullivan)	1	1	1	1	1	1	1	1	1	1	\$255,000
Softball - Unlit (Allanburg)	2	2	2	2	2	2	2	2	2	2	\$68,000
Softball - Unlit (Port Robinson)	1	1	1	1	1	1	1	1	1	1	\$68,000
Softball - Unlit (Martin Street)	1	1	1	1	1	1	1	1	1	1	\$68,000
Softball - Unlit (McAdam)	1	1	1	1	1	1	1	1	1	1	\$68,000
Softball - Unlit (Quono/Abitibi)	1	1	1	1	-	-	-	-	-	-	\$68,000
Baseball - Lit (McMillan)	1	1	1	1	1	1	1	1	1	1	\$340,000
Baseball Fieldhouse (McMillan)	1	1	1	1	1	1	1	1	1	1	\$490,000
Baseball - Lit (Sullivan)	1	1	1	1	1	1	1	1	1	1	\$255,000
Baseball - Unlit (South Confederation)	2	2	2	2	2	2	2	2	2	2	\$102,100
T-Ball (Beaverarms)	1	1	1	1	1	1	1	1	1	1	\$8,400
T-Ball (Hutt Park)	1	1	1	1	1	1	1	1	1	1	\$8,400
Tennis Courts (South Confederation)	2	2	2	2	2	2	2	2	2	2	\$85,000
Bocce Courts (C.E. Grose)	1	1	1	1	1	1	1	1	1	1	\$68,000
Bocce Courts (Richmond)	-	1	1	1	1	1	1	1	1	1	\$7,400
Bocce Courts (Allanburg Comm)	-	-	1	1	1	1	1	1	1	1	\$7,400
Basketball Court (McAdam)	1	1	1	1	1	1	1	1	1	1	\$50,900
Basketball Court (Port Robinson)	1	1	1	1	1	1	1	1	1	1	\$50,900
Basketball Court (South Confederation)	1	1	1	1	1	1	1	1	1	1	\$25,500
Basketball Court (Winterberry)	-	-	-	1	1	1	1	1	1	1	\$50,900
Basketball Court (Beaverarms Village)	1	1	1	1	1	1	1	1	1	1	\$25,500
Outdoor Pool (Richmond Pool, accessible )	-	1	1	1	1	1	1	1	1	1	\$3,921,600
Water Play Facility (Sullivan)	1	1	1	1	1	1	1	1	1	1	\$170,000
Water Play Facility (South Confederation)	1	1	1	1	1	1	1	1	1	1	\$255,000



**City of Thorold  
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Water Play Facility (Port Robinson Park)	1	1	1	1	1	1	1	1	1	1	\$183,800
Water Play Facility (McMillan 2)	-	-	1	1	1	1	1	1	1	1	\$183,800
Water Play Facility (McAdam Park)	-	1	1	1	1	1	1	1	1	1	\$183,800
Playgrounds (Allanburg)	1	1	1	1	1	1	1	1	1	1	\$85,000
Playgrounds (Sullivan)	1	1	1	1	1	1	1	1	1	1	\$85,000
Playgrounds (South Confederation)	1	1	1	1	1	1	1	1	1	1	\$127,500
Playgrounds (Port Robinson)	1	1	1	1	1	1	1	1	1	1	\$68,000
Playgrounds (McAdam)	1	1	1	1	1	1	1	1	1	1	\$85,000
Playgrounds (Hutt Park - Accessible)	1	1	1	1	1	1	1	1	1	1	\$85,000
Playgrounds (CE Grose)	1	1	1	1	1	1	1	1	1	1	\$49,000
Playgrounds (Martin St Park)	1	1	1	1	1	1	1	1	1	1	\$49,000
Playgrounds (McMillan)	1	1	1	1	1	1	1	1	1	1	\$49,000
Playgrounds (Allanburg Comm Park)	-	1	1	1	1	1	1	1	1	1	\$49,000
Playgrounds (Winterberry Park, accessible)	-	-	-	1	1	1	1	1	1	1	\$86,200
Playgrounds (Beaverdams Village)	1	1	1	1	1	1	1	1	1	1	\$85,000
Skateboard Park (McAdam)	1	1	1	1	1	1	1	1	1	1	\$170,000
Gazebo (Port Robinson)	-	-	-	-	-	-	-	-	-	1	\$30,000
Gazebo (McAdam)	1	1	1	1	1	1	1	1	1	1	\$50,900
Boardwalk (Mel Swart)	1	1	1	1	1	1	1	1	1	1	\$425,000
Pavilion (Mel Swart Park)	1	1	1	1	1	1	1	1	1	1	\$24,600
Band shell (Battle of Beaverdams)	1	1	1	1	1	1	1	1	1	1	\$425,000
Gazebo (Richmond) (accessible)	-	-	1	1	1	1	1	1	1	1	\$30,600
6 p/n tables, 6 benches and 3 BBQs (Richmond) (accessible)	-	-	1	1	1	1	1	1	1	1	\$24,600
Washrooms/Clubhouse - C. E. Gross Park	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	\$200
Washrooms/Canteen - Sullivan Park	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$200
Washroom/Changeroom/Canteen - McMillan Park	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	\$200



**City of Thorold  
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Washroom - South Confederation	900	900	900	900	900	900	900	900	900	900	\$200
Washroom - McAdam Park	-	-	-	-	-	-	-	-	-	1	\$200,000
<b>Park and Recreation Lots:</b>											
South Confederation (East)	56	56	56	56	56	56	56	56	56	56	\$2,500
South Confederation (West)	32	32	32	32	32	32	32	32	32	32	\$2,500
Arena (East Side - Ormond St)	80	80	80	80	80	80	80	80	80	80	\$2,500
Arena (North Side - St. David's)	50	50	50	50	50	50	50	50	50	50	\$2,500
<b>Total</b>	<b>6,659</b>	<b>6,663</b>	<b>6,667</b>	<b>6,669</b>	<b>6,668</b>	<b>6,668</b>	<b>6,668</b>	<b>6,668</b>	<b>6,668</b>	<b>6,670</b>	

Population	18,072	17,976	17,931	18,071	18,169	18,316	18,691	18,801	19,155	19,665
Per Capita Standard	0.37	0.37	0.37	0.37	0.37	0.36	0.36	0.35	0.35	0.34

10 Year Average	2009-2018
Quantity Standard	0.3610
Quality Standard	\$1,661
Service Standard	\$600

D.C. Amount (before deductions)	10 Year
Forecast Population	2,694
\$ per Capita	\$600
Eligible Amount	\$1,615,322



**City of Thorold  
Service Standard Calculation Sheet**

Service: Parkland Trails  
Unit Measure: Paths and Trails

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Trail)
Welland Canal Parkway Trails											
Phase 1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	\$754,100
Phase 2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	\$2,132,100
Phase 3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	\$263,000
Phase 4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	\$1,748,800
Battle of Beaverdams Park	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	\$62,500
Richmond (Accessible)	-	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	\$11,400
Winterberry Park (Accessible)	-	-	-	1.0	1.0	1.0	1.0	1.0	1.0	1.0	\$17,100
South Confed (Accessible Path)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	\$30,600
<b>Total</b>	<b>6.0</b>	<b>7.0</b>	<b>7.0</b>	<b>8.0</b>	<b>8.0</b>	<b>8.0</b>	<b>8.0</b>	<b>8.0</b>	<b>8.0</b>	<b>8.0</b>	

Population	18,072	17,976	17,931	18,071	18,169	18,316	18,691	18,801	19,155	19,665
Per Capita Standard	0.0003	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004

10 Year Average	2009-2018
Quantity Standard	0.0004
Quality Standard	\$678,600
Service Standard	\$271

D.C. Amount (before deductions)	10 Year
Forecast Population	2,694
\$ per Capita	\$271
Eligible Amount	\$731,259



**City of Thorold  
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
Ford Pickup F-150	4	4	4	4	4	4	4	4	4	4	\$42,500
Ford Dump F-350 CC	2	2	2	2	2	2	2	2	2	2	\$59,600
Ford Crew Cab - F-250/F-350	2	2	2	2	2	2	2	2	2	2	\$42,500
Dodge Pickup - 1500	1	1	1	1	1	1	1	1	1	1	\$42,500
New Holland Tractor	1	1	1	1	1	1	1	1	1	1	\$59,600
John Deere Tractor 2155/5325	2	2	2	2	2	2	2	2	2	2	\$59,600
Strongco 580M Backhoe	1	1	1	1	1	1	1	1	1	1	\$170,000
Kubota GF1800	1	1	-	-	-	-	-	-	-	-	\$29,600
Kubota F2880	1	1	1	2	2	2	2	2	2	2	\$44,200
Kubota F2560/F2560E	5	5	5	5	5	5	5	5	5	5	\$44,200
John Deere Gator	2	2	2	2	2	2	2	2	2	2	\$23,800
Land Pride 3Pt Hitch	2	2	2	2	2	2	2	2	2	2	\$6,500
Auger 3 Pt Hitch	1	1	1	1	1	1	1	1	1	1	\$1,700
Aerator 3 Pt Hitch	1	1	1	1	1	1	1	1	1	1	\$6,000
Snow Blower (Kabota)	1	1	1	1	1	1	1	1	1	1	\$5,100
Scarifier	1	1	1	1	1	1	1	1	1	1	\$10,000
Kubota Sweeping Attachment	1	1	1	1	1	1	1	1	1	1	\$7,400
Trac Vac New	2	2	2	2	2	2	2	2	2	2	\$6,800
Dodge Pickup	1	1	1	1	1	1	1	1	1	1	\$42,500
Olympia - Ice Resurfacers	2	2	2	2	2	2	2	2	2	2	\$135,900
Score Clock (New Arena)	1	1	1	1	1	1	1	1	1	1	\$42,500
Score Clock (Old Arena)	1	1	1	1	1	1	1	1	1	1	\$25,500
Ice Edger	2	2	2	2	2	2	2	2	2	2	\$3,800
GM Pickup	-	-	-	1	1	1	1	1	1	1	\$28,400
Mowers	-	-	-	-	-	-	-	-	-	2	\$40,000
Trailers	2	2	2	2	2	2	2	2	2	2	\$15,000
<b>Total</b>	<b>40</b>	<b>40</b>	<b>39</b>	<b>41</b>	<b>41</b>	<b>41</b>	<b>41</b>	<b>41</b>	<b>41</b>	<b>43</b>	

Population	18,072	17,976	17,931	18,071	18,169	18,316	18,691	18,801	19,155	19,665
Per Capita Standard	0.0022	0.0022	0.0022	0.0023	0.0023	0.0022	0.0022	0.0022	0.0021	0.0022

10 Year Average	2009-2018
Quantity Standard	0.0022
Quality Standard	\$39,841
Service Standard	\$88

D.C. Amount (before deductions)	10 Year
Forecast Population	2,694
\$ per Capita	\$88
Eligible Amount	\$236,129



**City of Thorold  
Service Standard Calculation Sheet**

Service: Indoor Recreation Facilities  
Unit Measure: ft<sup>2</sup> of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Arena #1	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	\$245	\$281
Arena #2	28,500	28,500	28,500	28,500	28,500	28,500	28,500	28,500	28,500	28,500	\$245	\$281
Senior's Centre	5,750	5,750	5,750	5,750	5,750	5,750	5,750	5,750	5,750	5,750	\$202	\$234
Allenburg Community Centre	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	\$202	\$234
Darlene Ryan Community Centre	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	\$202	\$234
Community Activities Office	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$202	\$234
Parks Building - Storage - Carleton St.	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	-	\$153	\$180
Parks Quonset Hut	-	-	-	-	-	-	-	-	9,600	9,600	\$63	\$80
<b>Total</b>	<b>85,750</b>	<b>85,750</b>	<b>85,750</b>	<b>85,750</b>	<b>85,750</b>	<b>85,750</b>	<b>85,750</b>	<b>85,750</b>	<b>95,350</b>	<b>94,350</b>		

Population	18,072	17,976	17,931	18,071	18,169	18,316	18,691	18,801	19,155	19,665
Per Capita Standard	4.7449	4.7702	4.7822	4.7452	4.7196	4.6817	4.5878	4.5609	4.9778	4.7979

10 Year Average	2009-2018
Quantity Standard	4.7368
Quality Standard	\$266
Service Standard	\$1,262

D.C. Amount (before deductions)	10 Year
Forecast Population	2,694
\$ per Capita	\$1,262
Eligible Amount	\$3,400,663





**City of Thorold  
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Books	82,515	82,903	82,183	81,262	77,995	68,170	73,968	80,185	81,614	76,921	\$31
Periodicals	910	910	934	922	922	722	643	734	643	724	\$11
CDs, Videos, Talking Books, Cassettes, DVD	3,365	3,559	3,570	3,727	4,251	4,454	4,846	4,950	5,346	5,482	\$45
CD-Roms, Microfilms	81	81	74	72	61	42	42	42	42	42	\$45
Ebooks	-	-	105	207	336	370	542	207	743	341	\$60
Video Games	54	62	87	88	101	237	248	135	236	178	\$60
Eresources (dollars spent) <sup>1</sup>	1	1	1	1	1	1	1	1	1	1	\$10,000
Makerspace	-	3	3	3	8	8	18	21	21	76	\$170
<b>Total</b>	<b>86,926</b>	<b>87,519</b>	<b>86,957</b>	<b>86,282</b>	<b>83,675</b>	<b>74,004</b>	<b>80,308</b>	<b>86,275</b>	<b>88,646</b>	<b>83,765</b>	

Population	18,072	17,976	17,931	18,071	18,169	18,316	18,691	18,801	19,155	19,665
Per Capita Standard	4.81	4.87	4.85	4.77	4.61	4.04	4.30	4.59	4.63	4.26

10 Year Average	2009-2018
Quantity Standard	4.5722
Quality Standard	\$31.82
Service Standard	\$145

<sup>1</sup> Represents a variety of electronic subscriptions such as ebooks, emagazines, etc.

D.C. Amount (before deductions)	10 Year
Forecast Population	2,694
\$ per Capita	\$145
Eligible Amount	\$391,896





# Appendix C

## Long-Term Capital and Operating Cost Examination





# Appendix C: Long-Term Capital and Operating Cost Examination

## City of Thorold Annual Capital and Operating Cost Impact

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

In addition to the operational impacts, over time the initial capital projects will require replacement. This replacement of capital is often referred to as life cycle cost. By definition, life cycle costs are all the costs which are incurred during the life of a physical asset, from the time its acquisition is first considered, to the time it is taken out of service for disposal or redeployment. The method selected for life cycle costing is the sinking fund method which provides that money will be contributed annually and invested, so that those funds will grow over time to equal the amount required for future replacement. The following factors were utilized to calculate the annual replacement cost of the capital projects (annual contribution = factor X capital asset cost) and are based on an annual growth rate of 2% (net of inflation) over the average useful life of the asset:

Asset	Lifecycle Cost Factors	
	Average Useful Life	Factor
Watermains	75	0.00586
Wastewater Sewers	75	0.00586
Roads	50	0.01182
Public Works Fleet	7	0.13451
Parking	40	0.01656
Facilities	40	0.01656
Fire Vehicles	15	0.05783
Equipment	10	0.09133
Library Materials	15	0.05783
Parkland	20	0.04116



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

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

SERVICE	GROSS COST LESS BENEFIT TO EXISTING	ANNUAL LIFECYCLE EXPENDITURES	ANNUAL OPERATING EXPENDITURES	TOTAL ANNUAL EXPENDITURES
<b>1. Wastewater Services - Rolling Meadows</b>				
1.1 Allanburg Sewer Oversizing & Sewer Extension	912,681	53,748	53,027	106,775
<b>2. Wastewater Services</b>				
2.1 Sewers	1,156,716	114,206	477,239	591,445
<b>3. Water Services</b>				
3.1 Storage and distribution systems	1,501,607	121,460	187,383	308,843
<b>4. Services Related to a Highway</b>				
4.1 Roads	16,002,510	850,108	42,777	892,885
4.2 Depots and Domes	2,100,000	113,413	5,614	119,027
4.3 PW Rolling Stock	485,000	80,235	1,296	81,531
<b>5. Fire Protection Services</b>				
5.1 Fire facilities	4,499,993	245,346	379,926	625,272
5.2 Fire vehicles	1,440,000	133,498	121,576	255,074
5.3 Small equipment and gear	1,267,200	155,517	106,987	262,504
<b>6. Municipal Parking</b>				
6.1 Municipal Parking Spaces	180,000	10,803	26,142	36,945
<b>7. Outdoor Recreation Services</b>				
7.1 Parkland development, amenities & trails	2,316,799	251,620	92,942	344,562
7.2 Parks vehicles and equipment	230,000	38,051	9,227	47,278
<b>8. Indoor Recreation Services</b>				
8.1 Recreation facilities	3,345,656	243,024	225,226	468,250
<b>9. Library Services</b>				
9.1 Library facilities	455,968	56,580	52,621	109,201
9.2 Library materials	390,000	35,140	45,008	80,148
<b>10. Administration</b>				
10.1 Studies	1,061,784		-	-
<b>Total</b>	<b>37,345,914</b>	<b>2,502,749</b>	<b>1,826,991</b>	<b>4,329,740</b>



# Appendix D

## D.C. Reserve Fund Policy





# Appendix D: D.C. Reserve Fund Policy

## D.1 Legislative Requirements

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

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

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

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

- opening balance;
- closing balance;



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

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

## **D.2 D.C. Reserve Fund Application**

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

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

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



**Figure 1**  
**City of Thorold**  
**Annual Treasurer's Statement of Development Charge Reserve Funds**

Description	Services to which the Development Charge Relates										Total	
	Non-Discounted Services					Discounted Services						
	Services Related to a Highway	Water Services	Wastewater Services	Wastewater Services - Rolling Meadows	Fire Protection Services	Parks and Recreation	#REF!	Library Services	Administration	Municipal Parking Spaces		
<b>Opening Balance, January 1, _____</b>												<b>0</b>
<b>Plus:</b>												
Development Charge Collections												0
Accrued Interest												0
Repayment of Monies Borrowed from Fund and Associated Interest <sup>1</sup>												0
<b>Sub-Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Less:</b>												
Amount Transferred to Capital (or Other) Funds <sup>2</sup>												0
Amounts Refunded												0
Amounts Loaned to Other D.C. Service Category for Interim Financing												0
Credits <sup>3</sup>												0
<b>Sub-Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Closing Balance, December 31, _____</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Source of funds used to repay the D.C. reserve fund

<sup>2</sup> See Attachment 1 for details

<sup>3</sup> See Attachment 2 for details

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



**Attachment 1  
City of Thorold**

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

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



**Attachment 2**  
**City of Thorold**  
**Statement of Credit Holder Transactions**

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





# Appendix E

## Local Service Policy





# Appendix E: Local Service Policy

## City of Thorold General Policy Guidelines on Development Charge and Local Service Funding for Road Related, Stormwater Management, Water and Sanitary Sewer Works

The following guidelines set out in general terms the size and nature of engineered infrastructure that is included in the City's development charge study, as a project to be financed at least in part with development charges, versus infrastructure that is considered to be a local service, meaning that it is the responsibility of the developer, pursuant to a subdivision or other development agreement.

### 1. Roads

For the purpose of interpreting this guideline the following meanings will be used.

Collector roads are designed for the movement of light to moderate volumes of local traffic, at moderate speeds, to arterial roads or for the distribution of traffic to local roads. Right-of-way widths shall generally be 20 metres.

Local roads are designed to accommodate low volumes of traffic traveling at low speeds. They provide primarily for land access to abutting properties and shall be designed to discourage the movement of through traffic.

Arterial roads are intended to carry medium to large volumes of all types of traffic moving at medium speeds. These roads serve the major traffic flows between the principal areas of traffic generation. Rights-of-way shall generally be from 20 to 26 metres.

- 1.1 Collector roads Internal to development – Direct developer responsibility under s. 59 of the D.C.A. (as a local service).
- 1.2 Local roads and entrances to development – Direct developer responsibility under s. 59 of the D.C.A. as a local service.



- 1.3 Collector roads and arterial roads external to development – Direct developer responsibility if the works are within the area to which the plan relates and therefore a local service under s. 59 of the D.C.A., otherwise include in D.C. calculation to the extent permitted under s. 5 (1) of the D.C.A.
- 1.4 Stream crossing and rail crossing road works, excluding underground utilities but including all other works within lands to be dedicated to the City or rail corridors – Include in the D.C. calculation to the extent permitted under s. 5 (1) of the D.C.A.

## **2. Traffic Signals**

- 2.1 Traffic signalization within or external to a development – Include in the D.C. calculation to the extent permitted under s. 5 (1) of the D.C.A., excluding on Regional roads which are a Regional responsibility.

## **3. Intersection Improvements**

- 3.1 New roads (collector and arterial) and road (collector and arterial) improvements – Include as part of road costing noted in Item 1, to the limits of right of way.
- 3.2 Intersection improvements within specific developments and all works necessary to connect to entrances (private and specific subdivision) to the roadway – Direct developer responsibility under s. 59 of the D.C.A. as a local service.
- 3.3 Intersections with Regional roads are a Regional responsibility.
- 3.4 Intersections with provincial highways – Include in the D.C. calculation to the extent that they are a City responsibility.
- 3.5 Intersection improvements on other roads due to development growth increasing traffic – Include in the D.C. calculation.



#### **4. Streetlights**

- 4.1 Streetlights on external roads – Linked to collector road funding source in item 1.
- 4.2 Streetlights within specific developments – Direct developer responsibility under s. 59 of the D.C.A. as a local service.

#### **5. Sidewalks**

- 5.1 Sidewalks on M.T.O. and regional roads – Direct developer responsibility under s. 59 of the D.C.A. as a local service.
- 5.2 Sidewalks on area municipal roads – Linked to collector road funding source in item 1.
- 5.3 Other sidewalks external to development which are a local service within the area to which the plan relates – Direct developer responsibility as a local service provision under s. 59 of the D.C.A.

#### **6. Bike Routes/Bike Lanes/Bike Paths/Multi-Use Trails/Naturalized Walkways**

- 6.1 Bike routes and bike lanes, within road allowance, are considered to be part of the road construction and will be linked to the Roads funding source in item 1.
- 6.2 Bike paths outside road allowances – Direct developer responsibility under s. 59 of the D.C.A. as a local service.
- 6.3 Multi-use trails/naturalized walkways/trail bridges/underpasses and associated works external to development – Include in the area municipal D.C. calculation consistent with the service standard provisions of the D.C.A., s. 5 (1).
- 6.4 Multi-use trails/naturalized walkways/trail bridges/underpasses and associated works internal to development – Direct developer responsibility under s. 59 of the D.C.A. (as a local service).



## **7. Noise Abatement Measures**

- 7.1 Internal to a development – Direct developer responsibility under s. 59 of the D.C.A. as a local service.
- 7.2 External to a Development, but required and related to, or to mitigate impacts from the development of the subject lands – Direct developer responsibility under s. 59 of the D.C.A. as a local service.

## **8. Land Acquisition for Road Allowances**

- 8.1 Land acquisition for arterial roads – Dedication under the Planning Act subdivision provisions (s. 51) through development lands; in areas with limited or no development – Include in the regional or City D.C. calculation to the extent eligible.
- 8.2 Land acquisition for collector roads – Dedication under the Planning Act subdivision provisions (s. 51) through development lands (up to 26 metre right of way); in areas with no limited or no development – Include in the D.C. calculation to the extent eligible.
- 8.3 Land acquisition for grade separations (beyond normal dedication requirements) – Include in the D.C. calculation to the extent eligible.

## **9. Land Acquisition for Easements**

- 9.1 Easement costs external to subdivisions shall be included in the D.C. calculation.

## **10. Stormwater Management (S.W.M.) Facilities**

- 10.1 The costs of stormwater management facilities internal to a subdivision and related to a plan of subdivision are considered to be a local service under the D.C.A. and the associated costs are not included in the D.C. calculation.
- 10.2 Local S.W.M. facilities would typically include:
  - 10.2.1 Stormwater management facilities servicing local drainage areas.



10.2.2 Storm sewer oversizing associated with local drainage areas

10.2.3 Storm sewer works on existing roads.

## **11. Water**

- 11.1 Major external trunk watermains, being those with sizes over 300 mm are to be included in the D.C. calculation. Watermains 300 mm and under are deemed to be a local service and are to be a direct developer responsibility under s. 59 of the D.C.A.
- 11.2 Major pumping stations are to be included in the D.C. calculation.
- 11.3 Marginal costs of waterworks (watermain, valves, etc.) internal to a subdivision are to be included in the D.C. calculation for those costs in above 300 mm nominal diameter. Costs for 300 mm and under are deemed to be a local service and a direct developer responsibility under s. 59 of the D.C.A.
- 11.4 Connections to trunk mains and minor pumping stations to service specific areas are to be a direct developer responsibility under s. 59 of the D.C.A. as a local service. Minor pumping stations are those that service a single subdivision, or that service adjacent or adjoining subdivisions.

## **12. Sanitary Sewer**

- 12.1 Major external trunk sanitary sewers, being those with sizes over 300 mm, are to be included in the D.C. calculation. Sewer mains 300 mm and under are deemed to be a local service and a direct developer responsibility under s. 59 of the D.C.A.
- 12.2 Major pumping stations are to be included in the D.C. calculation.
- 12.3 Marginal costs of sanitary sewer works within the subdivision, which benefits upstream developers, are to be included in the D.C. calculation above 300 mm nominal diameter and depth of 5 metres or greater.
- 12.4 Connections to trunk mains and minor pumping stations to service specific areas are to be a direct developer responsibility under s. 59 of the D.C.A.



as a local service. Minor pumping stations are those that service a single subdivision, or that service adjacent or adjoining subdivisions.

- 12.5 Combined Sewage Overflow (C.S.O.) tanks to service a single subdivision, or that service adjacent or adjoining subdivisions are to be a direct developer responsibility under s. 59 of the D.C.A. as a local service. Where a C.S.O. benefits more than one landowner, the City may consider including the cost in an area-specific charge.
- 12.6 Upgrades to, or construction of, temporary sanitary pumping stations and/or temporary C.S.O. tanks are considered to be a direct developer responsibility under s. 59 of the D.C.A. as a local service.

### **13. Parkland Development**

- 13.1 Preparation of the park plan, retaining necessary consultants to prepare design and grading plans for the park, prior to development are the owner's responsibility as a local service, and part of the condition of s. 51 and 53 of the Planning Act agreements.
- 13.2 Stripping and stockpiling, leveling, top soiling, fencing, seeding and stormwater servicing (consistent with the plan), and provision of services to the lot line – Direct developer responsibility as a local service, and part of the condition of s. 51 and 53 of the Planning Act agreements.
- 13.3 The City also requires the owner to dedicate parkland or provide cash-in-lieu, consistent with the Planning Act provisions.
- 13.4 All the above costs are deemed a direct responsibility of the developer and have not been included in the D.C. calculation.
- 13.5 All other components of parkland development, including parking, park furniture, signage, landscaping, walkways/trails, fields, diamonds, playground equipment, lighting, irrigation and field houses, etc. – Included in the D.C. calculation.



# Appendix F

## Asset Management Plan





## Appendix F: Asset Management Plan

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

**The asset management plan shall,**

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

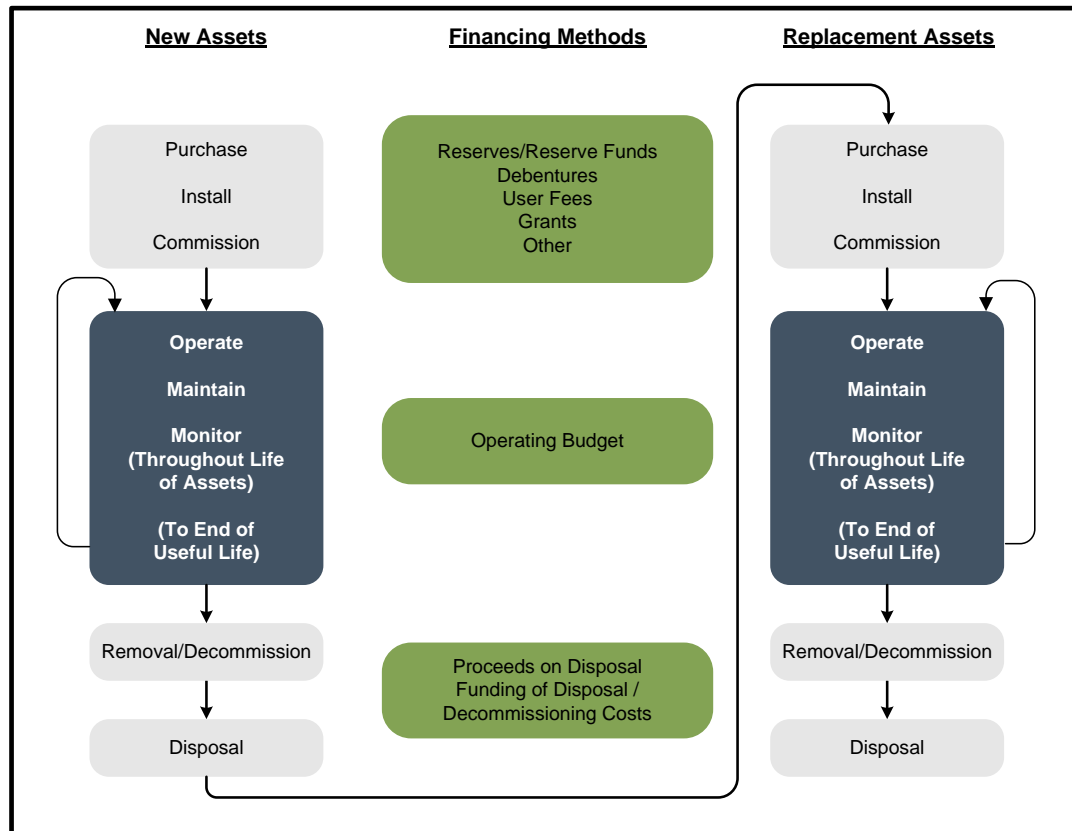
In regard to the above, section 8 of the Regulations was amended to include subsections (2), (3) and (4) which set out for specific detailed requirements for transit (only). For all services except transit, there are no prescribed requirements at this time thus requiring the municipality to define the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

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

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



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



In 2012, the Province developed Building Together: Guide for municipal asset management plans which outlines the key elements for an asset management plan (A.M.P.), as follows:

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

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



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

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

Commensurate with the above, the City prepared an Asset Management Plan in 2013 for its existing assets however, did not take into account future growth-related assets. As a result, the asset management requirement for the D.C. must be undertaken in the absence of this information.

In recognition to the schematic above, the following table (presented in 2019 \$) has been developed to provide the annualized expenditures and revenues associated with new growth. Note that the D.C.A. does not require an analysis of the non-D.C. capital needs or their associated operating costs so these are omitted from the table below. As well, as all capital costs included in the D.C. eligible capital costs are not included in the City's Asset Management Plan, the present infrastructure gap and associated funding plan have not been considered at this time. Hence the following does not represent a fiscal impact assessment (including future tax/rate increases) but provides insight into the potential affordability of the new assets:

1. The non-D.C. recoverable portion of the projects which will require financing from municipal financial resources (i.e. taxation, rates, fees, etc.). This amount has been presented on an annual debt charge amount based on 20-year financing.
2. Lifecycle costs for the 2019 D.C. capital works have been presented based on a sinking fund basis. The assets have been considered over their estimated useful lives.
3. Incremental operating costs for the D.C. services (only) have been included.
4. The resultant total annualized expenditures are \$5.12 million.
5. Consideration was given to the potential new taxation and user fee revenues which will be generated as a result of new growth. These revenues will be



available to finance the expenditures above. The new operating revenues are \$3.35 million. This amount, totalled with the existing operating revenues of \$28.49 million, provide annual revenues of \$31.84 million by the end of the period.

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



City of Thorold  
Asset Management – Future Expenditures and Associated Revenues  
2019\$

	2031 (Total)
<b>Expenditures (Annualized)</b>	
Annual Debt Payment on Non-Growth Related Capital <sup>1</sup> (2014 D.C. and 2016 updates)	785,424
Annual Debt Payment on Post Period Capital <sup>2</sup>	974,589
Annual Lifecycle - Town Wide Services	
Annual Lifecycle - Area Specific Services <sup>3</sup>	
<b>Annual Lifecycle<sup>3</sup></b>	<b>\$2,502,749</b>
<b>Incremental Operating Costs (for D.C. Services)</b>	<b>\$1,826,991</b>
<b>Total Expenditures</b>	<b>\$5,115,165</b>
<b>Revenue (Annualized)</b>	
Total Existing Revenue <sup>4</sup>	\$28,494,517
Incremental Tax and Non-Tax Revenue (User Fees, Fines, Licences, etc.)	\$3,350,415
<b>Total Revenues</b>	<b>\$31,844,932</b>

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

<sup>2</sup> Interim Debt Financing for Post Period Benefit

<sup>3</sup> All infrastructure costs included in Area Specific by-laws have been included

<sup>4</sup> As per Sch. 10 of FIR





# Appendix G

## Proposed D.C. By-law





# Appendix G: Proposed D.C. By-law

## CORPORATION OF THE CITY OF THOROLD

### BY-LAW NO. 46-2019

#### BEING A BY-LAW TO ESTABLISH DEVELOPMENT CHARGES FOR

#### THE CITY OF THOROLD

**WHEREAS** the Development Charges Act, 1997, S.O. 1997, c. 27 (the "Act") provides that the council of a municipality may by By-law impose development charges against land to pay for increased capital costs required because of increased needs for services;

**AND WHEREAS** a development charge background study has been completed in March 21, 2019 in accordance with the section 10 of the Act;

**AND WHEREAS** the Council of the City of Thorold has given notice and held a public meeting on April 16, 2019 in accordance with the Act and the regulations thereto;

**AND WHEREAS** Council, on May 21, 2019 adopted report \_\_\_, thereby indicating that it intends to ensure that the increase in the need for services attributable to the anticipated development will be met, subject to sufficient development charge revenues being generated and other municipal affordability criteria being met;

**AND WHEREAS** Council determined that no further public meetings were required under section 12 of the Act;

**NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE CITY OF THOROLD ENACTS AS FOLLOWS:**

#### Definitions

1. In this By-law,

**"Act"** means the *Development Charges Act, 1997*, S.O. 1997, c. 27;



“**agricultural use**” means the growing of crops, including nursery, biomass, and horticultural crops; raising of livestock; raising of other animals for food, fur or fibre, including poultry and fish; aquaculture; apiaries; agro-forestry; maple syrup production; and associated on-farm buildings and structures located on the same lot, including, but not limited to livestock facilities and manure storage; but shall not include vermiculture, and retail sales activities (such as but not limited to restaurants, banquet facilities, hospitality facilities and gift shops);

“**air-supported structure**” means an air supported structure as defined in the Building Code Act;

“**apartment**” means a building consisting of more than one dwelling unit with a private bathroom and kitchen facilities in each dwelling unit, which includes a stacked townhouse and duplex, but does not include a back to back townhouse, single detached dwelling, a semi-detached dwelling, a group home, a lodging house, a special care/special dwelling, or a multiple dwelling;

“**back to back townhouse**” means a building containing four or more dwelling units separated vertically by a common wall, including a rear common wall, that do not have rear yard;

“**board of education**” means a board of education as specified in the Education Act, namely a French-language and/or English-language, public or separate school board;

“**building**” means a structure, whether permanent or temporary, having a roof supported by columns or walls or supported directly on the foundation and used for accommodation, shelter or storage of people, animals or goods but shall not include a fence, trailer, truck camper, motor home, or tent;

“**Building Code Act**” means the Building Code Act, S.O. 1992, chapter 23, as amended by S.O. 1997, c.24 & S.O. 1997, c.30 Schedule B and any subsequent amendments thereto, to any successor legislation thereto;

“**City**” means The Corporation of the City of Thorold;

“**commercial**” means any non-residential development that is not “industrial” or “institutional” as defined in this By-law;



“**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 total floor area, and includes redevelopment;

“**development charge**” means a charge imposed with respect to growth-related net capital costs against land under this By-law;

“**duplex**” means a building that is divided horizontally into two (2) dwelling units above grade each of which has an independent entrance either directly to the exterior or through a common vestibule and neither of the units is a second dwelling unit;

“**dwelling unit**” means a room or suite of rooms, occupied or capable of being occupied as a single independent and separate housekeeping establishment;

“**dwelling semi-detached**” means a building divided vertically into two (2) dwelling units by a common wall extending from the base of the foundation to the roof, a minimum height of one storey above grade and extending horizontally the entire depth of the building;

“**dwelling single detached**” means a building containing not more than one (1) dwelling unit;

“**existing industrial building**” means an industrial use building that has existed on a site when the first building or buildings were constructed on a vacant site pursuant to site plan approval under section 41 of the *Planning Act*;

“**farm building**” means a farm building as defined in the Building Code, being a regulation currently in force from time to time under the provisions of the *Building Code Act*;

“**floor**” includes a paved, concrete, wooden, gravel, or dirt floor;

“**grade finished**” means the average elevation of the surface ground adjoining a building or structure at all exterior walls;

“**group home**” means a residential building or the residential portion of a mixed-use building containing a single housekeeping unit which may or may not be



supervised on a 24-hour basis on site by agency staff on a shift rotation basis, and funded wholly or in part by any government or its agency, or by public subscription or donation, or by any combination thereof and licensed, approved or supervised by the Province of Ontario for the accommodation of persons under any general or special act and amendments or replacements thereto. A group home may contain an office provided that the office is used only for the operation of the group home in which it is located;

**“hospice”** means a building or portion of a mixed-use building designed and intended to provide palliative care and emotional support to the terminally ill in a home or homelike setting so that quality of life is maintained and family members may be active participants in care;

**“industrial use”** means use or intended use or designed for or in connection with purposes:

- (a) including (but not limited to):
  - (i) manufacturing, producing or processing of raw goods or materials and;
  - (ii) warehousing or distribution in connection with manufacturing, producing or processing of raw goods or materials,
  - (iii) research or development in connection with manufacturing, producing or processing of raw goods or materials;
  - (iv) storage of anything used or produced in manufacturing producing or processing by the manufacturer, producer or processor at the site where the manufacturing, producing or processing takes place;
  - (v) office or administrative use accessory to the above-mentioned activities or;
  - (vi) sale of commodities to the general public, accessory to the above-mentioned activities;
- (b) but excluding:



- (i) office or administrative use where a building or structure is used exclusively for such use, and is not attached to any building used for the purposes set out in paragraph (a) above;
- (ii) retail sales activities;

**“institutional”** means lands, buildings or structures used or designed or intended for use by an organized body, society or religious group for promoting a public or non-profit purpose and shall include, but without limiting the generality of the foregoing, places of worship and special care facilities;

**“live/work unit”** means a unit which contains separate residential and non-residential areas intended for both residential and non-residential uses concurrently, and shares a common wall or floor with direct access between the residential and non-residential areas;

**“local board”** means a public utility commission, transportation commission, public library board, board of park management, local board of health, police services board, 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 of the City or the Region;

**“lodging house”** means a building designed or intended to contain, or containing lodging units where the residents share access to common areas of the building, other than the lodging units;

**“lodging unit”** means one or more rooms located within a lodging house which:

- (a) is designed to be occupied for human habitation by one resident;
- (b) is not normally accessible to persons other than the resident without the permission of the resident; and,
- (c) may contain either cooking or sanitary facilities, but not both, for the exclusive use of the resident of the unit.

A room or suite in a hotel or motel shall not constitute a lodging unit;



“**marijuana production facilities**” means a building used, designed or intended for growth, producing, testing, destroying, storing or distribution, excluding retail sales, of medical marijuana or cannabis authorized by a license issued by the federal Minister of Health pursuant to section 25 of the Marihuana for Medical Purposes Regulations, SOR/2013-119, under the Controlled Drugs and Substances Act, S.C. 1996, c.19;

“**mezzanine**” means a mezzanine as defined in the Building Code;

“**multiple dwellings**” means a residential building consisting of three or more dwelling units attached by a vertical wall or walls and not abutting any dwelling units along a horizontal plane, includes a back to back townhouse, and does not include single-detached, semi-detached, stacked townhouse, apartments, or special care/special dwellings;

“**non-residential uses**” means land, buildings or structures or portions of any kind whatsoever, used, designed or intended to be used for other than a residential use, but includes short-stay rental use, and includes all commercial, industrial and institutional uses;

“**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, or any successor legislation;

“**protracted**” means in relation to a temporary building or structure the persistence of its construction, erection, placement on land, alteration or of an addition to it for a continuous period exceeding eight months;

“**redevelopment**” means the construction, erection or placing of one or more buildings or structures on land where all or part of a building or structure has previously been demolished on such land, or changing the use of a building or structure from residential to non-residential or from non-residential to residential;

“**Region**” means The Regional Municipality of Niagara;



“**residential uses**” means land, buildings or structures or portions thereof used, designed, or intended to be used as living accommodation for one or more individuals, but does not include such use related to short stay rental use;

“**residential**” means one or more dwelling units designed, adapted or used as a home or residence of one or more individuals, and shall include a single detached dwelling, a semi-detached dwelling, a multiple dwelling, and apartment, but not a short stay rental building;

“**services**” means services designated in this By-law including Schedule A to this By-law or in agreement under section 44 of the Act, or both;

“**short stay rental use**” means use or intended use for human habitation on a temporary basis for profit, including but not limited to hotels, motels, guest cabins, and bed and breakfasts;

“**special care facilities**” means lands, buildings or structures used or designed or intended for uses for the purpose of providing supervision, nursing care or medical treatment, which do not comprise dwelling units, that are licensed, approved or supervised under any special or general statute, and excludes the special care/special dwelling portions of the building;

“**special care/special dwelling**” means a residential portion of a special care facilities building containing two or more dwelling units, which units have a common entrance from street level:

- (a) Where the occupants have the right to use in common, halls, stairs, yards, common rooms, and accessory buildings;
- (b) Which may or may not have exclusive sanitary and/or culinary facilities;
- (c) That is designed to accommodate persons with specific needs, including, but not limited to, independent permanent living arrangements;
- (d) Where support services such as meal preparation, grocery shopping, laundry, housekeeping, nursing, respite care and attendant services are provided at various levels; and



- (e) Includes, but is not limited to, retirement houses or lodges, nursing homes, group homes and hospices;

“**stacked townhouse**” means a building containing four or more dwelling units where each dwelling unit is separated horizontally and vertically from another dwelling unit by a common wall or floor;

“**temporary**” means for a fixed period of time with the intent to discontinue such use upon the expiration of the time period;

“**total floor area**” means the sum total of the total areas of the floors in a building or structure, whether at, above, or below-grade, measured between the exterior faces of the exterior walls of the building or structure or from the centre line of a common wall separating two uses, or from the outside edge of a floor where the outside edge of the floor does not meet an exterior or common wall, and:

- (a) includes the floor area of a mezzanine and air-supported structure and the space occupied by interior walls partitions; and
- (b) excludes any parts of the building or structure used for mechanical equipment related to the operation or maintenance of the building or structure, stairwells, elevators, washrooms, and the parking and loading of vehicles, and;
- (c) where a building does not have any walls, the total floor area shall be the sum total of the area of land directly beneath the roof of the building and the total areas of the floors in the building or structure.

## Rules

- 2. For the purpose of complying with section 6 of the Act:
  - (a) the area to which this By-law applies shall be the area described in section 3 of this By-law;
  - (b) the rules developed under paragraph 9 of subsection 5 (1) of the Act for determining if a development charge is payable in any particular case and for determining the amount of the charge shall be as set forth in sections 4 through 19, inclusive and section 26 of this By-law;



- (c) the exemptions provided for by such rules shall be the exemptions set forth in sections 20 through 27, inclusive of this By-law, the indexing of charges shall be in accordance with section 17 of this By-law
- (d) the rules developed under paragraph 10 of subsection 5 (1) of the Act for phasing in of development charges shall be as set forth in section 18 of this By-law and
- (e) the redevelopment of land shall be in accordance with the rules set forth in section 27 of this By-law.

### Lands Affected

- 3. This By-law applies to all lands in the geographic area of the City.

### Designation of Services

- 4. It is hereby declared by Council that all development of land within the area to which this By-law applies will increase the need for services.
- 5. Development charges shall be imposed under this By-law, and Reserve Funds established for the following categories of services to pay for the increased capital costs required because of increased needs for services arising from development:
  - (a) Administration;
  - (b) Library Services;
  - (c) Fire Protection Services;
  - (d) Parks and Recreation;
  - (e) Services Related to a Highway;
  - (f) Municipal Parking Spaces;
  - (g) Water;
  - (h) Wastewater; and



- (i) Rolling Meadows - Wastewater.
6. The development charge applicable to a development as determined under this By-law shall apply without regard to the services required or used by an individual development for services noted in section 5 (a) to 5 (i)

#### Approvals for Development

7. Development charges shall be imposed against all lands, buildings or structures within the area to which this By-law applies if the development of such lands, buildings or structures requires any of the following approvals:
- (a) the passing of a zoning By-law or of an amendment thereto 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*, or;
  - (g) the issuing of a permit under the *Building Code Act, 1992* in relation to a building or structure.
8. No more than one development charge for each service designated in section 5 shall be imposed upon any lands, buildings or structures to which this By-law applies even though two or more of the actions described in section 7 are required before the lands, buildings or structure can be developed.
9. Notwithstanding section 13 if two or more of the actions described in section 7 occur at different times, additional development charges shall be imposed in respect of any increased or additional development permitted by that action.
10. Where a development requires an approval described in section 7 after the issuance of a building permit and no development charge has been paid, then



the development charge shall be paid prior to the granting of the approval required under section 7.

11. If a development does not require a building permit but does require one or more of the approvals described in section 7, then the development charge shall nonetheless be payable in respect of any increased or additional development permitted by such approval required for the increased or additional development being granted.
12. Nothing in this By-law prevents Council from requiring, as a condition of an agreement under sections 41, 51 or 53 of the Planning Act, that the owner, at his or her own expense, install such local services related to a plan of subdivision or within the area to which the plan relates, as council may require, or that the owner pay for local connections to storm drainage facilities, watermains and sewer mains, installed at the owner's expense, or administrative, processing, or inspection fees.

#### Calculation of Development Charges

13. The development charge with respect to the use of any land, buildings or structures shall be calculated as follows:
  - (a) in the case of residential development, or the residential portion of a mixed-use development, based upon the number and type of dwelling units; or
  - (b) in the case of non-residential development, or the non-residential portion of a mixed-use development, based upon the total floor area of such development.

#### Amount of Charge – Residential

14. The development charges described in Schedule B to this By-law shall be imposed on a City-wide basis for all 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 component of the mixed-use building or structure, according to the type of residential use.



- (a) With respect to the Neighbourhood of the Rolling Meadows Secondary Plan area (as outlined in Schedule D), the area-specific development charges described in Schedule C to this By-law shall be imposed to all residential uses and are in addition to the City-Wide charges described in Schedule B.

#### Amount of Charge – Non-Residential – Commercial/Institutional/Industrial

15. The development charges described in Schedule B to this By-law shall be imposed on commercial/institutional/industrial uses of lands, buildings or structures and, in the case of a mixed-use building or structure, on the commercial/institutional/industrial components of the mixed-use building or structure, and calculated with respect to each of the services according to the total floor area of the commercial/institutional/industrial use.
  - (a) With respect to the Neighbourhood of the Rolling Meadows Secondary Plan area (as outlined in Schedule D), the area-specific development charges described in Schedule C to this By-law shall be imposed to all non-residential uses and are in addition to the City-Wide charges described in Schedule B.

#### Indexing of Development Charges

16. The development charges set out in Schedules B and C, attached hereto shall be adjusted without amendment to this By-law annually on January 1<sup>st</sup> of each year, commencing on January 1, 2020, in accordance with the Act.

#### Phasing, Timing of Calculation and Payment

17.
  - (1) Except as set out in sub-paragraphs (4) and (5) below, the development charges set out in this By-law are not subject to phasing in and are payable in full, subject to the exemptions and credits herein from the effective date of this By-law.
  - (2) Subject to section 26 (with respect to redevelopment) and subsection (3), the development charge shall be calculated as of, and shall be payable, on the date the first building permit is issued in relation to a building or structure on land to which the development charge applies.



- (3) Notwithstanding subsection (2) the City may require an owner to enter into an agreement, including the provision of security for the owner's obligations under agreement, pursuant to section 26 of the Act providing for all or part of a development charge to be paid before or after it otherwise would be payable. The terms of such agreement shall then prevail over the provision of this By-law.
- (4) Notwithstanding subsection (1) the development charges imposed on industrial uses of lands, buildings or structures shall be phased and payable in the amounts applicable at the date of payment as set out in the applicable column of Schedule C to this By-law.
- (5) Notwithstanding subsection (1) the development charges imposed on non-residential, excluding industrial, uses of lands, buildings or structures shall be phased and payable in the amounts applicable at the date of payment as set out in the applicable column of Schedule C to this By-law.

#### Payment by Money or the Provision of Services

18. (1) Payment of development charges shall be made to the City by cash or by certified cheque.
- (2) In the alternative to payment by the means provided in subsection (1), the City may, by an agreement entered into with the owner, accept the provision of services in full or partial satisfaction of the development charge otherwise payable provided that:
  - (a) if the City and the owner cannot agree as to the reasonable cost of doing the work under subsection (2), the dispute shall be referred to Council whose decision shall be final and binding.
  - (b) if the credit exceeds the amount of the charge for the service to which the work relates,
    - (i) the excess amount shall not be credited against the charge for any other service, unless the City has so agreed in an agreement under section 38 of the Act; and



- (ii) in no event shall the City be required to make a cash payment to the credit holder.
- (3) Nothing in this By-law prevents Council from requiring, as a condition of any approval given under the Planning Act that the owner, at the owner's expense, install such local services as Council may require in accordance with the City's local services' policies in effect at the time.

#### Rules with Respect to Exemptions for Intensification of Existing Housing

19. (1) This By-law does not apply with respect to approvals related to the residential development of land, buildings or structures that would have the affect only:
- (a) of permitting the enlargement of an existing dwelling unit (that does not double the size of the dwelling);
  - (b) of creating one or two additional dwelling units in an existing single detached dwelling unit;
  - (c) of creating one additional dwelling unit in an existing semi-detached dwelling unit; or
  - (d) of creating one additional dwelling unit for any other existing residential building.

In addition to the rules in section 19(1), the intensification must take place within the existing footprint of the building.

- (2) Notwithstanding clauses (1) (b) to (d), a development charge shall be imposed with respect to the creation of one or two additional dwelling units in a dwelling, if the total floor area of the additional one or two dwelling units exceeds, the total floor area of the existing dwelling unit in clause (1) (b) and (1) (c), and the smallest existing dwelling unit in clause (1) (d).



## Rules with Respect to an Industrial Expansion Exemption

20. If a development includes the enlargement of the gross floor area of an existing industrial building, the amount of the development charge that is payable in respect of the enlargement is determined in accordance with the following:
- (a) Subject to subsection 20 (c), if the gross floor area is enlarged by 50 per cent or less of the lesser of:
    - (A) the gross floor area of the existing industrial building, or
    - (B) the gross floor area of the existing industrial building before the first enlargement for which:
      - (i) an exemption from the payment of development charges was granted, or
      - (ii) a lesser development charge than would otherwise be payable under this By-law, or predecessor thereof, was paid,

pursuant to Section 4 of the Act and this subsection,

the amount of the development charge in respect of the enlargement is zero;
  - (b) Subject to subsection 20 (c), if the gross floor area is enlarged by more than 50 per cent or less of the lesser of:
    - (A) the gross floor area of the existing industrial building, or
    - (B) the gross floor area of the existing industrial building before the first enlargement for which:
      - (i) an exemption from the payment of development charges was granted, or
      - (ii) a lesser development charge than would otherwise be payable under this By-law, or predecessor thereof, was paid,

pursuant to section 4 of the Act and this subsection,



the amount of the development charge in respect of the enlargement is the amount of the development charge that would otherwise be payable multiplied by the fraction determined as follows:

- (A) determine the amount by which the enlargement exceeds 50 per cent of the gross floor area before the first enlargement, and
  - (B) divide the amount determined under subsection (A) by the amount of the enlargement
- (c) For the purposes of calculating the extent to which the gross floor area of an existing industrial building is enlarged in subsection 20 (a) and 20 (b), the cumulative gross floor area of any previous enlargements for which:
- (A) An exemption from the payment of development charges was granted, or
  - (B) A lesser development charge than would otherwise be payable under this By-law, or predecessor thereof, was paid,
- pursuant to Section 4 of the Act and this subsection,
- shall be added to the calculation of the gross floor area of the proposed enlargement.
- (d) For the purposes of this subsection, the enlargement must not be attached to the existing industrial building by means only of a tunnel, bridge, passageway, canopy, shared below grade connection, such as a service tunnel, foundation, footing or parking facility.

### Categories of Exempt Institutions

21. (1) The following categories of institutions are hereby designated as being exempt from the payment of development charges:
- (a) buildings or structures used as hospitals governed by the *Public Hospitals Act*, R.S.O. 1990, c. P. 40;
  - (b) buildings or structures owned by and used for the purposes of the City, the Region, or their local boards;



- (c) buildings or structures used as a place of worship;
  - (d) buildings or structures owned by a board of education, and used for school purposes;
  - (e) buildings or structures, related to classrooms or administration space, owned by a college of applied arts and technology established pursuant to the Ministry of Training, Colleges and Universities Act, R.S.O. 1990, c. M.19, and used for teaching of programs of study leading to a post secondary certificate or diploma, a graduate certificate or a bachelor degree, but does not include student residences, commercial uses on site, or any other space not directly related for the purposes of education;
- (2) The exemption referred to in paragraph 21 (1) (b) does not apply to the development for residential uses of lands owned by:
- (a) the Region or any local board thereof;
  - (b) any corporation owned, controlled, or operated by the Region.

### Agricultural Uses

22. Agricultural uses as well as farm buildings and other ancillary development to an agricultural use excluding any residential, commercial or industrial uses shall be exempt from the provisions of this By-law.

### Whether Charge Payable

23. Despite the definition of residential use and non-residential use, and notwithstanding the other provisions of this By-law, a development charge shall be imposed in relation to agricultural, and eligible exempt uses as defined in section 21 of this By-law, unless:
- (a) such building or structure is owned in fee simple by the qualifying owner;
  - (b) and is actually used and occupied by said owner for the qualifying purposes of said owner.



For the purposes of this section, “qualifying” means possessing the attributes necessary to qualify for an exemption from the development charge otherwise collectable under the provisions of this By-law.

#### Temporary Buildings or Structures

24. (1) Temporary buildings or structure shall be exempt from the provisions of this By-law.
- (2) In the event that a temporary building or structure becomes protracted, it shall be deemed not to be nor ever to have been a temporary building or structure, and the development charges required to be paid under this By-law shall become payable on the date the temporary building or structure becomes protracted.
- (3) Prior to the City issuing a building permit for a temporary building or structure, the City may require an owner to enter into an agreement, including the provision of security for the owner’s obligation under the agreement, pursuant to section 27 of the Act providing for all or part of the development charge required by subsection 27 (2) to be paid after it would otherwise be payable. The terms of such agreement shall then prevail over the provisions of this By-law.

#### Rules with Respect to the Redevelopment of Land

25. (1) Where there is a redevelopment of land on which there is a conversion of space proposed, or on which there was formerly erected a building or structure that has been demolished, a credit shall be allowed against the development charge otherwise payable by the owner pursuant to this By-law for the portion of the previous building or structure still in existence that is being converted or for the portion of the building or structure that has been demolished, as the case may be, calculated by multiplying the number and type of dwelling units being converted or demolished or the non-residential total floor area being converted or demolished by the relevant development charge in effect on the date when the development charge is payable in accordance with this By-law. If the development includes the conversion from one use (the “first use”) to another use, the credit shall be based on the development charges calculated pursuant to



this By-law at the current development charge rates, that would be payable as development charges in respect of the first use.

- (2) A credit in respect of any demolition under this section shall not be given unless a building permit has been issued or a subdivision agreement has been entered into with the City for the development within 5 years from the date the demolition permit was issued.
- (3) The amount of any credit hereunder shall not exceed, in total, the amount of the development charges otherwise payable with respect to the development.

#### Interest

26. The City shall pay interest on a refund under subsection 18(3), (5) and 25(2) of the Development Charges Act, 1997 at a rate equal to the Bank of Canada rate on the date this By-law comes into force.

#### Front-Ending Agreements

27. The City may enter into agreements under section 44 of the Act.

#### Schedules

28. The following Schedules to this By-law form an integral part of this By-law.

Schedule A Designated Municipal Services under this By-law

Schedule B Residential and Non-residential City-Wide Development Charges

Schedule C Area-Specific Development Charges for Rolling Meadows

Schedule D Rolling Meadows Secondary Plan Area Boundary Map

#### By-law Registration

29. A certified copy of this By-law may be registered in the By-law register in the Land Registry Office against all land in the City and may be registered against title to any land to which this By-law applies.



Date By-law Effective

30. This By-law comes into force on May \_\_\_\_, 2019.

Date By-law Expires

31. This By-law expires five years after the date on which it comes into force.

Repeal

32. By-law No. 74-2014 are hereby repealed on the effective date this By-law comes into force.

Headings for Reference Only

33. The headings inserted in this By-law are for convenience of reference only and shall not affect the construction or interpretation of this By-law.

Severability

34. If, for any reason, any provision, section, subsection or paragraph of this By-law is held 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 or amended, in whole or in part or dealt with in any other way.

**READ a FIRST, SECOND, AND THIRD TIME**, and **PASSED** in open Council this \_\_\_\_ day of May, 2019.

\_\_\_\_\_

**MAYOR**

\_\_\_\_\_

**CLERK**



**SCHEDULE A**  
**BY-LAW NO. 46-2019**  
**DESIGNATED MUNICIPAL SERVICES UNDER THIS BY-LAW**

**100% Eligible Services – City-Wide Services**

Services Related to a Highway

- Roads
- Traffic Signals
- Depots and Domes
- PW Rolling Stock

Fire Protection Services

- Fire Facilities
- Fire Vehicles
- Small Equipment and Gear

**100% Eligible Services – Urban Area Services**

Wastewater Services

- Sewers

Water Services

- Water

**90% Eligible Services – City Wide Services**

Municipal Parking

- Parking

Parks and Recreation

- Parkland Development, Amenities & Trails
- Park Vehicles
- Recreation Facilities

Library Services

- Library Facilities
- Library Materials

Administration

- Studies

**100% Eligible Services – Area-Specific Services**

Wastewater Services

- Rolling Meadows Sewers



**SCHEDULE B  
CITY OF THOROLD  
DEVELOPMENT CHARGE BY-LAW 46-2019  
CITY-WIDE RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES**

Service	RESIDENTIAL					NON-RESIDENTIAL
	Single and Semi-Detached Dwelling	Other Multiples	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Special Care/Special Dwelling Units	(per sq.ft. of Gross Floor Area)
<b>City Wide Services:</b>						
Services Related to a Highway	5,135	3,396	3,316	2,028	1,836	3.02
Municipal Parking Spaces	113	75	73	45	40	0.06
Fire Protection Services	2,072	1,370	1,338	818	741	1.22
Parks and Recreation	4,270	2,824	2,757	1,686	1,526	0.49
Library Services	596	394	385	235	213	0.06
Administration	673	445	435	266	241	0.38
<b>Total City Wide Services</b>	<b>12,859</b>	<b>8,504</b>	<b>8,304</b>	<b>5,078</b>	<b>4,597</b>	<b>5.23</b>
<b>Urban Services:</b>						
Wastewater Services	735	486	475	290	263	0.40
Water Services	955	632	617	377	341	0.51
<b>Total Urban Services</b>	<b>1,690</b>	<b>1,118</b>	<b>1,092</b>	<b>667</b>	<b>604</b>	<b>0.91</b>
<b>GRAND TOTAL CITY WIDE</b>	<b>12,859</b>	<b>8,504</b>	<b>8,304</b>	<b>5,078</b>	<b>4,597</b>	<b>5.23</b>
<b>GRAND TOTAL CITY WIDE + URBAN AREA</b>	<b>14,549</b>	<b>9,622</b>	<b>9,396</b>	<b>5,745</b>	<b>5,201</b>	<b>6.14</b>



**SCHEDULE C**  
**CITY OF THOROLD**  
**DEVELOPMENT CHARGE BY-LAW 46-2019**  
**AREA-SPECIFIC DEVELOPMENT CHARGES – ROLLING MEADOWS WASTEWATER**

Service	RESIDENTIAL					NON-RESIDENTIAL
	Single and Semi-Detached Dwelling	Other Multiples	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Special Care/Special Dwelling Units	(per sq.ft. of Gross Floor Area)
<b>Area Specific Services:</b>						
Wastewater Services - Rolling Meadows	200	132	129	79	71	0.09



**SCHEDULE D  
CITY OF THOROLD  
DEVELOPMENT CHARGE BY-LAW 46-2019  
THE NEIGHBOURHOODS OF ROLLING MEADOWS  
SECONDARY PLAN AREA**

