



Development Charges Background Study

Town of Richmond Hill

March 26, 2019

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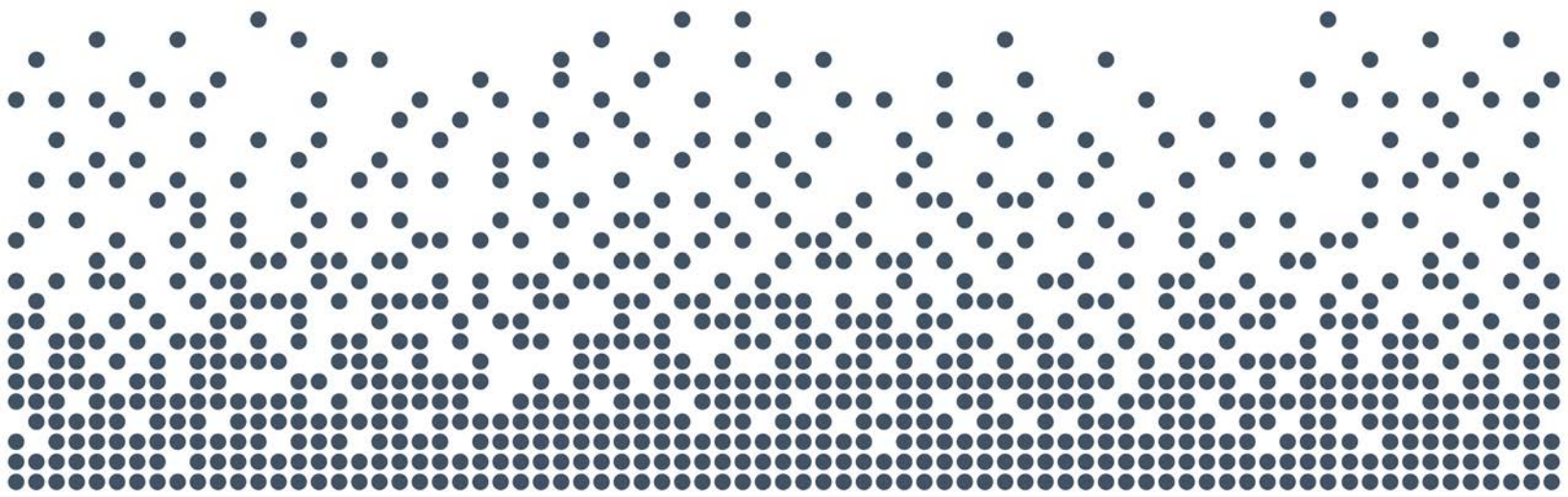
List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
A.M.P.	Asset Management Plan
D.C.	Development charge
D.C.A.	Development Charges Act, 1997, as amended
F.I.R.	Financial Information Return
F.S.W.	Floor Space per Worker
G.F.A.	Gross floor area
km	Kilometres
L.P.A.T.	Local Planning Appeal Tribunal
M.C.R.	Municipal Comprehensive Review
M.O.S.	Minutes of Settlement
N.F.P.O.W.	No Fixed Place of Work
O.M.B.	Ontario Municipal Board
O.P.	Official Plan
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.W.M.	Stormwater management
sq.ft.	square foot
sq.m.	square metre



List of Acronyms and Abbreviations (Cont'd)

T.M.P.	Transportation Master Plan
U.M.E.S.P.	Urban Master Environmental Servicing Plan



Executive Summary



Executive Summary

1. The report provided herein represents the Development Charges (D.C.) Background Study for the Town of Richmond Hill 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 Town;
 - Chapter 3 – Summary of the residential and non-residential growth forecasts for the Town;
 - Chapter 4 – Review of historic service standards and identification of future capital requirements to service growth and related deductions and allocations;
 - Chapter 5 – Calculation of the D.C.s;
 - Chapter 6 – D.C. policy recommendations and rules;
 - Appendix D – Approach to calculating the D.C.; and
 - Appendix E – 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 Appendix D; 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 Town-wide D.C. is based, projects the following population, housing and non-residential floor area for the 10-year (2019 to 2028) and 13-year (2019 to 2031) periods.

Measure	10 Year	13 Year
	2019-2028	2019-2031
(Net) Population Increase	41,960	48,784
Residential Unit Increase	14,290	19,046
Non-Residential Gross Floor Area Increase (ft ²)	6,672,300	7,708,400

Source: Watson & Associates Economists Ltd. Forecast 2019

5. On June 9, 2014, the Town of Richmond Hill passed By-law 52-14 under the D.C.A., with the by-law subsequently amended in 2016. The by-law imposes D.C.s on residential and non-residential uses. This by-law will expire on June 9,



2019. The Town 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 17, 2019 with adoption of the by-law on May 28, 2019.

6. The Town-wide D.C.s currently in effect are \$18,430 for single detached dwelling units for full services. Town-wide non-residential retail charges are \$85.50 per square metre and non-retail charges are \$66.49 per square metre. 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 Town-wide basis for all services. The corresponding calculated single detached unit charge is \$20,083. The calculated non-residential retail charge is \$84.12 per square metre and the non-retail charge is \$61.35 per square metre of building area.
7. As there are several outstanding items that would allow for a full D.C. update to take place, a two-staged approach to the D.C. is recommended. The first stage includes:
 - Updating the growth forecast to embrace the 2016 Census data for the population, household & employment base, average persons per unit assumptions and average floor space per worker assumption;
 - Updating service standard calculations
 - Updating growth-related capital infrastructure costing for indexing, removal of completed/funded projects to date, incorporation of post period benefit allocations agreed to in the appeal's Minutes of Settlement, and 2018 year-end reserve fund balances; and
 - Refinement of by-law policies related to redevelopment credits on derelict buildings and the delineation between large and small apartments, both to align with York Region's existing D.C. By-law.

Stage two is anticipated to take place by 2021 and will include a full update to include:

- The Region's growth plan to 2041;



- The results of the Town's Transportation Master Plan and Urban Environmental Servicing Plan;
- The results of the Town's capital sustainability exercise;
- Consideration of Area Specific vs. Town-wide D.C.s;
- Incorporation of any refinements made to the D.C. Act that are currently under review by the Province; and
- Any potential impacts from the 2016 D.C. appeal disposition.

Due to this two-staged approach, it is recommended that the existing residential charges be continued and not increased to the calculated rates. For non-residential retail and non-retail charges, it is recommended that the calculated reduced charges be put in place with the approval of the 2019 D.C. by-law (See Table ES-2).

8. The Town also imposes area-specific D.C.s through ten separate by-laws. A number of the area-specific by-laws are also due to expiry this year and/or required amendments to the calculations, these by-laws are being updated through a separate background study.
9. 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 5-7. A summary of these costs is provided below:

Total gross expenditures planned over the life of the by-law	\$232,990,506
Less:	
Benefit to existing development	\$ 42,439,698
Post planning period benefit	\$ 37,365,497
Ineligible re: Level of Service	\$ -
Mandatory 10% deduction for certain services	\$ 6,432,618
Grants, subsidies and other contributions	\$ -
Net Costs to be recovered from development charges	\$146,752,693

Hence, \$86.24 million (or an annual amount of \$43.12 million) will need to be contributed from taxes and rates, or other sources. Of this amount, \$37.37



million 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 Town plans to spend \$232.99 million over the next two years, of which \$146.75 million (63%) is recoverable from D.C.s. Of this net amount, \$125.13 million is recoverable from residential development and \$21.62 million from non-residential development. It is noted also that any exemptions or reductions in the charges would reduce this recovery further.

10. 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 13-year forecast:

- 11. Engineering;
- 12. Public Works Facilities and Fleet; and
- 13. Fire Protection Services.

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

- 14. Administration;
- 15. Outdoor Recreation Services;
- 16. Indoor Recreation Services; and
- 17. Library Services.

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 I. These decisions may include:

- 18. adopting the charges and policies recommended herein;
- 19. considering additional exemptions to the by-law; and
- 20. 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).

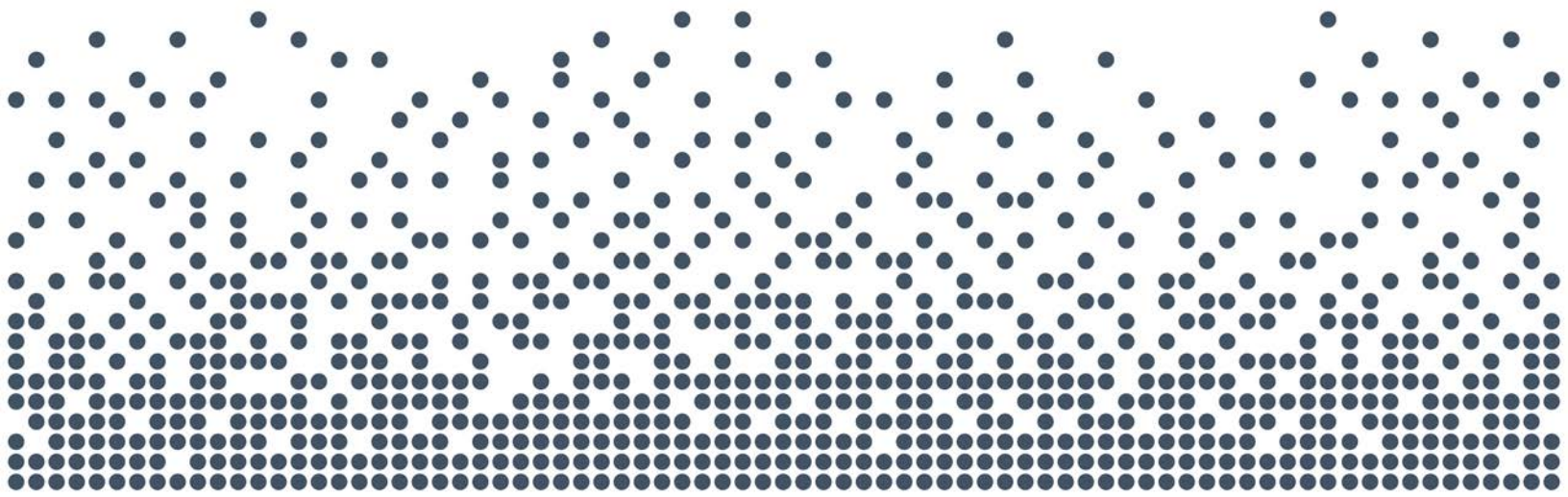


Table ES-1
Schedule of Calculated Development Charges

Service	RESIDENTIAL				NON-RESIDENTIAL			
	Single and Semi-Detached Dwelling	Apartments - Large >=700 sq.ft.	Apartments - Small <700 sq.ft.	Other Multiples	Retail (per sq.m. of Gross Floor Area)	Non-Retail (per sq.m. of Gross Floor Area)	Retail (per sq.ft. of Gross Floor Area)	Non-Retail (per sq.ft. of Gross Floor Area)
Municipal Wide Services:								
Engineering	9,000	6,320	4,329	7,415	60.12	43.76	5.59	4.07
Public Works Facilities & Fleet	949	666	456	782	6.30	4.63	0.59	0.43
Fire Protection Services	458	322	220	377	3.12	2.15	0.29	0.20
Outdoor Recreation Services	3,484	2,447	1,676	2,871	4.63	3.44	0.43	0.32
Indoor Recreation Services	4,678	3,285	2,250	3,854	6.19	4.57	0.57	0.42
Library Services	1,194	838	574	984	1.61	1.18	0.15	0.11
Administration	321	225	154	264	2.15	1.61	0.20	0.15
Total Municipal Wide Services	20,083	14,103	9,659	16,547	84.12	61.35	7.81	5.70

Table ES-2
Schedule of Recommended Development Charges

Service	RESIDENTIAL				NON-RESIDENTIAL			
	Single and Semi-Detached Dwelling	Apartments - Large >=700 sq.ft.	Apartments - Small <700 sq.ft.	Other Multiples	Retail (per sq.m. of Gross Floor Area)	Non-Retail (per sq.m. of Gross Floor Area)	Retail (per sq.ft. of Gross Floor Area)	Non-Retail (per sq.ft. of Gross Floor Area)
Municipal Wide Services:								
Engineering	7,498	4,925	2,882	6,089	60.12	43.76	5.59	4.07
Public Works Facilities & Fleet	856	562	330	694	6.30	4.63	0.59	0.43
Fire Protection Services	456	300	175	371	3.12	2.15	0.29	0.20
Outdoor Recreation Services	3,482	2,286	1,337	2,827	4.63	3.44	0.43	0.32
Indoor Recreation Services	4,652	3,055	1,788	3,777	6.19	4.57	0.57	0.42
Library Services	1,194	783	458	968	1.61	1.18	0.15	0.11
Administration	292	190	112	237	2.15	1.61	0.20	0.15
Total Municipal Wide Services	18,430	12,102	7,081	14,963	84.12	61.35	7.81	5.70



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 Town of Richmond Hill.

The Town retained Watson & Associates Economists Ltd. (Watson), to undertake the D.C.s (D.C.) study process throughout 2018 and 2019. Watson worked with Town staff in preparing the D.C. analysis and policy recommendations. As part of the 2016 D.C. process, the D.C. by-law was appealed, and a hearing was held. The hearing resulted in a number of issues that were agreed to through Minutes of Settlement (M.O.S.). Other items are still pending the decision of the Local Planning Appeal Tribunal (L.P.A.T.), formerly the Ontario Municipal Board (O.M.B.). As part of the M.O.S., the Town was required to establish consultation with the parties of the M.O.S., within two months of Town Council's direction to commence the review of the D.C. study. This process is discussed further in Section 1.2. of this report.

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 Town's D.C. background study, as summarized in Appendix D. It also addresses the requirement for "rules" (contained in Chapter 6) and the proposed by-law to be made available as part of the approval process (included as Appendix I).

In addition, the report is designed to set out sufficient background on the legislation (Appendix D), Richmond Hill'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 (Appendix E) 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 Minutes of Settlement Process

As per the Ontario Municipal Board (O.M.B.) Case No. DC160010, Minutes of Settlement (M.O.S.), Section 5:

“The Parties agree that prior to drafting background studies, updates to background studies or by-laws to amend or replace and of DCB 71-16, DCB 33-16, or DCB 35-16, Town Staff shall bring a report to Town Council seeking its direction to commence any such review. The Parties further agree that within two months of Town council’s direction to commence the review of DCB 71-16, DCB 33-16, or DCB 35-16 and prior to the establishment of any consultation process or actual consultations, the Parties shall meet to discuss a consultation process (the “**DC Review Consultation Process**”) for considering the following aspects of the Town’s DC regime:

- (a) the basis for including any particular project in the Town-wide or an area-specific D.C. By-law, with particular focus on the inclusion of the Flood Remediation and U.M.E.S.P. in the Town-wide D.C. By-law;
- (b) the appropriate scope of the local service policy of any future background study, which will depend in part on determination of the principles described in subsection 5(a) above;
- (c) methodologies for determining the allocation of benefit of the Sanitary Projects, including benefit to existing development and benefit occurring after the period of the implementing D.C. By-law;
- (d) methodologies for determining the allocation of benefit of the Flood Remediation, including benefit to existing development, benefit to development occurring after the period of the implementing D.C. By-law, benefit to residential growth, and benefit to non-residential growth;



- (e) confirming the amount, type, and location of development (i.e., ‘the denominator’) within the North Leslie West Development Area and within the West Gormley Development Area; and
- (f) the timely and iterative sharing of data, information and analysis with N.L.R.L.G. and Leslie Elgin and to any and all other stakeholders and interested persons, and to ensure ongoing regular dialogue regarding the matters enumerated above.”

Due to the above, a report was provided to Committee of the Whole on April 23, 2018 setting out the project plan to gain Council direction for staff to commence the D.C. review process. This resulted in Town staff scheduling the first consultation meeting with the Parties of the M.O.E. on June 26, 2018. Further to the initial meeting, additional meetings were held on July 31, 2018, September 5, 2018, November 26, 2018, and January 30, 2019.

During the meetings with the Parties of the M.O.E., discussions included the basis of calculating Town-wide vs. Area Specific D.C.s related to the U.M.E.S.P. and Flood Remediation projects, Local Service Policy refinements, methodologies for assigning benefit to existing and methodologies for determining benefit to the post 2031 forecast period. In addition, discussions related to the lands to be included in the area-specific D.C. calculations took place.

As there were still several outstanding items included in the appeal, that were not part of the M.O.S., the Parties and the Town. It was anticipated that the Board decision would provide direction into the requirements to undertake the D.C. calculations in time for the 2019 D.C. process. However, as of the date of writing this study, the Board decision has not been received.

In the absence of the Boards final appeal decision, along with several other issues (described below as part of Stage 2), coupled with the timing required to release a background study to ensure the emplacement of new D.C. by-laws (both Town-wide and Area Specifics), Town staff have decided to move forward with a two-stage solution. This two-staged solution would provide the Town with the necessary D.C. By-laws being passed prior to their expiry in the spring of 2019 thus, providing the Town with the time to undertake a full D.C. process. The work included in each of the stages is outlined below:



Stage 1 - 2019 Town-wide D.C. includes the following:

- Update Growth Forecast for:
 - The current 10-year period (2019-2028) and longer term to 2031; and
 - Update base information for 2016 Census data and development that has taken place to December 31, 2018, including:
 - Update the population, household and employment base;
 - Updating the average persons per unit (P.P.U.) assumptions; and
 - Updating the average floor space per worker (F.S.W) assumptions.
- Update Service Standard Calculations
- Growth-Related Capital Infrastructure:
 - Index Costing;
 - Remove capital projects complete/funded to date;
 - Incorporate Post Period Benefit (P.P.B.) deduction as per the M.O.S. on the Flood Remediation, Harris Ave. and U.M.E.S.P. projects;
- Refine by-law for redevelopment credits on derelict buildings and structures and revise the delineation between large and small apartments to ensure alignment with policies in the York Region D.C. By-law:
- Update the DC reserve fund balances as of December 31, 2018; and
- Undertake the required public process with approval of a two-year By-law.

Stage 2 – 2021 Town-wide D.C. includes the following:

- Update to embrace the Region's growth plan update to 2041;
- Incorporate the results of the final approved Transportation Master Plan (T.M.P.) and Urban Master Environmental Servicing Plan (U.M.E.S.P.);



- Incorporate the 2016 D.C. appeal L.P.A.T. disposition if require refinements are required;
- Incorporate potential changes to the D.C.A. currently under review by the Province;
- Incorporate the Town's capital sustainability exercise where it impacts on D.C.s;
- Consider Area Specific vs. Town wide basis for calculating D.C.s;
- Engage the broader development community; and
- Undertake the required public process with approval of a five-year by-law.

1.3 Summary of the Stage 1 Process

The public meeting required under Section 12 of the D.C.A., has been scheduled for April 17, 2019. Its purpose is to present the study to the public and to solicit public input. The meeting is also being held to answer any questions regarding the study's purpose, methodology and the proposed modifications to the Town'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 26, 2019.

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

21. Consideration of responses received prior to, at, or immediately following the Public Meeting; and
22. 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 Town of Richmond Hill

1. Data collection, staff review, engineering work, D.C. calculations and policy work	Spring 2018 to January, 2019
2. Meetings with Parties of the M.O.S.	June 26, 2018 July 31, 2018 September 5, 2018 November 26, 2018 January 30, 2019
3. Public meeting advertisement placed in newspaper(s)	No later than March 26, 2019
4. Stakeholder Consultation	March 20, 2019
5. Council Workshop	March 20, 2019
6. Background study and proposed by-law available to public	March 26, 2019
7. Public meeting of Council	April 17, 2019
8. Council considers adoption of background study and passage of by-law	May 28, 2019
9. Newspaper notice given of by-law passage	By 20 days after passage
10. Last day for by-law appeal	40 days after passage
11. Town makes pamphlet available (where by-law not appealed)	By 60 days after in force date



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

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

1.4.1 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.

1.4.2 Asset Management Plan for New Infrastructure

The new legislation now requires that a D.C. background study must include an asset management plan (A.M.P.) (s. 10 (2) c. 2). The A.M.P. 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 A.M.P. 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 A.M.P., 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 H of this report).

1.4.3 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 26, 2019 to ensure the new requirements for release of the study is met.

1.4.4 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 Town'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 Town may enter into a delayed payment agreement in order to capture the full development.

1.4.5 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 Town's D.C.



Chapter 2

Current Town of Richmond Hill Policy



2. Current Town of Richmond Hill Policy

2.1 Schedule of Charges

On June 9, 2014, the Town of Richmond Hill passed Town-wide By-law No. 52-14 under the D.C.A. This by-law was subsequently amended in 2016 by By-law No. 71-16. In addition to the Town-wide By-law, the Town passed Area-Specific By-law No. 53-14 for Elgin West, 54-14 for Headford Storm North of Rouge Development, 57-14 for Oak Ridges Lake Wilcox Greenfield, 56-14 for Oak Ridges Lake Wilcox Overall and 55-14 Urban Fringe East. These area specific D.C. by-laws are currently under review and will be updated under a separate background study.

The Town-wide by-law imposes D.C.s for residential and non-residential uses. The table below provides the rates currently in effect, as at July 1, 2018.

Table 2-1
Town of Richmond Hill
Current Town-wide D.C. Rates

Service	Residential				Non-Residential	
	Single & Semi Detached	Multiples	Apartments with Large ≥ 650 sq.ft.	Apartment with Small < 650 sq.ft.	Retail per sq.m.	Non-Retail per sq.m.
Engineering	7,498	6,089	4,925	2,882	63.06	48.43
Public Works Facilities & Fleet	856	694	562	330	7.21	5.55
Fire Protection Services	456	371	300	175	3.78	2.95
Outdoor Recreation Services	3,482	2,827	2,286	1,337	3.42	2.84
Indoor Recreation Services	4,652	3,777	3,055	1,788	4.60	3.78
Library Services	1,194	968	783	458	1.06	0.95
Administration	292	237	190	112	2.36	2.00
Total	18,430	14,963	12,102	7,081	85.50	66.49

2.2 Services Covered

The following services are covered under By-law 52-14:

- 23. Engineering;
- 24. Public Works Facilities & Fleet;
- 25. Fire Protection Services;
- 26. Outdoor Recreation Services;



- 27. Indoor Recreation Services;
- 28. Library Services; and
- 29. Administration.

2.3 Timing of D.C. Calculation and Payment

D.C.s are payable at the time of building permit issuance and are collected by the Town of Richmond Hill Building Department. Notwithstanding this timing, the Town may enter into an agreement respecting the timing of the payment of a D.C., or a portion thereof, and the terms of such an agreement shall then prevail over the provisions of the By-law.

2.4 Indexing

Rates shall be indexed annually on July 1st by the percentage change recorded in the average annual Non-Residential Building Construction Price Index produced by Statistics Canada.

2.5 Redevelopment Allowance

As a result of the redevelopment of land, a building or structure existing on the same land within 4 years prior to the date of payment of D.C.s in regard to such redevelopment was, or is to be demolished, in whole or in part, or converted from one principal use to another principal use on the same land, in order to facilitate the redevelopment, the D.C.s otherwise payable with respect to such redevelopment shall be reduced by the following amounts:

- (a) With respect to a residential building or structure, or the residential portion of a mixed-use building or structure that is not a heritage building and that has been demolished, by multiplying the number and type of dwelling units demolished by the development charge for the relevant demolished units in effect on the date when the development charge is payable; and
- (b) With respect to a non-residential building or structure or the non-residential portion of a mixed-use building or structure that has been demolished, by multiplying the gross floor area of the non-residential building or structure or non-residential portion of a mixed-use building or structure so demolished by the



development charge in effect on the date when the development charge is payable in accordance with the by-law, provided that, if the Town's records contain the demolition permit. The gross floor area shown on such demolition permit shall be used for the purpose of this calculation, and if such records do not exist, any other available record indicating the gross floor area shall be used;

provided that such amounts shall not exceed, in total, the amount of the D.C.s otherwise payable with respect to the redevelopment.

2.6 Exemptions

The following non-statutory exemptions are provided under By-laws 52-14:

30. Buildings or structures used as a public hospital;
31. Accessory buildings not exceeding 100 sq.m. of G.F.A. except for live work units with a retail component;
32. Relocation of a residential heritage building; and
33. A place of worship up to a maximum of 464.5 sq.m. or in respect of that portion of a place of worship which is used as an area of worship, whichever is greater.



Chapter 3

Anticipated Development in the Town of Richmond Hill



3. Anticipated Development in the Town of Richmond Hill

3.1 Requirement of the Act

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

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

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

The Town of Richmond Hill retained Watson during the summer of 2018 to provide an update to the Town’s long-term population, household and employment forecasts to the year 2041 by traffic zone. In the absence of a finalized Region-wide growth forecast to 2041, this revised forecast is being used to support the Town’s Transportation Master Plan (T.M.P.) and Urban Master Environmental Servicing Plan (U.M.E.S.P.) currently underway. This analysis represents an interim forecast, which is expected to be further updated and modified through the York Region Municipal Comprehensive Review (M.C.R.) process. The Region’s M.C.R. process is anticipated to be completed in 2020. This interim forecast has also been utilized for the 2019 D.C. background study to provide updated direction regarding population, housing and employment growth over the 2019 to 2031 forecast period.

For the 2019 D.C. study the growth forecast has been updated to embrace the 2016 Statistics Canada Census data along with building permit activity from 2016-2018 to determine the 2019 base population, household and employment. The census data also provided updates to the average assumptions for Persons Per Unit (P.P.U) and floor space per worker (F.S.W.) assumptions.



The following additional information sources were reviewed to assess the residential and non-residential development potential for the Town of Richmond Hill over the forecast period, including:

34. York Region Preferred Growth Scenario, November 2015;
35. York Region Housing and Population Traffic Zone Forecast, 2006-2051, July 2011;
36. Historical residential and non-residential building permit data over the 2008 to June 2018 period;
37. 2016 Census data; and
38. Discussions with Town staff and stakeholders regarding recent and anticipating residential and non-residential development trends through several meetings held throughout the summer, fall and winter of 2018/2019.

3.3 Summary of Growth Forecast

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

As identified in Table 3-1 and *Schedule 1*, the Town's population is anticipated to reach approximately 247,500 by mid 2029, and 254,320 by mid 2031, resulting in an increase of 41,960 and 47,780 persons, respectively, over the 10-year, and 13-year forecast period excluding the Census undercount. The population forecast summarized in Schedule 1 includes the net Census undercount, which is estimated at approximately 3.1%. The Census undercount represents the net number of persons missed during Census enumeration. All references provided herein to the population forecast exclude the net Census undercount.



Figure 3-1
Population and Household Forecast Model

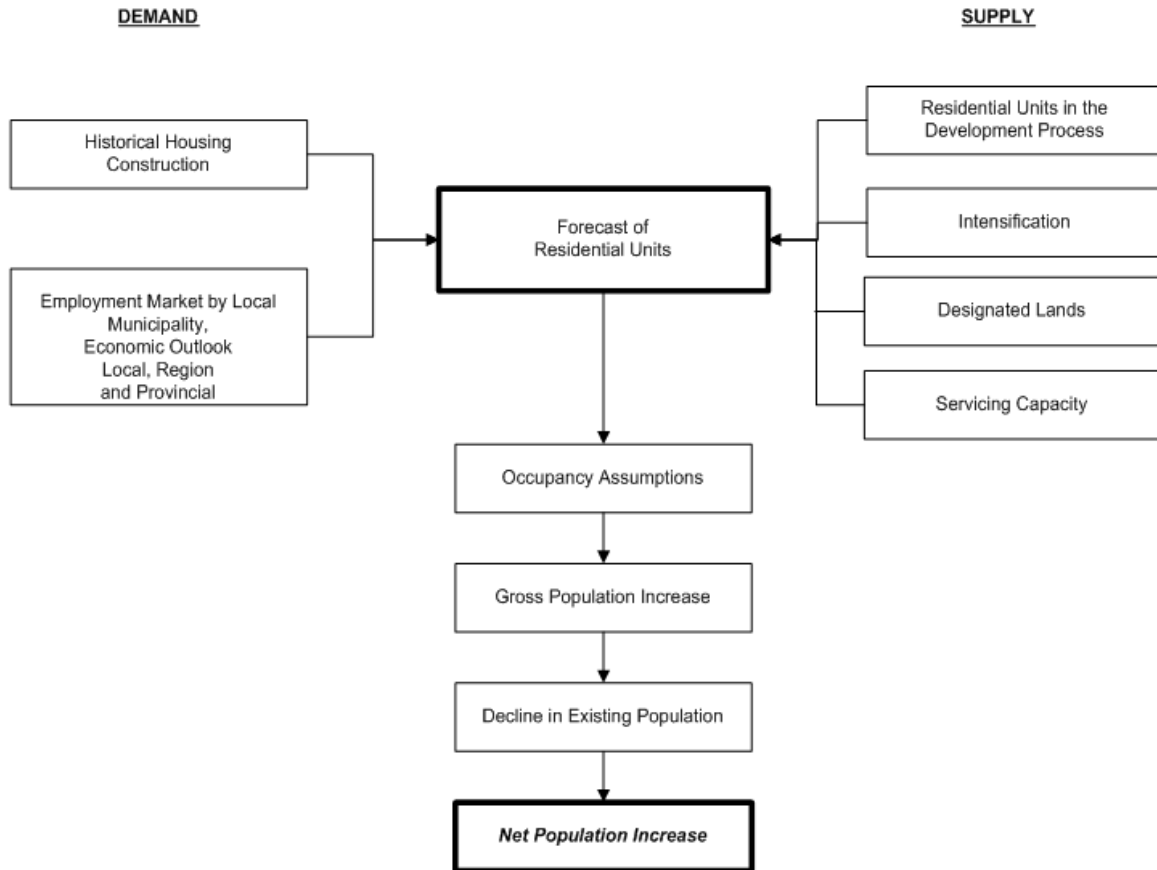




Table 3-1
Town of Richmond Hill
Residential Growth Forecast Summary

	Year	Population (Including Census Undercount) ¹	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 ²	Apartments ³	Other	Total Households	Equivalent Institutional Households	
Historical	Mid 2006	167,900	162,704	1,089	161,615	34,400	8,840	7,695	65	51,000	990	3.190
	Mid 2011	191,500	185,541	1,171	184,370	38,835	10,300	9,455	61	58,651	1,065	3.163
	Mid 2016	201,300	195,022	1,222	193,800	40,195	11,610	12,240	55	64,100	1,111	3.042
Forecast	Mid 2019	212,100	205,537	1,288	204,249	41,390	12,305	14,618	55	68,368	1,171	3.006
	Mid 2029	255,400	247,497	1,555	245,942	44,177	19,014	21,409	55	84,655	1,414	2.924
	Mid 2031	262,500	254,321	1,594	252,727	44,542	20,003	22,791	55	87,391	1,449	2.910
Incremental	Mid 2006 - Mid 2011	23,600	22,837	82	22,755	4,435	1,460	1,760	-4	7,651	75	
	Mid 2011 - Mid 2016	9,800	9,481	51	9,430	1,360	1,310	2,785	-6	5,449	46	
	Mid 2016 - Mid 2019	10,800	10,515	66	10,449	1,195	695	2,378	0	4,268	60	
	Mid 2019 - Mid 2029	43,300	41,960	267	41,693	2,787	6,709	6,791	0	16,287	243	
	Mid 2019 - Mid 2031	50,400	48,784	306	48,478	3,152	7,698	8,173	0	19,023	278	

Source: Derived from the 2041 York Region Preferred Growth Scenario, adjusted by Watson & Associates Economists Ltd., 2018.

¹ Census undercount estimated at approximately 3.2%. Note: Population including the undercount has been rounded.

² Includes townhouses and apartments in duplexes.

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



Provided below is a summary of the key assumptions and findings regarding the Town of Richmond Hill D.C. growth forecast update.

1. Unit Mix (Appendix A – Schedules 1 - 6)

- 39. The unit mix for the Town was derived from a review of historical development activity (as per Schedule 5), active residential development opportunities within the approvals process, available vacant designated residential land supply and discussions with planning staff regarding anticipated development trends within the Town.
- 40. Based on the above indicators, the 10-year household growth forecast is comprised of a housing unit mix of 17% low density (single detached and semi-detached), 41% medium density (multiples except apartments) and 42% high density (bachelor, 1-bedroom and 2-bedroom apartments).
- 41. The mid 2019 to mid 2031 household growth forecast is comprised of a housing unit mix of 17% low density, 40% medium density and 43% high density.

2. Planning Period

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

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

- 43. Over the 10-year period, the Town is anticipated to average approximately 1,630 new housing units per year, respectively.
- 44. Population in new units is derived from Schedules 2, 3 and 4, which incorporate historical development activity, anticipated units (see unit mix discussion) and average persons per unit by dwelling type for new units.
- 45. Schedule 7 summarizes the P.P.U. for the new housing units by age and type of dwelling based on a 2016 custom Census data. The total calculated P.P.U. for all density types has been adjusted to account for the upward P.P.U. trend which has been recently experienced in both new



and older units. Adjusted 25-year average P.P.U.s by dwelling type are as follows:

- Low density: 3.607
- Medium density: 2.972
- High density: 2.157

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

46. Existing households for 2019 are based on the 2016 Census households, plus estimated residential units constructed between 2017 and 2018 assuming a 6-month lag between construction and occupancy (see Schedule 2).

47. The decline in average occupancy levels for existing housing units is calculated in Schedules 2 through 4, by aging the existing population over the forecast period. The forecast population decline in existing households over the 10-year period is approximately 2,950 and 3,400 by 2031.

5. Employment (Appendix A, Schedules 9a, and 9b)

48. The employment forecast is largely based on the employment activity rate method. 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 retail, commercial non-retail, institutional, and work at home, which are considered individually below.

49. 2016 employment data (place of work) for the Town of Richmond Hill is outlined in Schedule 9a. The 2016 employment base is comprised by the 2016 Census data and shown in the following sectors:

- 85 Primary (0%);
- 10,000 work at home employment (14%);
- 12,280 Industrial (18%);
- 17,980 Commercial Retail (26%);
- 14,640 Commercial Non-Retail (21%); and
- 15,050 Institutional (21%).



50. The 2016 employment by usual place of work, including work at home, is estimated at 70,030. An additional 10,730 employees have been identified within the Town in 2016 that have no fixed place of work (N.F.P.O.W.).¹ The 2016 employment base, including N.F.P.O.W., totals approximately 80,760.
51. Total employment, including work at home and N.F.P.O.W., for the Town of Richmond Hill is anticipated to reach approximately 99,940 by 2029, and 102,560 by 2031.
52. This represents an employment increase of 15,910 for the 10-year forecast period, and 18,550 by the 2031 forecast period.
53. Schedule 9b, Appendix A, summarizes the employment forecast, excluding work at home employment and N.F.P.O.W. employment, which is the basis for the D.C. employment forecast. The impact on municipal services from these employees has already been included in the population forecast. The need for municipal services related to N.F.P.O.W. employees has largely been included in the employment forecast by usual place of work (i.e. employment and gross floor area (G.F.A.) in the retail and accommodation sectors generated from N.F.P.O.W. construction employment). Furthermore, since these employees have no fixed work address, they cannot be captured in the non-residential G.F.A. calculation. Accordingly, work at home and N.F.P.O.W. employees have been removed from the D.C. calculation.
6. Non-Residential Sq.ft. Estimates (G.F.A.), Appendix A, Schedule 9b)

54. Square footage estimates were calculated in Schedule 9b based on the following employee density assumptions:

- 1,100 sq.ft. per employee for industrial;
- 475 sq.ft. per employee for commercial retail;
- 350 sq.ft. per employee for commercial non-retail; and
- 686 sq.ft. per employee for institutional employment.

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



55. The Town-wide incremental G.F.A. increase is anticipated to be 6.67 million sq.ft. over the 10-year forecast period and 7.71 million sq.ft. to 2031, downwardly adjusted to account for institutional development associated with special care facilities.
56. In terms of percentage growth, the 10-year forecast incremental G.F.A. by sector is broken down as follows:
- industrial – 45%;
 - commercial/population-related – 39% (13% retail, 27% non-retail);
and
 - institutional – 16%.



Chapter 4

D.C.-Eligible Cost Analysis by Service



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

4.1 Introduction

This chapter outlines the basis for calculating eligible costs for the D.C.s to be applied on a uniform basis. In each case, the required calculation process set out in s. 5 (1) paragraphs 2 to 8 in the D.C.A. and described in Appendix D, 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. Over time, however, Town 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.

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

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

4.2.1 Administration

The D.C.A. permits the inclusion of studies undertaken to facilitate the completion of the Town's capital works program. The Town 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:

- 57. Official Plans;
- 58. Parks Plan Update;
- 59. Trails Master Plan;
- 60. Parkland Assessment Strategy;
- 61. Recreation Strategic Plan;



- 62. Parking Utilization Study;
- 63. Transportation Master Plan;
- 64. Pedestrian & Cycling Master Plans;
- 65. D.C. Background Studies; and
- 66. Other growth-related studies.

The cost of these studies, including the reserve fund deficit of \$3,070,219 is \$6,038,219, of which \$901,895 is attributable to existing benefit. The net growth-related capital cost, after the mandatory 10% deduction and the application of the existing reserve balance, is \$5,032,303 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 Covered in the D.C. Calculation

Town of Richmond Hill
Service: Administration Studies

Project Number	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%
	Planning Studies:												
1	DC Background Study	2019	172,900	-		172,900	-		172,900	17,290	155,610	122,932	32,678
2	Official Plan	2022	403,400	-		403,400	201,700		201,700	20,170	181,530	143,409	38,121
3	Official Plan	2027	403,400	-		403,400	201,700		201,700	20,170	181,530	143,409	38,121
	Parks & Recreation:												
4	Official Plan - Parkland Background Study	2022	115,300	-		115,300	74,945		40,355	4,036	36,320	28,692	7,627
5	Parks Plan Update	2019	86,400	-		86,400	43,200		43,200	4,320	38,880	30,715	8,165
6	Greenway/Trails Master Plan	2019	57,600	-		57,600	28,800		28,800	2,880	25,920	20,477	5,443
7	Parks Plan Update	2022	86,400	-		86,400	43,200		43,200	4,320	38,880	30,715	8,165
8	Parkland Assessment Strategy	2019	40,300	-		40,300	20,150		20,150	2,015	18,135	14,327	3,808
9	Greenway/Trails Master Plan	2020	57,600	-		57,600	28,800		28,800	2,880	25,920	20,477	5,443
10	Comm Centre/Pool/Fitness/Twin Pad Arena (Study)	2019	115,300	-		115,300	57,650		57,650	5,765	51,885	40,989	10,896
11	Recreation Strategic Plan	2022	115,300	-		115,300	57,650		57,650	5,765	51,885	40,989	10,896
12	Cultural Strategic Plan	2021	115,300	-		115,300	57,650		57,650	5,765	51,885	40,989	10,896
	Parking Studies:												
13	Parking Utilization Study	2019-2020	172,900	-		172,900	86,450		86,450	8,645	77,805	61,466	16,339
	Engineering Studies:												
14	Transportation Master Plan	2022	288,200	-		288,200	-		288,200		288,200	227,678	60,522
15	Urban MESP	2024	230,500	-		230,500	-		230,500		230,500	182,095	48,405
16	TDM Master Plan	2019	126,800	-		126,800	-		126,800		126,800	100,172	26,628
17	TDM Master Plan	2024	126,800	-		126,800	-		126,800		126,800	100,172	26,628
18	Pedestrians & Cycling Master Plan	2020	126,800	-		126,800	-		126,800		126,800	100,172	26,628
19	Village Core Transportation Master Plan	2019	126,800	-		126,800	-		126,800		126,800	100,172	26,628
	Reserve Fund:												
20	Reserve Fund Adjustment		3,070,219	-		3,070,219	-		3,070,219		3,070,219	2,425,473	644,746
	Total		6,038,	-	-	6,038,219	901,895	-	5,136,	104,021	5,032,303	3,975,520	1,056,784



4.2.2 Outdoor Recreation Services

The Town currently has 808.78 acres of parkland within its jurisdiction. This parkland consists of various sized parkettes, neighbourhood/community parks, destination parks, linear parks, urban squares, and passive open space area. The Town has sustained the current level of service over the historical 10-year period (2009 to 2018), with an average of 4.2 acres of parkland and 2.9 parkland amenities items per 1,000 population. The Town also provides 0.03 square metres of skate trails and skateboard parks per capita. Including parkland, parkland amenities (e.g. ball diamonds, playground equipment, soccer fields, etc.), and park skate trails & skateboard parks, the level of service provided is approximately \$1,706 per capita. When applied over the forecast period, this average level of service translates into a D.C.-eligible amount of \$71,600,124.

Based on the projected growth over the 10-year forecast period, the Town has identified \$51,586,200 in future growth capital costs for parkland development. These projects include, the development of additional parks including amenities and trails. In addition to these costs, the reserve fund deficit of \$5,427,566 has been included for recovery, providing a gross total cost of \$57,013,766. Allocations to recognize the post period benefit of \$8,305,300 have been made. Therefore, the net growth capital cost after the mandatory 10% deduction of \$44,380,376 have been included in the D.C.

The Town's Parks department operates and maintains 350 vehicles and equipment, which has provided a current level of service over the historical 10-year period (2009-2018) of 1.8 vehicles and equipment per 1,000 population. This translates to a level of service of approximately \$65 per capita. When applied over the forecast period, this average level of service translates into a D.C.-eligible amount of \$2,716,071.

To support the project growth in parkland, the Town has identified three trucks totalling \$1,113,400. The net growth capital cost after the mandatory 10% deduction of \$1,002,060 has been included in the D.C.

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



Infrastructure Costs Covered in the D.C. Calculation

Town of Richmond Hill
 Service: Parkland Development

Project Number	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 Developmen	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share	Non-Residential Share	
													95%	5%
2019-2028														
1	Duke Of Richmond North Park	2019	407,900	-		407,900	-		407,900	40,790	367,110	348,755	18,356	
2	Brodie House Park - Design	2021	101,500	-		101,500	-		101,500	10,150	91,350	86,783	4,568	
3	Townwood to Towerhill Trail - Design	2021	24,300	-		24,300	-		24,300	2,430	21,870	20,777	1,094	
4	Briar Nine Reserve Expansions - Design	2021	16,400	-		16,400	-		16,400	1,640	14,760	14,022	738	
5	Brodie House Park - Construction	2022	507,500	-		507,500	-		507,500	50,750	456,750	433,913	22,838	
6	Crossmar Trail Extension to Yonge - Design	2022	348,900	-		348,900	-		348,900	34,890	314,010	298,310	15,701	
7	Townwood to Towerhill Trail - Construction	2022	195,000	-		195,000	-		195,000	19,500	175,500	166,725	8,775	
8	North Leslie Park 1 - Design	2022	142,100	-		142,100	-		142,100	14,210	127,890	121,496	6,395	
9	Briar Nine Reserve Expansions - Construction	2022	113,000	-		113,000	-		113,000	11,300	101,700	96,615	5,085	
10	Miles Hill Parkette (Palmer Road Allowance) - Design	2022	64,400	-		64,400	-		64,400	6,440	57,960	55,062	2,898	
11	Gamble Park Trail - Design	2022	51,900	-		51,900	-		51,900	5,190	46,710	44,375	2,336	
12	David Dunlop Parkette - Design	2022	47,300	-		47,300	-		47,300	4,730	42,570	40,442	2,129	
13	Phyllis Rawlinson / Perryman Park	2022-2023	4,478,900	-		4,478,900	-		4,478,900	447,890	4,031,010	3,829,460	201,551	
14	Crossmar Trail Extension to Yonge Street, North of Jefferson Forest Drive	2023	2,302,600	-		2,302,600	-		2,302,600	230,260	2,072,340	1,968,723	103,617	
15	Oak Ridges East Community Park	2023	1,585,100	-		1,585,100	-		1,585,100	158,510	1,426,590	1,355,261	71,330	
16	North Leslie Park 1 Construction	2023	1,181,700	-		1,181,700	-		1,181,700	118,170	1,063,530	1,010,354	53,177	
17	North Leslie Park 2 - Design	2023	510,000	-		510,000	-		510,000	51,000	459,000	436,050	22,950	
18	David Dunlop Parkette - Construction	2023	372,300	-		372,300	-		372,300	37,230	335,070	318,317	16,754	
19	Miles Hill Parkette (Palmer Road Allowance) - Construction	2023	293,300	-		293,300	-		293,300	29,330	263,970	250,772	13,199	
20	Gamble Park Trail - Construction	2023	186,700	-		186,700	-		186,700	18,670	168,030	159,629	8,402	
21	Bloomington Wetland Trails - Design	2023	178,900	-		178,900	-		178,900	17,890	161,010	152,960	8,051	
22	Bayview Northeast Trail - Design	2019	94,500	-		94,500	-		94,500	9,450	85,050	80,798	4,253	
23	North Leslie Park 2	2019	4,249,300	-		4,249,300	-		4,249,300	424,930	3,824,370	3,633,152	191,219	
24	Bloomington Wetland Trails	2019	1,487,500	-		1,487,500	-		1,487,500	148,750	1,338,750	1,271,813	66,938	
25	Duke of Richmond West Trail	2019-2020	5,373,900	-		5,373,900	-		5,373,900	537,390	4,836,510	4,594,685	241,826	
26	Greatlands Developments park (Yonge & 16th East of Nothern Heights Drive)	2019-2020	6,443,400	-		6,443,400	-		6,443,400	644,340	5,799,060	5,509,107	289,953	
27	Oak Ridges Bayview Avenue Median	2019-2020	1,623,600	-		1,623,600	-		1,623,600	162,360	1,461,240	1,388,178	73,062	
28	Bayview Northeast Trail	2020	728,200	-		728,200	-		728,200	72,820	655,380	622,611	32,769	
29	North Leslie Park 3 - Design	2020	203,900	-		203,900	-		203,900	20,390	183,510	174,335	9,176	
30	Webster Park North trail connection to Birch Ave. - Design	2020	174,400	-		174,400	-		174,400	17,440	156,960	149,112	7,848	



Infrastructure Costs Covered in the D.C. Calculation

Town of Richmond Hill
 Service: Parkland Development

Project Number	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Subtotal	Less:		Potential D.C. Recoverable Cost	
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share 95%	Non-Residential Share 5%
	2019-2028												
31	Webster Park Trail Connection To Birch - Construction	2021	439,600	131,900		307,700	-		307,700	30,770	276,930	263,084	13,847
32	North Leslie Park 5 (1.69 ha) - Design	2021	254,700	76,400		178,300	-		178,300	17,830	160,470	152,447	8,024
33	North Leslie Park 4 (1.10 ha) - Design	2021	165,700	49,700		116,000	-		116,000	11,600	104,400	99,180	5,220
34	West Gormley Parkette Block 287 - Design	2021	92,000	27,600		64,400	-		64,400	6,440	57,960	55,062	2,898
35	South Rouge River Headwaters Trail - Design	2021	53,900	16,200		37,700	-		37,700	3,770	33,930	32,234	1,697
36	Liberty Developments Park (Hwy 7 & Rockwell Road)	2021-2022	9,763,300	2,929,000		6,834,300	-		6,834,300	683,430	6,150,870	5,843,327	307,544
37	North Leslie Park 3 (1.96 ha)	2021	984,700	295,400		689,300	-		689,300	68,930	620,370	589,352	31,019
38	North Leslie Park 5	2022	849,000	594,300		254,700	-		254,700	25,470	229,230	217,769	11,462
39	West Gormley Parkette Block 287 Construction	2022	763,700	534,600		229,100	-		229,100	22,910	206,190	195,881	10,310
40	North Leslie Park 4 (1.10 ha) - Construction	2022	552,700	386,900		165,800	-		165,800	16,580	149,220	141,759	7,461
41	South Rouge River Headwaters Trail - Construction	2022	444,700	311,300		133,400	-		133,400	13,340	120,060	114,057	6,003
42	North Leslie Park 6 (1.66 ha) - Design	2022	145,200	101,600		43,600	-		43,600	4,360	39,240	37,278	1,962
43	West Gormley Parkette Block 322 - Design	2022	86,900	60,800		26,100	-		26,100	2,610	23,490	22,316	1,175
44	Salfas Parkette - Design	2022	64,700	45,300		19,400	-		19,400	1,940	17,460	16,587	873
45	Oxford / Direzze Trail - Design	2022	53,300	37,300		16,000	-		16,000	1,600	14,400	13,680	720
46	Sunnywood Park - Design	2023	50,700	40,600		10,100	-		10,100	1,010	9,090	8,636	455
47	North Leslie Park 6 (1.66 ha)	2023	1,173,400	938,700		234,700	-		234,700	23,470	211,230	200,669	10,562
48	Salfas Parkette	2023	519,600	415,700		103,900	-		103,900	10,390	93,510	88,835	4,676
49	North Leslie Transrichmond Trail	2023	438,200	350,600		87,600	-		87,600	8,760	78,840	74,898	3,942
50	North Leslie Trails (1.8 km)	2023	394,300	315,400		78,900	-		78,900	7,890	71,010	67,460	3,551
51	Oxford / Direzze Trail	2023	357,100	285,700		71,400	-		71,400	7,140	64,260	61,047	3,213
52	West Gormley Park Block 436 Construction	2023	221,100	176,900		44,200	-		44,200	4,420	39,780	37,791	1,989
53	North Leslie Park 8 (2.13 ha)	2023	147,500	118,000		29,500	-		29,500	2,950	26,550	25,223	1,328
54	North Leslie Park 7 (0.80)	2023	81,800	65,400		16,400	-		16,400	1,640	14,760	14,022	738
55	Reserve Fund Adjustment		5,427,566	-		5,427,566	-		5,427,566		5,427,566	5,156,187	271,378
	Total		57,013,	8,305,300	-	48,708,	-	-	48,708,	4,328,090	44,380,376	42,161,357	2,219,019



4.2.3 Indoor Recreation Facilities

With respect to recreation facilities, there are currently many facilities provided by the Town, amounting to a total of 796,097 sq.ft. of space. The average historical level of service for the previous ten years has been approximately 3.63 sq.ft. of space per capita or an investment of \$3,138 per capita. Based on this service standard, the Town would be eligible to collect \$131,664,606 from D.C.s for facility space.

The Town has identified the need for an arena twinning, a new community centre and an indoor turf facility. The gross capital cost of these projects is \$145,970,000, with \$63,868,000 benefiting growth in the post 2028 period and \$4,356,000 benefiting existing development. Further, a deduction in the amount of \$9,024,978 has been made to reflect the balance in the D.C. reserve fund. Therefore, the net growth capital cost after the mandatory 10% deduction of \$60,946,422 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.



Infrastructure Costs Covered in the D.C. Calculation

Town of Richmond Hill
 Service: Indoor Recreation Facilities

Project Number	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	Arena Twinning	2019	21,780,000	-		21,780,000	4,356,000		17,424,000	1,742,400	15,681,600	14,897,520	784,080
2	Comm. Centre/Pool/Fitness/Twin Pad Arena (land)	2020	5,710,000	2,798,000		2,912,000	-		2,912,000	291,200	2,620,800	2,489,760	131,040
3	Comm. Centre/Pool/Fitness/Twin Pad Arena	2021-2022	70,580,000	34,584,000		35,996,000	-		35,996,000	3,599,600	32,396,400	30,776,580	1,619,820
4	Indoor Turf Facility	2020-2021	47,900,000	26,486,000		21,414,000	-		21,414,000	2,141,400	19,272,600	18,308,970	963,630
5	Reserve Fund Adjustment					-	9,024,978		(9,024,978)		(9,024,978)	(8,573,729)	(451,249)
	Total		145,970,000	63,868,000	-	82,102,000	13,380,978	-	68,721,022	7,774,600	60,946,422	57,899,101	3,047,321



4.2.4 Library Services

The Town provides four library facilities which total 147,455 sq.ft. in library space. Over the past ten years, the average level of service was 0.71 sq.ft. of space per capita or an investment of \$595 per capita. Based on the service standard over the past ten years, the Town would be eligible to collect a total of \$24,956,969 from D.C.s for library facilities.

The Town has identified a Central Library Addition and a Richmond Hill Centre Branch for inclusion into the D.C. with a gross cost of \$21,030,000. In addition, the reserve fund deficit of \$1,271,479 has been added, which brings a total gross cost of \$22,301,479. Deductions have been made with respect to the post period benefit amounting to \$6,522,800 and an existing benefit of \$1,764,700. The net growth capital cost after the mandatory 10% deduction is \$12,739,729.

The Town has an inventory of library collection items totalling 508,409, along with one (1) vehicle. These collection items include various materials including books, periodicals, audio visual materials, and electronic resources, all of which have a total value of approximately \$24.32 million. Over the past ten years, the average level of service was 2.96 items per capita or an investment of \$141 per capita. Based on this service standard, the Town would be eligible to collect approximately \$5,905,031 from D.C.s for library collection items and vehicles (over the 10-year period).

Based on the projected growth over the 10-year forecast period (2019 to 2028), expansion to the collection has been identified for future capital totalling \$2,627,600. In addition to these costs, the reserve fund deficit of \$446,736 has also been included for recovery. Therefore, the net growth-related capital cost to be included in the D.C. is \$2,811,576 (after the mandatory 10% deduction).

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 Covered in the D.C. Calculation

Town of Richmond Hill
 Service: Library Facilities

Project Number	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	Central Library Addition	2019-2020	12,333,000	-		12,333,000	895,000		11,438,000	1,143,800	10,294,200	9,779,490	514,710
2	Richmond Hill Centre Branch	2022-2023	8,697,000	6,522,800		2,174,200	869,700		1,304,500	130,450	1,174,050	1,115,348	58,703
3	Reserve Fund Adjustment		1,271,479			1,271,479	-		1,271,479		1,271,479	1,207,905	63,574
	Total		22,301,479	6,522,800	-	15,778,679	1,764,700	-	14,013,979	1,274,250	12,739,729	12,102,743	636,986



Infrastructure Costs Covered in the D.C. Calculation

Town of Richmond Hill
 Service: Library Collection Materials & Vehicles

Project Number	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	Furniture and Equipment	2019-2028	30,600	-		30,600	-		30,600	3,060	27,540	26,163	1,377
2	Collection & Materials	2019-2023	121,000	-		121,000	-		121,000	12,100	108,900	103,455	5,445
3	Collection & Materials	2024-2028	1,762,000	-		1,762,000	-		1,762,000	176,200	1,585,800	1,506,510	79,290
4	Central Library Collection Development	2021	357,000	-		357,000	-		357,000	35,700	321,300	305,235	16,065
5	Richmond Hill Centre Branch Collection Development	2022-2023	357,000	-		357,000	-		357,000	35,700	321,300	305,235	16,065
6	Reserve Fund Adjustment		446,736	-		446,736	-		446,736		446,736	424,399	22,337
	Total		3,074,336	-	-	3,074,336	-	-	3,074,336	262,760	2,811,576	2,670,997	140,579



4.3 Service Levels and 13-Year Capital Costs for the Town's D.C. Calculation

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

4.3.1 Engineering and Public Works Facilities & Fleet

Engineering needs for the Town are based upon the Town's existing Transportation Master Plan (T.M.P.) and existing Urban Master Environment Service Plan (U.M.E.S.P.). Note that both of these plans are currently being updated however, the final findings are not available for inclusion for this D.C. calculation therefore, the projects identified for inclusion in the engineering capital project listing are based on the existing plans.

The Town owns and maintains 125 km of Arterial and collector roads. This provides an average level of investment of \$9,450 per capita, resulting in a D.C.-eligible recovery amount of \$460,994,165 over the 13-year forecast period.

The Town also has 18 bridges, 40 culverts and 1/3 of the Norman Bethune Avenue flyover which equates to \$4,303 per capita and a D.C. recoverable amount of \$209,898,038 over the 13-year forecast period.

The total D.C.-eligible amount over the 13-year forecast period for Services Related to a Highway is \$670,892,203.

The capital program amounts to \$348,925,100 over the forecast period. Deductions have been made for the post period benefit in the amount of \$52,985,800. This post period amount includes a 1/3 deduction against the Sanitary collection network – U.M.E.S.P., Flood Remediation and Harris Ave. Urbanization projects as per the M.O.S. Further deductions of \$78,098,400 have been made to account for the benefit to existing development and \$28,263,933 to account for other contributions. The reserve fund balance of \$25,732,770 has also been deducted from the D.C. calculation, resulting in a D.C. eligible amount of \$163,844,196 for Engineering.



The Town operates their Public Works service out of a number of facilities. The facilities provide 165,005 sq.ft. of building area, providing for an average level of service of 0.87 sq.ft. per capital or \$576 per capital. This level of service provides the Town with a maximum D.C. eligible amount for recovery over the 13-year forecast period of \$28,100,560. Four projects have been identified to service growth over the forecast period, an expansion to the operations centre, a salt shed, additional cold storage and secure storage in the north end of Town. The cost of these projects totals \$24,639,800. Of this amount, \$4,647,800 will benefit growth in the post-2031 period. A deduction in the amount of \$3,223,843 has been made to account for the existing reserve fund balance. The total net cost of \$16,768,157 has therefore been included in the D.C. calculations.

The Public Works Department has a variety of vehicles and major equipment which provide an average level of service of \$82 per capita. This results in a maximum D.C. eligible amount of \$3,988,092 over the 13-year forecast period. Additional vehicle and equipment items have been identified for the forecast period which have a gross cost of \$785,000. Of this amount, \$282,600 is considered to benefit growth in the post 2031 period resulting in \$502,400 being included in the D.C. calculation.

The residential/non-residential capital cost allocation for roads and related services is based on a 79%/21% split for the incremental growth in population to employment over the forecast period. .



Infrastructure Costs Covered in the D.C. Calculation

Town of Richmond Hill
Service: Engineering

Project Number	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 79%	Non-Residential Share 21%
	2019-2031										
1	West Beaver Creek Road Widening (Leslie St to West Pearce St) (EA)	2020	230,500	-		230,500	161,400	-	69,100	54,589	14,511
2	Weldrick Road East Road Widening (Yonge St to Bayview Ave Inc. CNR Crossing / Grade separation) (EA)	2021	288,200	-		288,200	201,700	-	86,500	68,335	18,165
3	Weldrick Road West Road Widening (Bathurst St to Yonge St) (EA)	2021	288,200	-		288,200	201,700	-	86,500	68,335	18,165
4	East Beaver Creek Road Widening (East Pearce to East Wilmot)	2020	2,856,200	-		2,856,200	314,200	-	2,542,000	2,008,180	533,820
5	East Beaver Creek at Highway 7 & Intersection Improvements	2020	120,900	-		120,900	-	-	120,900	95,511	25,389
6	East Beaver Creek Road Transportation Improvements	2021	2,637,900	-		2,637,900	1,136,900	-	1,501,000	1,185,790	315,210
7	East Beaver Creek at Highway 7 Transportation Improvements	2021	780,000	-		780,000	549,900	-	230,100	181,779	48,321
8	West Beaver Creek Road - widening from Leslie to Hwy 7	2021-2022	11,835,200	-		11,835,200	1,301,900	-	10,533,300	8,321,307	2,211,993
9	West Beaver Creek Road - widening from Leslie to Hwy 7	2021-2022	246,300	-		246,300	27,100	-	219,200	173,168	46,032
10	Mural Street Sidewalk: East Side East Beaver Creek to Leek	2020	133,700	-		133,700	-	-	133,700	105,623	28,077
11	Weldrick Road West Sidewalk	2023-2024	147,000	-		147,000	102,900	-	44,100	34,839	9,261
12	Newkirk Road between Elgin Mills Road and Major Mackenzie Dr. - widening the existing 2 lanes to 4 lanes	2022-2023	14,028,600	-		14,028,600	1,543,100	-	12,485,500	9,863,545	2,621,955
13	Leek Crescent (N leg) at Mural Street Transportation Improvements	2022-2023	879,700	-		879,700	615,800	-	263,900	208,481	55,419
14	Portage Avenue Road Construction	2021-2021	396,400	-		396,400	-	-	396,400	313,156	83,244
15	Weldrick Road East Transportation Improvements	2023-2025	15,599,800	-		15,599,800	5,308,400	-	10,291,400	8,130,206	2,161,194
16	Weldrick Road West Transportation Improvements	2023-2024	5,483,400	-		5,483,400	3,838,400	-	1,645,000	1,299,550	345,450
17	Construct 4 lane Hwy 404 overpass north of Major Mackenzie Dr.	2021	14,576,100	2,915,200		11,660,900	-	9,717,400	1,943,500	1,535,365	408,135
18	Construct 4 lane Hwy 404 overpass north of Major Mackenzie Dr. (Land)	2021	435,700	87,100		348,600	-	-	348,600	275,394	73,206
19	Construct 4 lane Hwy 404 overpass north of Elgin Mills Road	2026	12,939,400	2,587,900		10,351,500	-	8,626,267	1,725,233	1,362,934	362,299
20	Construct 4 lane Hwy 404 overpass north of Elgin Mills Road (Land)	2026	9,209,500	1,841,900		7,367,600	-	-	7,367,600	5,820,404	1,547,196
21	Bethesda sideroad (incl. 4.8 ha land requirement)	2020	33,581,800	-		33,581,800	23,507,300	-	10,074,500	7,958,855	2,115,645
22	Bethesda Rd. - Culvert Extension	2020	27,700	-		27,700	27,700	-	-	-	-
23	Bethesda Side/CN Rail - Grade Separation	2020	17,115,400	3,423,100		13,692,300	-	-	13,692,300	10,816,917	2,875,383
24	19th Ave. - Road Widening & Improvements	2020	11,545,900	-		11,545,900	-	-	11,545,900	9,121,261	2,424,639
25	East Wilmot / Leslie Intersection	2019	571,700	-		571,700	-	-	571,700	451,643	120,057
26	East Pearce / Leslie Intersection	2019	571,700	-		571,700	-	-	571,700	451,643	120,057
27	East Pearce - East Beaver Creek to Hwy 404 (previously East Wilmot)	2019	2,058,600	-		2,058,600	-	-	2,058,600	1,626,294	432,306
28	2nd Grade Sep. / Crossover (incl. 1.17 ha land req.)	2021	15,513,200	-		15,513,200	10,859,200	-	4,654,000	3,676,660	977,340
29	Valleymede / Hwy 7	2020	219,000	-		219,000	-	-	219,000	173,010	45,990
30	Traffic Signals	2020	1,573,300	-		1,573,300	-	-	1,573,300	1,242,907	330,393
31	Construct 4 lane Hwy 404 overpass north of 16th Ave	2021	14,880,400	2,976,100		11,904,300	-	9,920,267	1,984,033	1,567,386	416,647



Infrastructure Costs Covered in the D.C. Calculation

Town of Richmond Hill
Service: Engineering

Project Number	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%
32	Construct 4 lane Hwy 404 overpass north of 16th Ave (land)	2021	2,301,800	460,400		1,841,400	-	-	1,841,400	1,454,706	386,694
33	TDM initiatives - as identified in update	2022-2026	495,600	-		495,600	-		495,600	391,524	104,076
34	TDM initiatives - as identified in update	2022-2026	495,600	-		495,600	-		495,600	391,524	104,076
35	Pedestrians & Cycling Master Plan Implementation	2019-2023	1,786,600	-		1,786,600	-		1,786,600	1,411,414	375,186
36	Pedestrians & Cycling Master Plan Implementation	2024-2031	1,786,600	-		1,786,600	-		1,786,600	1,411,414	375,186
37	Village Core Transportation Master Plan Implementation	2019-2023	5,717,000	-		5,717,000	-		5,717,000	4,516,430	1,200,570
38	Multi-modal Transportation Initiatives	2019-2023	10,569,600	-		10,569,600	7,398,700		3,170,900	2,505,011	665,889
39	Water distribution network	2019-2031	698,500	174,600		523,900	-		523,900	413,881	110,019
40	Yonge Street Watermain Infrastructure Extension	2019	421,900	105,500		316,400	-		316,400	249,956	66,444
41	Local Street - West of Yonge between Garden Avenue and Carrville Road	2019-2031	7,699,600	1,924,900		5,774,700	-		5,774,700	4,562,013	1,212,687
42	Garden Street Extension as a Collector Street from Yonge Street to Bayview Avenue	2019-2031	13,670,200	3,417,600		10,252,600	-		10,252,600	8,099,554	2,153,046
43	Garden Street 4 Lane Grade Separation over CN Rail Corridor (construction costs only, excludes land)	2019-2031	14,903,500	3,725,900		11,177,600	-		11,177,600	8,830,304	2,347,296
44	Enford Road Extension as an Industrial Collector Street	2019-2021	2,109,300	527,300		1,582,000	-		1,582,000	1,249,780	332,220
45	Addison Road extension to Weldrick Road West	2019-2031	2,858,500	714,600		2,143,900	-		2,143,900	1,693,681	450,219
46	Outstanding Credits		960,500	-		960,500	-		960,500	758,795	201,705
47	Provision for Land Purchases	2019-2031	26,879,300	6,719,800		20,159,500	-		20,159,500	15,926,005	4,233,495
48	Sanitary collection network - U.M.E.S.P.	2019-2031	27,074,100	8,934,500		18,139,600	7,947,600		10,192,000	8,051,680	2,140,320
49	Flood Remediation	2019-2021	37,402,800	12,342,900		25,059,900	13,054,500		12,005,400	9,484,266	2,521,134
50	Harris Ave. Urbanization (reconstruction of Harris Avenue to municipal standard from Yonge Street to approximately 100m west of Yonge Street)	2019-2021	322,700	106,500		216,200	-		216,200	170,798	45,402
51	Reserve Fund Adjustment						25,732,770		(25,732,770)	(20,328,888)	(5,403,882)
	Total		348,925,	52,985,800	-	295,939,300	103,831,170	28,933	163,844,196	129,436,915	34,407,281



Infrastructure Costs Covered in the D.C. Calculation

Town of Richmond Hill
 Service: Public Works Facilities

Project Number	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	Operations Centre Expansion	2019-2021	10,054,400	-		10,054,400	-		10,054,400	7,942,976	2,111,424
2	Salt Shed (20,000 sq.ft.)	2020	3,217,000	2,412,800		804,200	-		804,200	635,318	168,882
3	Cold Storage and Site Works	2019	9,739,700	1,914,800		7,824,900	-		7,824,900	6,181,671	1,643,229
4	Secure Storage North (5,000 sq.ft.)	2019	1,628,700	320,200		1,308,500	-		1,308,500	1,033,715	274,785
5	Reserve Fund Adjustment						3,223,843		(3,223,843)	(2,546,836)	(677,007)
	Total		24,639,800	4,647,800	-	19,992,000	3,223,843		16,768,157	13,246,844	3,521,313



4.3.2 Fire Protection Services

The Town currently has six fire stations and a fire facility, training building and a burn tower at the Operations Centre which amount to 70,234 sq.ft. of building area. These facilities provide for a D.C. eligible amount of \$12,367,232 over the 13-year forecast period. One additional station has been identified for inclusion in the D.C. calculation with a gross capital cost of \$4,593,000. A deduction of \$780,810 has been made to this project to account for the benefit to growth beyond the 2031 period. An adjustment of \$1,758,361 has been made to account for the reserve fund deficit resulting in a D.C. eligible amount of \$5,570,551 for fire facilities.

The fire department has a current inventory of vehicles totalling 39 items including aerials, tankers, command vehicles and other vehicles. The current value of these vehicles is \$16,911,500 and provides a per capita investment of \$91. The total D.C. eligible amount for fire vehicles is \$4,461,785. Additional vehicles have been identified for inclusion in the D.C. at a cost of \$2,599,000, which has been included in the D.C. calculation.

The Town's fire department also has an inventory of small equipment and gear including self contained breathing apparatuses, helmets, radios, etc. These items have a total value of \$1,812,400, resulting in a D.C. eligible amount of \$437,592. Additional equipment required for the new fire station has been identified in the amount of \$221,300. After deductions of \$27,860 to account for the benefit to existing development and \$33,195 for post period benefit, the D.C. eligible amount included in the calculation is \$160,245.

The allocation between residential and non-residential development is 79%/21% based on the incremental growth in population to employment, for the 13-year forecast period.



Infrastructure Costs Covered in the D.C. Calculation

Town of Richmond Hill
 Service: Fire Facilities

Project Number	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	District VII Station	2019	4,593,000	780,810		3,812,190	-		3,812,190	3,011,630	800,560
2	Reserve Fund Adjustment		1,758,361	-		1,758,361	-		1,758,361	1,389,105	369,256
	Total		6,351,	780,810	-	5,570,551	-		5,570,551	4,400,736	1,169,816



Chapter 5

D.C. Calculation



5. D.C. Calculation

Table 5-1 calculates the proposed Town wide D.C.s to be imposed for infrastructure services based upon a 13-year planning horizon. Table 5-2 calculates the proposed uniform D.C. to be imposed on anticipated development in the Town for Town-wide services over a 10-year planning horizon. These table provide for a blended non-residential D.C. calculation.

The calculation for residential development is generated on a per capita basis and is based upon four forms of housing types (single and semi-detached, apartments – large (700 sq.ft. or more), apartments – small (less than 700 sq.ft.) (note that the delineation between small and large apartments is different than the current by-law and is discussed further in Chapter 6), and other multiples). 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 charges are also presented in metric in the various tables.

The D.C. eligible costs for each service component were developed in Chapter 4 for all Town 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 4 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 5-1, 5-2 and 5-3. Note that the non-residential charges are presented on a “Blended” basis whereas, as discussed in the next paragraph, the Town imposes charges against retail and non-retail uses to have the Town’s charges consistent with the Region of York by-law.

With respect to non-residential development, the total costs in the uniform charge (in Tables 5-1 and 5-2) have been allocated by the anticipated development (i.e. employees) over the planning period. To calculate the cost per sq.ft. of gross floor area these cost allocations have been divided by the associated sq.ft. per employee. In the past the Town has adopted its by-law with differentiated charges for retail versus non-retail. This differentiation is anticipated to continue, and therefore these charges have



been calculated and are provided in Tables 5-4 and 5-5 and are summarized in Table 5-6.

Table 5-7 summarizes the gross capital expenditures and sources of revenue for works to be undertaken during the 2-year life of the by-law.



**TABLE 5-1
TOWN OF RICHMOND HILL
DEVELOPMENT CHARGE CALCULATION
Municipal-wide Services
2019-2031**

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost		
	Residential	Non-Residenti	S.D.U.	Non-Residential (Blended)	
				per sq.m.	per sqft.
	\$	\$	\$	\$	\$
1. <u>Engineering</u>					
1.1 Engineering	129,436,915	34,407,281	9,000	48.06	4.47
2. <u>Public Works Facilities & Fleet</u>					
2.1 Depots and Domes	13,246,844	3,521,313	921	4.95	0.46
2.2 PW Rolling Stock	396,896	105,504	28	0.11	0.01
	13,643,740	3,626,	949	5.06	47
3. <u>Fire Protection Services</u>					
3.1 Fire facilities	4,400,736	1,169,816	306	1.61	0.15
3.2 Fire vehicles	2,053,210	545,790	143	0.75	0.07
3.3 Small equipment and gear	126,593	33,651	9	-	-
	6,580,539	1,749,	458	2.37	22
TOTAL	\$149,661,195	\$39,783,	\$10,406	\$55.49	16
D.C.-Eligible Capital Cost	\$149,661,195	\$39,783,356			
13-Year Gross Population/GFA Growth (sq.ft.)	51,878	7,708,400			
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$2,885	\$5.16			
By Residential Unit Type	P.P.U.				
Single and Semi-Detached Dwelling	3.607	\$10,406			
Apartments - Large >= 700 sq.ft.	2.533	\$7,307			
Apartments - Small < 700 sq.ft.	1.735	\$5,005			
Other Multiples	2.972	\$8,574			



**TABLE 5-2
TOWN OF RICHMOND HILL
DEVELOPMENT CHARGE CALCULATION
Municipal-wide Services
2019-2028**

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost		
	Residential	Non-Residential	S.D.U.	Non-Residential (Blended)	
				per sq.m.	per sq.ft.
	\$	\$	\$	\$	\$
4. Outdoor Recreation Services					
4.1 Parkland development, amenities & trails	161,357	2,219,019	3,407	3.55	0.33
4.2 Parks vehicles and equipment	951,957	50,103	77	0.11	0.01
	43,113,314	2,269,	3,484	3.	0.34
5. Indoor Recreation Services					
5.1 Recreation facilities	899,101	3,047,321	4,678	4.90	0.45
	57,899,101	3,047,	4,678	4.	0.45
6. Library Services					
6.1 Library facilities	102,743	636,986	978	1.08	0.10
6.2 Library materials	670,997	140,579	216	0.22	0.02
	14,773,740	777,	1,194	1.	0.12
7. Administration					
7.1 Studies	975,520	1,056,784	321	1.72	0.16
TOTAL	761,674	\$7,150,792	\$9,677	\$11.57	\$1.07
D.C.-Eligible Capital Cost	\$119,761,674	\$7,150,792			
10-Year Gross Population/GFA Growth (sq.ft.)	44,641	6,672,300			
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$2,683	\$1.07			
By Residential Unit Type	P.P.U.				
Single and Semi-Detached Dwelling	3.607	\$9,677			
Apartments - Large >= 700 sq.ft.	2.533	\$6,795			
Apartments - Small < 700 sq.ft.	1.735	\$4,655			
Other Multiples	2.972	\$7,973			

**TABLE 5-3
TOWN OF RICHMOND HILL
DEVELOPMENT CHARGE CALCULATION
TOTAL ALL SERVICES**

	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost		
	Residential	Non-Residenti	S.D.U.	Non-Residential (Blended)	
				per sq.m.	per.ft.
	\$	\$	\$	\$	\$
Municipal-wide Services 13 Year	149,661,195	39,783,356	10,406	55.49	5.16
Municipal-wide Services 10 Year	119,761,674	7,150,792	9,677	11.57	1.07
TOTAL	\$269,422,869	\$46,934,	\$20,083	\$67.06	23



**TABLE 5-4
TOWN OF RICHMOND HILL
DEVELOPMENT CHARGE CALCULATION
Municipal-wide Services
2019-2031**

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Retail/Non-Retail		Retail/Non-Retail		Retail/Non-Retail	
	Retail	Non-Retail	Retail per sq.m.	Non-Retail per sq.m.	Retail per sq.ft.	Non-Retail per sq.ft.
1. <u>Engineering</u>	\$	\$	\$	\$	\$	
1.1 Engineering	11,271,854	23,135,427	60.12	43.76	5.59	4.07
2. <u>Public Works Facilities & Fleet</u>						
2.1 Depots and Domes	153,585	2,367,728	6.08	4.52	0.57	0.42
2.2 PW Rolling Stock	563	70,941	0.22	0.11	0.02	0.01
	1,188,148	2,438,669	6.30	4.63	0.59	43
3. <u>Fire Protection Services</u>						
3.1 Fire facilities	383,233	786,583	2.05	1.51	0.19	0.14
3.2 Fire vehicles	801	366,989	0.97	0.65	0.09	0.06
3.3 Small equipment and gear	024	22,627	0.11	-	0.01	-
	058	1,176,199	3.12	2.15	0.29	0.20
TOTAL	\$13,033,060	\$26,750,295	\$69.53	\$50.54	\$6.46	70
D.C.-Eligible Capital Cost	\$13,033,060	\$26,750,295				
13-Year Gross Population/GFA Growth (sq.ft.)	2,017,900	5,690,500				
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$6.46	\$4.70				

**TABLE 5-5
TOWN OF RICHMOND HILL
DEVELOPMENT CHARGE CALCULATION
Municipal-wide Services
2019-2028**

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Retail/Non-Retail		Retail/Non-Retail		Retail/Non-Retail	
	Retail	Non-Retail	Retail per sq.m.	Non-Retail per sq.m.	Retail per sq.ft.	Non-Retail per s.ft.
4. <u>Outdoor Recreation Services</u>	\$	\$	\$	\$	\$	
4.1 Parkland development, amenities & trails	559,483	1,659,535	4.52	3.34	0.42	0.31
4.2 Parks vehicles and equipment	12,633	37,470	0.11	0.11	0.01	0.01
	572,116	1,697,006	4.63	3.44	0.43	32
5. <u>Indoor Recreation Services</u>						
5.1 Recreation facilities	768,324	2,278,997	6.19	4.57	0.57	0.42
	768,324	2,278,997	6.19	4.57	0.57	42
6. <u>Library Services</u>						
6.1 Library facilities	160,604	476,382	1.29	0.97	0.12	0.09
6.2 Library materials	35,444	105,135	0.32	0.22	0.03	0.02
	196,048	581,517	1.61	1.18	0.15	11
7. <u>Administration</u>						
7.1 Studies	266,448	790,336	2.15	1.61	0.20	0.15
TOTAL	\$1,802,936	\$5,347,856	\$14.58	\$10.82	\$1.35	00
D.C.-Eligible Capital Cost	\$1,802,936	\$5,347,856				
10-Year Gross Population/GFA Growth (sq.ft.)	1,334,600	5,337,700				
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$1.35	\$1.00				



**TABLE 5-6
TOWN OF RICHMOND HILL
DEVELOPMENT CHARGE CALCULATION
TOTAL ALL SERVICES**

SERVICE	.C.-Eligible Cost		2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Retail/Non-Retail		Retail/Non-Retail		Retail/Non-Retail	
	Retail	Non-Retail	Retail per sq.m.	Non-Retail per sq.m.	Retailer sq..	Non-Retail per sq.ft.
	\$	\$	\$	\$	\$	\$
Municipal-wide Services 13 Year	13,033,060	26,750,295	69.53	50.54	6.46	4.70
Municipal-wide Services 10 Year	1,802,936	5,347,856	14.58	10.82	1.35	1.00
TOTAL	\$14,835,997	\$32,098,151	84.12	61.35	81	5.70



**Table 5-7
TOWN OF RICHMOND HILL
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. Engineering									
1.1 Engineering	117,836,175	-	36,895,788	-	-	15,768,492	51,485,797	13,686,098	
2. Public Works Facilities & Fleet									
2.1 Depots and Domes	21,288,333	-	-	-	-	4,647,800	13,146,021	3,494,512	
2.2 PW Rolling Stock	261,667	-	-	-	-	94,200	132,299	35,168	
3. Fire Protection Services									
3.1 Fire facilities	4,593,000	-	-	-	-	780,810	3,011,630	800,560	
3.2 Fire vehicles	2,526,400	-	-	-	-	-	1,995,856	530,544	
3.3 Small equipment and gear	221,300	-	27,860	-	-	33,195	126,593	33,651	
4. Outdoor Recreation Services									
4.1 Parkland development, amenities & trails	20,786,600	-	-	-	2,078,660	-	17,772,543	935,397	
4.2 Parks vehicles and equipment	566,111	-	-	-	56,611	-	484,025	25,475	
5. Indoor Recreation Services									
5.1 Recreation facilities	51,440,000	-	4,356,000	-	3,104,300	16,041,000	26,541,765	1,396,935	
6. Library Services									
6.1 Library facilities	12,333,000	-	895,000	-	1,143,800	-	9,779,490	514,710	
6.2 Library materials	54,520	-	-	-	5,452	-	46,615	2,453	
7. Administration									
7.1 Studies	1,083,400	-	265,050	-	43,795	-	611,898	162,657	
Total Expenditures & Revenues	\$232,990,506	\$0	\$42,439,698	\$0	\$6,432,618	\$37,365,497	\$125,134,532	\$21,618,160	



Chapter 6

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



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

6.1 Introduction

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

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

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

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

67. 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;
68. 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
69. 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. 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 Town’s existing policies; however, there are items under consideration at this time and these may be refined prior to adoption of the by-law.



6.2 D.C. By-law Structure

It is recommended that:

- 70. The Town uses a uniform Town-wide D.C. calculation for all Town-wide services;
and
- 71. The Town uses one by-law for all Town-wide services.

6.3 D.C. By-law Rules

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

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

6.3.1 *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.

6.3.2 *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).
 - In order to better align with York Region's D.C. by-law, Richmond Hill has proposed the Town's by-law be refined to change the delineation between large and small apartments. The proposed change is for large apartments to be classified as 700 sq.ft. or larger (versus 650 sq.ft.) and small apartments shall be considered to be less than 700 sq.ft. (versus 650 sq.ft.), note this does not result in a change to the calculate charges.
- 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.
 72. For Administration, 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;
 73. For Indoor Recreation, Outdoor Recreation and Library services, a 5% non-residential attribution has been made to recognize use by the non-residential sector; and
 74. For Fire, Engineering and Public Works Facilities & Fleet, a 79% residential/21% non-residential attribution has been made based on a population versus employment growth ration over the 13-year forecast period.

6.3.3 Application to Redevelopment of Land (Demolition and Conversion)

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

- 1) the number of dwelling units demolished/converted multiplied by the applicable residential D.C. in place at the time the D.C. is payable; and/or



- 2) the gross floor area of the building demolished/converted multiplied by the current non-residential D.C. in place at the time the D.C. is payable.

The demolition credit is allowed only if the land was improved by occupied structures and if the demolition permit related to the site was issued less than forty-eight (48) months prior to the issuance of a building permit. The credit can, in no case, exceed the amount of D.C.s that would otherwise be payable.

In order to better align with York Region's D.C. by-law, the Town proposes a refinement to their D.C. by-law to allow for buildings or structures deemed derelict to be eligible for redevelopment credits for 120 months, versus the forty-eight (48) months available for all other redevelopments. The credit provided for derelict buildings is based on the following table:

Number of Months from Date of Demolition Permit to Date of Building Permit Issuance	Credit Provided (%)
Up to and including 48 months	100
Greater than 48 months up to and including 72 months	75
Greater than 72 months up to and including 96 months	50
Greater than 96 months up to and including 120 months	25
Greater than 120 months	0

6.3.4 Exemptions (full or partial)

- a) Statutory exemptions

75. 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.;

76. buildings or structures owned by and used for the purposes of any municipality, local board or Board of Education (s. 3);



77. 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

78. Public hospitals;

79. Place of worship to a maximum of 5,000 square feet;

80. Heritage Use – land, buildings or structures used for the purpose of the relocation of a heritage building; and

81. Accessory Use – creating or adding an accessory use or structure not exceeding 100 sq.m. of gross floor area.

6.3.5 Phasing in

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

6.3.6 Timing of Collection

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

82. 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

83. 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.

6.3.7 Indexing

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

¹ O.Reg. 82/98 referenced “The Statistics Canada Quarterly, Construction Price Statistics, catalogue number 62-007” as the index source. Since implementation, Statistics Canada has modified this index twice and the above-noted index is the most



6.3.8 The Applicable Areas

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

84. All Town-wide services – the full residential and non-residential charge will be imposed on all lands within the Town.

6.4 Other D.C. By-law Provisions

It is recommended that:

6.4.1 Categories of Services for Reserve Fund and Credit Purposes

The Town's D.C. collections are currently reserved in seven separate reserve funds: Engineering; Public Works Facilities & Fleet; Fire; Indoor Recreation; Outdoor Recreation; Library Services; and Administration. Appendix F outlines the reserve fund policies that the Town is required to follow as per the D.C.A.

6.4.2 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.

6.4.3 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).

6.4.4 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

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.



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 Town does provide for area-rating. The capital works to be recovered on an area rated basis are included under separate background studies.

6.5 Other Recommendations

It is recommended that Council:

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

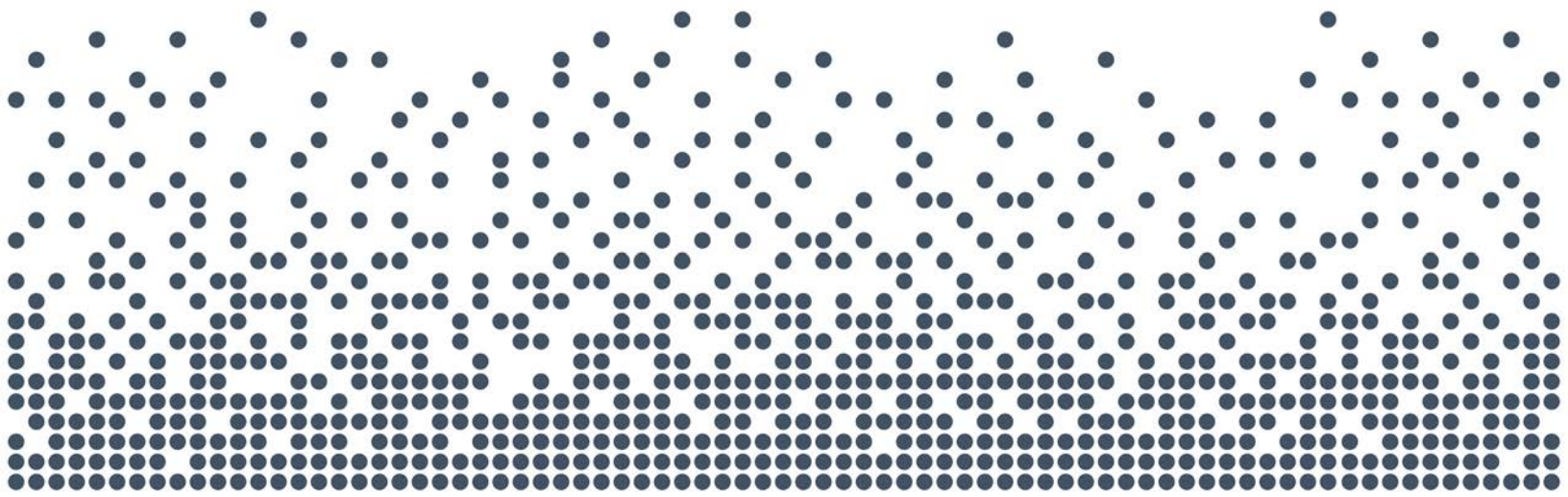
“Adopt the assumptions contained herein as an ‘anticipation’ with respect to capital grants, subsidies and other contributions;”

“Approve the capital project listing set out in Chapter 4 of the D.C. Background Study dated March 26, 2019, subject to further annual review during the capital budget process;”

“Approve the D.C.s Background Study dated March 26, 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 I.”



Appendices



Appendix A

Background Information on Residential and Non- Residential Growth Forecast



Schedule 1 Town of Richmond Hill Residential Growth Forecast Summary

	Year	Population (Including Census Undercount) ¹	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 ²	Apartment ³	Other	Total Households		Equivalent Institutional Households
Historical	Mid 2006	167,900	162,704	1,089	161,615	34,400	8,840	7,695	65	51,000	990	3.190500
	Mid 2011		185,541	1,171	184,370	38,835	10,300	9,455	61	58,651	1,065	3.163300
	Mid 2016		195,022	1,222	193,800	40,195	11,610	12,240	55	64,100	1,111	3.042100
Forecast	Mid 2019		205,537	1,288	204,249	41,390	12,305	14,618	55	68,368	1,171	3.006400
	Mid 2029		247,497	1,555	245,942	44,177	19,014	21,409	55	84,655	1,414	2.924500
	Mid 2031		254,321	1,594	252,727	44,542	20,003	22,791	55	87,391	1,449	2.910600
Incremental	Mid 2006 - Mid 2011		22,837	82	22,755	4,435	1,460	1,760	-4	7,651	75800	
	Mid 2011 - Mid 2016		9,481	51	9,430	1,360	1,310	2,785	-6	5,449	46800	
	Mid 2016 - Mid 2019		10,515	66	10,449	1,195	695	2,378	0	4,268	60300	
	Mid 2019 - Mid 2029		41,960	267	41,693	2,787	6,709	6,791	0	16,287	243400	
	Mid 2019 - Mid 2031		48,784	306	48,478	3,152	7,698	8,173	0	19,023	278	

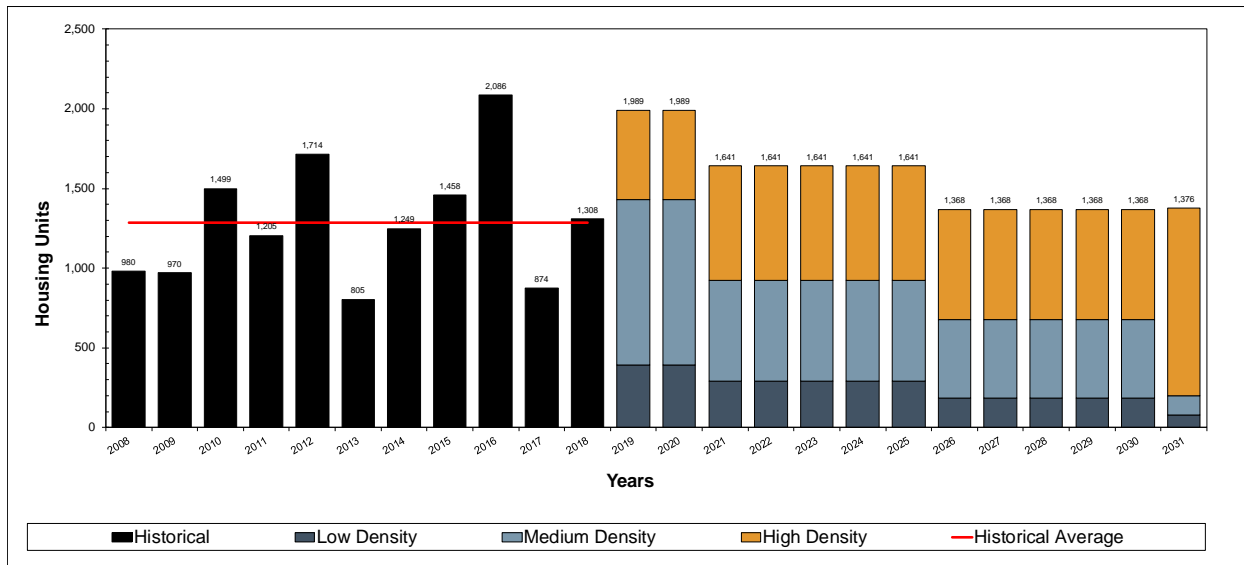
Source: Derived from the 2041 York Region Preferred Growth Scenario, adjusted by Watson & Associates Economists Ltd., 2018.

¹ Census undercount estimated at approximately 3.2%. Note: Population including the undercount has been rounded.

² Includes townhouses and apartments in duplexes.

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

Figure A – 1 Annual Housing Forecast¹



Source: Historical housing activity derived from building permit data received from the Town of Richmond Hill, 2008-2017.
1. Growth forecast represents calendar year.



Schedule 2
Town of Richmond Hill
Current Year Growth Forecast
Mid 2016 to Mid 2019

		Population
Mid 2016 Population		195,022
Occupants of New Housing Units, Mid 2016 to Mid 2019	<i>Units (2)</i>	4,268
	<i>multiplied by P.P.U. (3)</i>	2,462
	<i>gross population increase</i>	10,508
Occupants of New Equivalent Institutional Units, Mid 2016 to Mid 2019	<i>Units</i>	60
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	66
Decline in Housing Unit Occupancy, Mid 2016 to Mid 2019	<i>Units (4)</i>	64,100
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.001
	<i>total decline in population</i>	-59
Population Estimate to Mid 2019		205,537
Net Population Increase, Mid 2016 to Mid 2019		10,515

- (1) 2016 population based on Statistics Canada Census unadjusted for Census undercount.
- (2) Estimated residential units constructed, Mid-2016 to the beginning of the growth period assuming a six-month lag between construction and occupancy.
- (3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.600	28%	1.008
<i>Multiples (6)</i>	2.848	16%	0.464
<i>Apartments (7)</i>	1.777	56%	0.990
Total		100%	2.462

¹ Based on 2016 Census custom database

² Based on Building permit/completion activity

- (4) 2016 households taken from Statistics Canada Census.
- (5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.
- (6) Includes townhouses and apartments in duplexes.
- (7) Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

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



Schedule 3
Town of Richmond Hill
10-Year Growth Forecast
Mid 2019 to Mid 2029

		Population
Mid 2019 Population		205,537
Occupants of New Housing Units, Mid 2019 to Mid 2029	<i>Units (2)</i>	16,287
	<i>multiplied by P.P.U. (3)</i>	2,741
	<i>gross population increase</i>	44,641
		44,641
Occupants of New Equivalent Institutional Units, Mid 2019 to Mid 2029	<i>Units</i>	243
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	267
		267
Decline in Housing Unit Occupancy, Mid 2019 to Mid 2029	<i>Units (4)</i>	68,368
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.043
	<i>total decline in population</i>	-2,948
		-2,948
Population Estimate to Mid 2029		247,497
<i>Net Population Increase, Mid 2019 to Mid 2029</i>		<i>41,960</i>

(1) Mid 2019 Population based on:

2016 Population (195,022) + Mid 2016 to Mid 2019 estimated housing units to beginning of forecast period (4,268 x 2.456 = 10,508) + (60 x 1.100 = 66) + (64,100 x -0.001 = -59) = 205,537

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

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

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.607	17%	0.617
<i>Multiples (6)</i>	2.972	41%	1.224
<i>Apartments (7)</i>	2.157	42%	0.899
<i>one bedroom or less</i>	1.735		
<i>two bedrooms or more</i>	2.533		
Total		100%	2.741

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

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

(4) Mid 2019 households based upon 64,100 (2016 Census) + 4,268 (Mid 2016 to Mid 2019 unit estimate) = 68,368

(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
Town of Richmond Hill
2031 Growth Forecast
Mid 2019 to Mid 2031

		Population
Mid 2019 Population		205,537
Occupants of New Housing Units, Early 2019 to Mid 2031	<i>Units (2)</i>	19,023
	<i>multiplied by P.P.U. (3)</i>	2,727
	<i>gross population increase</i>	51,878
Occupants of New Equivalent Institutional Units, Early 2019 to Mid 2031	<i>Units</i>	278
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	306
Decline in Housing Unit Occupancy, Early 2019 to Mid 2031	<i>Units (4)</i>	68,368
	<i>multiplied by P.P.U. decline rate (5)</i>	-0,050
	<i>total decline in population</i>	-3,400
Population Estimate to 2031		254,321
<i>Net Population Increase, Early 2019 to Mid 2031</i>		<i>48,784</i>

(1) Mid 2019 Population based on:

2016 Population (195,022) + Mid 2016 to Mid 2019 estimated housing units to beginning of forecast period (4,268 x 2.456 = 10,508) + (60 x 1.100 = 66) + (64,100 x -0.001 = -59) = 205,537

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

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

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.607	17%	0.598
<i>Multiples (6)</i>	2.972	40%	1.203
<i>Apartments (7)</i>	2.157	43%	0.927
<i>one bedroom or less</i>	1.735		
<i>two bedrooms or more</i>	2.533		
Total		100%	2.727

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

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

(4) Mid 2019 households based upon 64,100 (2016 Census) + 4,268 (Mid 2016 to Mid 2019 unit estimate) = 68,368

(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
Town of Richmond Hill
Summary of Active Development Applications, Intensification and Residential Vacant
Land Supply Potential as of 2018

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ¹	Apartments ²	Total
Registered Not Built	1,309	779	1,160	3,248
<i>% Breakdown</i>	<i>40%</i>	<i>24%</i>	<i>36%</i>	<i>100%</i>
Draft Plans Approved	2,261	3,218	5,828	11,307
<i>% Breakdown</i>	<i>20%</i>	<i>28%</i>	<i>52%</i>	<i>100%</i>
Application Under Review	1,099	3,815	4,849	9,763
<i>% Breakdown</i>	<i>11%</i>	<i>39%</i>	<i>50%</i>	<i>100%</i>
Total	4,669	7,812	11,837	24,318
<i>% Breakdown</i>	<i>19%</i>	<i>32%</i>	<i>49%</i>	<i>100%</i>

Source: Development application data received from the Town of Richmond Hill, July 2018.

¹ Includes townhomes and apartments in duplexes.

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



Schedule 6
Town of Richmond Hill
Historical Residential Building Permits
Years 2008 to 2018

Year	Residential Building Permits			
	Singles & Semi Detached	Multiples ¹	Apartments ²	Total
2008	275	26	679	980
2009	714	231	25	970
2010	908	307	284	1,499
2011	659	214	332	1,205
2012	311	335	1,068	1,714
Sub-total	2,867	1,113	2,388	6,368
Average (2008 - 2012)	573	223	478	1,274
% Breakdown	45.0%	17.5%	37.5%	100.0%
2013	417	388	0	805
2014	330	512	407	1,249
2015	237	339	882	1,458
2016	535	204	1,347	2,086
2017	314	200	360	874
Sub-total	1,833	1,643	2,996	6,472
Average (2013 - 2017)	367	329	599	1,294
% Breakdown	28.3%	25.4%	46.3%	100.0%
2018	346	291	671	1,308
Sub-total	346	291	671	1,308
% Breakdown	26.5%	22.2%	51.3%	100.0%
2008 - 2018				
Total	5,046	3,047	6,055	14,148
Average	459	277	550	1,286
% Breakdown	35.7%	21.5%	42.8%	100.0%

Source: Building permit data received from the Town of Richmond Hill, 2008-2018.

¹ Includes townhouses and apartments in duplexes.

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



Schedule 7
Town of Richmond Hill
Person Per Unit by Age and Type of Dwelling
(2016 Census)

Age of Dwelling	Singles and Semi-Detached						25 Year Historic Average	25 Year Forecast ³
	< 1 BR	1 BR	BR	3/4 BR	5+ BR	Total		
1-5	-	-		3.442	4.558	3.600		
10	-	-	714	3.511	4.324	3.613		
15	-	-	500	3.535	4.272	3.634		
20	-	-	318	3.383	4.274	3.557		
25	-	-		3.325	4.049	3.540	3.589	3.607
35	-	-	882	3.089	3.774	3.245		
	-	1.474	110	2.789	3.855	2.834		
total	1.214	1.556	219	3.271	4.085	3.396		

Age of Dwelling	Multiples ¹						25 Year Historic Average	25 Year Forecast ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	-	-	2.059	2.862	-	2.848		
6-10	-	-	2.105	3.267	-	3.191		
11-15	-	-	2.455	3.022	-	2.980		
16-20	-	-	2.086	2.995	4.091	2.932		
20-25	-	1.571	2.200	3.100	-	2.959	2.982	2.972
25-35	-	1.750	2.067	3.184	4.000	3.028		
35+	-	1.471	2.000	2.976	2.577	2.603		
Total	-	1.747	2.131	3.045	3.753	2.940		

Age of Dwelling	Apartments ²						25 Year Historic Average	25 Year Forecast ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	-	1.471	2.142	3.063	-	1.777		
6-10	-	1.536	2.091	-	-	1.835		
11-15	-	1.490	2.047	3.000	-	1.909		
16-20	-	1.417	2.169	2.769	-	2.017		
20-25	-	1.308	2.113	2.963	-	1.987	1.905	2.157
25-35	-	1.379	1.958	2.840	-	1.904		
35+	-	1.293	2.021	2.689	-	1.860		
Total	1.500	1.423	2.058	2.867	2.615	1.875		

Age of Dwelling	All Density Types					
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total
1-5	-	1.485	2.174	3.203	4.543	2.742
6-10	-	1.570	2.111	3.442	4.307	3.158
11-15	-	1.546	2.172	3.388	4.252	3.316
16-20	-	1.521	2.184	3.257	4.235	3.256
20-25	-	1.366	2.117	3.265	4.069	3.168
25-35	-	1.403	1.970	3.093	3.800	2.966
35+	0.929	1.335	2.042	2.809	3.731	2.558
Total	1.412	1.454	2.086	3.206	4.066	3.022

¹ Includes townhouses and apartments in duplexes.

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

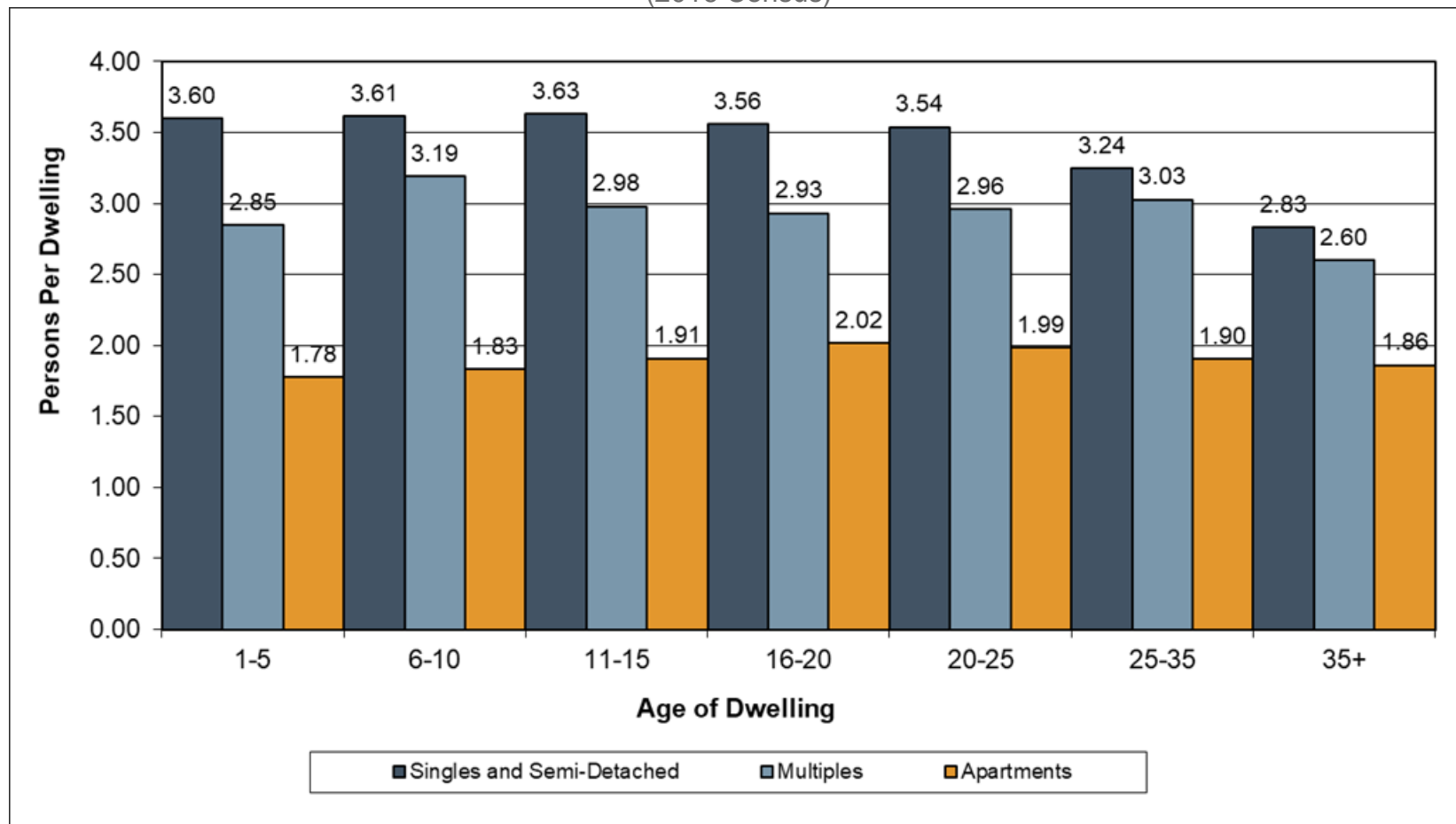
³ PPU has been forecasted based on 2001 to 2016 trends.

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

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



Schedule 8
Town of Richmond Hill
Person Per Unit Structural Type and Age of Dwelling
(2016 Census)





Schedule 9a Town of Richmond Hill Employment Forecast, 2019 to 2031¹

Period	Population	Activity Rate								Total Including NFPQV
		Primary	Work at Home	Industrial	Commercial (Retail)	Commercial (Non-Retail)	Institutional	Total	N.F.P.Q.V. ¹	
Mid 2006	162,704	0.001	0.047	0.084	0.081	0.064	0.060	0.336	0.039	0.375
Mid 2011	185,541	0.001	0.046	0.068	0.084	0.068	0.068	0.335	0.055	0.390
Mid 2016	195,022	0.000	0.051	0.063	0.092	0.075	0.077	0.359	0.055	0.414
Mid 2019	205,537	0.000	0.051	0.062	0.092	0.075	0.074	0.354	0.055	0.409
Mid 2029	247,497	0.000	0.051	0.062	0.083	0.083	0.069	0.349	0.055	0.404
Mid 2031	254,321	0.000	0.051	0.062	0.082	0.084	0.068	0.348	0.056	0.403
Incremental Change										
Mid 2006 - Mid 2011	22,837	0.0002	-0.0012	-0.0157	0.0028	0.0047	0.0080	-0.0011	0.0159	0.0148
Mid 2011 - Mid 2016	9,481	-0.0006	0.0053	-0.0052	0.0083	0.0066	0.0094	0.0237	0.0001	0.0239
Mid 2016 - Mid 2019	10,515	0.0000	0.0000	-0.0011	-0.0006	-0.0005	-0.0029	-0.0052	-0.0001	-0.0053
Mid 2019 - Mid 2029	41,960	-0.0001	0.0000	0.0004	-0.0084	0.0080	-0.0052	-0.0053	0.0002	-0.0050
Mid 2019 - Mid 2031	48,784	-0.0001	-0.0002	0.0004	-0.0100	0.0099	-0.0060	-0.0061	0.0006	-0.0055
Annual Average										
Mid 2006 - Mid 2011	4,567	0.0000	-0.0002	-0.0031	0.0006	0.0009	0.0016	-0.0002	0.0032	0.0030
Mid 2011 - Mid 2016	1,896	-0.0001	0.0011	-0.0010	0.0017	0.0013	0.0019	0.0047	0.0000	0.0048
Mid 2016 - Mid 2019	3,505	0.0000	0.0000	-0.0004	-0.0002	-0.0002	-0.0010	-0.0017	0.0000	-0.0018
Mid 2019 - Mid 2029	4,196	0.0000	0.0000	0.0000	-0.0006	0.0004	-0.0005	-0.0005	0.0000	-0.0005
Mid 2019 - Mid 2031	4,065	0.0000	0.0000	0.0000	-0.0008	0.0008	-0.0005	-0.0005	0.0000	-0.0005

Source: Derived from the 2041 York Region Planned Growth Scenario, adjusted by Watson & Associates Economists Ltd., 2018.

Period	Population	Employment								Total Employment (including N.F.P.Q.V.)	Total (Excluding Work at Home)
		Primary	Work at Home	Industrial	Commercial (Retail)	Commercial (Non-Retail)	Institutional	Total	N.F.P.Q.V. ¹		
Mid 2006	162,704	140	7,680	13,638	13,190	10,373	9,725	54,745	6,345	61,090	47,065
Mid 2011	185,541	200	8,535	12,643	15,570	12,703	12,575	62,225	10,185	72,410	53,690
Mid 2016	195,022	85	10,000	12,283	17,984	14,638	15,045	70,034	10,730	80,764	60,034
Mid 2019	205,537	85	10,539	12,715	18,827	15,329	15,250	72,744	11,288	84,032	62,205
Mid 2029	247,497	85	12,691	15,414	20,600	20,428	17,076	86,294	13,646	99,941	73,603
Mid 2031	254,321	85	13,000	15,823	20,750	21,473	17,332	88,462	14,116	102,578	75,462
Incremental Change											
Mid 2006 - Mid 2011	22,837	60	855	-995	2,380	2,330	2,850	7,480	3,840	11,320	6,625
Mid 2011 - Mid 2016	9,481	-115	1,465	-360	2,414	1,936	2,470	7,809	545	8,354	6,344
Mid 2016 - Mid 2019	10,515	0	539	432	843	691	205	2,710	558	3,268	2,171
Mid 2019 - Mid 2029	41,960	0	2,152	2,700	1,773	5,099	1,826	13,550	2,359	15,909	11,398
Mid 2019 - Mid 2031	48,784	0	2,461	3,108	1,923	6,144	2,082	15,718	2,828	18,546	13,257
Annual Average											
Mid 2006 - Mid 2011	4,567	12	171	-199	476	466	570	1,496	768	2,264	1,325
Mid 2011 - Mid 2016	1,896	-23	293	-72	483	387	494	1,562	109	1,671	1,269
Mid 2016 - Mid 2019	3,505	0	180	144	281	230	68	903	186	1,089	724
Mid 2019 - Mid 2029	4,196	0	215	270	177	510	183	1,355	236	1,591	1,140
Mid 2019 - Mid 2031	4,065	0	205	259	160	512	174	1,310	236	1,546	1,105

Source: Derived from the 2041 York Region Planned Growth Scenario, adjusted by Watson & Associates Economists Ltd., 2018.



Schedule 9b
Town of Richmond Hill
Employment and Gross Floor Area (G.F.A.) Forecast, 2019 to 2031

Period	Population	Employment					Gross Floor Area in Square Fet (Estimated) ¹				
		Industrial	Commercial (Retail)	Commercial (Non-Retail)	Institutional	Total	Industrial	Commercial (Retail)	Commercial (Non-Retail)	Institutional	Total
Mid 2006	162,704	13,	13,190	10,373	9,725	47,065					
id 2011	185,541	12,	15,570	12,703	12,575	53,690					
id 2016	195,022	12,	17,984	14,638	15,045	60,034					
id 2019	205,537	12,	18,827	15,329	15,187	62,142					
id 2029	247,497	15,	20,600	20,428	16,760	73,287					
id 2031	254,321	15,	20,750	21,473	16,979	75,109					
Incremental Change											
id 2006 - Mid 2011	22,837	-	2,380	2,330	2,850	6,625					
id 2011 - Mid 2016	9,481	-	2,414	1,936	2,470	6,344					
id 2016 - Mid 2019	10,515		843	691	142	2,108	475,200	400,400	95,400	93,500	1,064,500
id 2019 - Mid 2029	41,960	700	1,773	5,099	1,573	11,145	2,969,600	842,300	1,784,700	1,075,700	6,672,300
id 2019 - Mid 2031	48,784	108	1,923	6,144	1,792	12,967	3,418,800	913,600	2,150,300	1,225,700	7,708,400
Annual Average											
id 2006 - Mid 2011	4,567	-	476	466	570	1,325					
id 2011 - Mid 2016	1,896	72	483	387	494	1,269					
id 2016 - Mid 2019	3,505		281	230	47	703	158,400	133,467	31,800	31,167	354,833
id 2019 - Mid 2029	4,196		177	510	157	1,115	296,960	84,230	178,470	107,570	667,230
id 2019 - Mid 2031	4,065		160	512	149	1,081	284,900	76,133	179,192	102,142	642,367

Source: Derived from the 2041 York Region Preferred Growth Scenario, adjusted by Watson & Associates Economists Ltd., 2018.

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

² Square Foot Per Employee Assumptions

Industrial	1,100
Commercial/ Population Related	380
Retail	475
Non-Retail	350
Institutional	684

* Reflects Mid 2019 to Mid 2031 forecast period

Note: Institutional forecast employment has been adjusted downward to account for development captured in special care dwelling units.

Numbers may not add to totals due to rounding.



Appendix B

Level of Service



Appendix B: Level of Service

APPENDIX B - LEVEL OF SERVICE CEILING

TOWN OF RICHMOND HILL

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)		
Engineering	Engineering - Roads	\$9,449.70	0.0006	km of roadways	15,749,500	per lane km	460,994,165
	Engineering - Bridges, Culverts & Flyovers	\$4,302.60	0.0003	Number of Bridges, Culverts & Structures	14,342,000	per item	209,898,038
Public Works	Public Works Facilities	\$576.02	0.8690	sq.ft. of building area	663	per sq.ft.	28,100,560
	Public Works Fleet	\$81.75	0.0014	No. of vehicles and equipment	58,393	per vehicle	3,988,092
Fire	Fire Facilities	\$253.51	0.3513	ft² of building area	722	per sq.ft.	12,367,232
	Fire Vehicles	\$91.46	0.0002	No. of vehicles	457,300	per vehicle	4,461,785
	Fire Small Equipment and Gear	\$8.97	0.0035	No. of equipment and gear	2,563	per Firefighter	437,592
Outdoor Recreation	Parkland Development	\$1,291.59	0.0042	Acres of Parkland	307,521	per acre	54,195,116
	Parkland Amenities	\$402.15	0.0029	No. of parkland amenities	138,672	per amenity	16,874,214
	Parkland - Skate Trails & Skateboard Parks	\$12.65	0.0290	Square Metres of Skate Trails & Skateboard Parks	436	per lin m.	530,794
	Parks & Recreation Vehicles and Equipment	\$64.73	0.0018	No. of vehicles and equipment	35,961	per vehicle	2,716,071
Indoor Recreation	Indoor Recreation Facilities	\$3,137.86	3.6250	ft² of building area	866	per sq.ft.	131,664,606
Library Services	Library Facilities	\$594.78	0.7146	ft² of building area	832	per sq.ft.	24,956,969
	Library Collection Materials & Vehicles	\$140.73	2.9616	No. of library collection items and vehicles	48	per collection item	5,905,031



**Town of Richmond Hill
Service Standard Calculation Sheet**

Service: Engineering - Roads
Unit Measure: km of roadways

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/km) - Including Land
2 Lane Collector	93.3	94.1	94.1	94.1	94.8	94.8	94.8	94.8	96.1	96.6	\$13,698,440
4 Lane Collector	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	\$15,242,149
Industrial Collector	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.6	16.6	\$16,622,149
Arterial	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	\$19,834,514
Total	122	123	123	123	123	123	123	123	125	125	

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	0.0007	0.0007	0.0007	0.0007	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006

10 Year Average	2009-2018
Quantity Standard	0.0006
Quality Standard	\$15,749,500
Service Standard	\$9,450

D.C. Amount (before deductions)	13 Year
Forecast Population	48,784
\$ per Capita	\$9,450
Eligible Amount	\$460,994,165



**Town of Richmond Hill
Service Standard Calculation Sheet**

Service: Engineering - Bridges, Culverts & Flyovers
Unit Measure: Number of Bridges, Culverts & Structures

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Bridges	16	17	17	17	17	17	17	17	18	18	\$6,770,000
Culverts	40	40	40	40	40	40	40	40	40	40	\$17,500,000
Flyover - Norman Bethune Avenue*	-	-	-	-	-	-	-	-	-	1	\$14,380,000
Total	56	57	57	57	57	57	57	57	58	59	

*Cost is 1/3 of total to account for the Town of Richmond Hill's share

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003

10 Year Average	2009-2018
Quantity Standard	0.0003
Quality Standard	\$14,342,000
Service Standard	\$4,303

D.C. Amount (before deductions)	13 Year
Forecast Population	48,784
\$ per Capita	\$4,303
Eligible Amount	\$209,898,038



**Town of Richmond Hill
Service Standard Calculation Sheet**

Service: Public Works Facilities
Unit Measure: sq.ft. of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Building Value (\$/sq.ft.)	Value/ft ² with land, site works, etc.
Operations Centre East	41,230	41,230	41,230	41,230	41,230	41,230	41,230	41,230	41,230	41,230	\$347	\$1,063
Operations Centre West	74,921	74,921	74,921	74,921	74,921	74,921	74,921	74,921	74,921	74,921	\$347	\$685
Covered Storage	11,100	11,100	11,100	11,100	11,100	11,100	11,100	11,100	11,100	11,100	\$190	\$209
Salt Storage Shed	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	\$190	\$372
Truck Wash	4,351	4,351	4,351	4,351	4,351	4,351	4,351	4,351	4,351	4,351	\$190	\$209
Cold Storage Barn (Old Cattle Barn)	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003	\$90	\$262
Total	165,005	165,005	165,005	165,005	165,005	165,005	165,005	165,005	165,005	165,005		

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	0.9402	0.9176	0.8893	0.8758	0.8650	0.8612	0.8537	0.8461	0.8253	0.8158

10 Year Average	2009-2018
Quantity Standard	0.8690
Quality Standard	\$663
Service Standard	\$576

D.C. Amount (before deductions)	13 Year
Forecast Population	48,784
\$ per Capita	\$576
Eligible Amount	\$28,100,560



**Town of Richmond Hill
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
Cars	13	14	16	16	16	16	16	16	16	16	\$40,100
Down Size Pickups	15	15	15	15	15	15	15	15	15	15	\$43,400
Pickups and Vans	23	23	23	23	24	24	24	24	24	24	\$49,600
1 Ton Trucks	13	13	13	13	13	13	13	13	13	13	\$133,900
Trucks over 1.5 tons	11	11	11	11	11	11	12	13	14	14	\$257,800
Loaders/Backhoes/Flushers	5	5	5	5	5	5	5	5	5	5	\$180,500
Other Equipment	59	60	63	63	63	64	64	62	63	63	\$43,800
Attachments	75	75	75	75	106	106	106	106	106	106	\$8,300
Sidewalk Machines	-	-	-	11	12	12	14	16	18	20	\$167,100
Shared vehicles with parks:											
Bucket Truck	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.90	\$316,200
Crane Truck	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.90	\$280,500
Chipper	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.80	\$56,100
Stumper	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.75	\$51,000
One Ton Truck	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.30	\$102,000
Pick-up	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$66,300
Trailer	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$20,400
Zero Turns per Crew	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	\$25,500
Dump Trailers	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	\$20,400
Total	237	239	244	255	288	289	292	293	297	299	

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	0.0014	0.0013	0.0013	0.0014	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015

10 Year Average	2009-2018
Quantity Standard	0.0014
Quality Standard	\$58,393
Service Standard	\$82

D.C. Amount (before deductions)	13 Year
Forecast Population	48,784
\$ per Capita	\$82
Eligible Amount	\$3,988,092



**Town of Richmond Hill
Service Standard Calculation Sheet**

Service: Fire Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Building Value (\$/sq.ft.)	Value/ft ² with land, site works, etc.
District I - Alfred D. Stong	15,300	15,300	15,300	15,300	15,300	15,300	15,300	15,300	15,300	15,300	\$410	\$772
District II - Robert G. Kennedy	6,050	6,050	6,050	6,050	6,050	6,050	6,050	6,050	6,050	6,050	\$453	\$707
District III - Harold J. Mills	5,900	5,900	5,900	5,900	5,900	5,900	5,900	5,900	5,900	5,900	\$453	\$767
District IV - Russell Curley Lynett	6,700	6,700	6,700	6,700	6,700	6,700	6,700	6,700	6,700	6,700	\$441	\$742
District V - Bert Cook	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	\$436	\$750
Fire Facility (at Operations Centre)	11,249	11,249	11,249	11,249	11,249	11,249	11,249	11,249	11,249	11,249	\$347	\$563
Fire Training Building (at Operations Centre) & Burn Tower	-	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	\$383	\$886
District VI - Station - Gamble Road Fire Hall	-	-	-	8,935	8,935	8,935	8,935	8,935	8,935	8,935	\$409	\$635
Total	54,799	61,299	61,299	70,234	70,234	70,234	70,234	70,234	70,234	70,234		

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	0.3123	0.3409	0.3304	0.3728	0.3682	0.3666	0.3634	0.3601	0.3513	0.3472

10 Year Average	2009-2018
Quantity Standard	0.3513
Quality Standard	\$722
Service Standard	\$254

D.C. Amount (before deductions)	13 Year
Forecast Population	48,784
\$ per Capita	\$254
Eligible Amount	\$12,367,232



**Town of Richmond Hill
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)
Aerials	2	2	2	2	2	2	2	2	2	2	\$1,740,000
Engines/Pumpers	7	7	7	8	8	8	8	8	8	8	\$1,100,000
Large Rescue	3	3	3	3	3	3	3	1	1	1	\$816,000
Tankers	2	2	2	2	3	3	3	3	3	3	\$434,900
Hazmat	1	1	1	1	1	1	1	1	1	1	\$621,200
Large Command Post	1	1	1	1	1	1	1	1	1	1	\$621,200
Other Vehicles	15	15	15	15	16	16	16	16	16	15	\$51,000
Traning Vehicle	2	2	2	2	3	3	3	3	3	3	\$45,900
All Terrain Vehicle	-	-	-	-	-	-	-	-	1	1	\$37,300
Small Rescue	-	-	-	-	-	-	-	2	2	2	\$84,900
1 Boat and Trailer	-	-	-	-	-	-	1	1	1	1	\$56,600
Small Command Vehicle	1	1	1	1	1	1	1	1	1	1	\$102,000
Total	34	34	34	35	38	38	39	39	40	39	

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002

10 Year Average	2009-2018
Quantity Standard	0.0002
Quality Standard	\$457,300
Service Standard	\$91

D.C. Amount (before deductions)	13 Year
Forecast Population	48,784
\$ per Capita	\$91
Eligible Amount	\$4,461,785



**Town of Richmond Hill
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)
Self Contained Breathing Apparatus	54	54	54	60	60	60	60	60	60	60	\$7,500
Self Contained Breathing Apparatus Bottles	110	110	110	120	120	120	120	120	120	120	\$2,300
Sets of Bunker Gear / Gloves / Miscellaneous	139	139	139	146	146	146	146	146	154	158	\$2,800
Helmets	139	139	139	146	146	146	146	146	154	158	\$400
Leather Boots	139	139	139	146	146	146	146	146	154	158	\$600
Portable Radios	50	50	50	55	55	55	55	60	60	60	\$8,100
Total	631	631	631	673	673	673	673	678	702	714	

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	0.0036	0.0035	0.0034	0.0036	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035

10 Year Average	2009-2018
Quantity Standard	0.0035
Quality Standard	\$2,563
Service Standard	\$9

D.C. Amount (before deductions)	13 Year
Forecast Population	48,784
\$ per Capita	\$9
Eligible Amount	\$437,592



**Town of Richmond Hill
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)
Local Parks (Neighborhood/Parkettes)	262.27	263.67	263.67	263.67	265.58	269.20	281.80	282.60	283.30	285.60	\$278,600
Community Parks	236.20	236.20	237.97	237.97	237.97	237.97	243.60	243.60	243.60	243.60	\$354,600
Destination Parks - Other	184.27	184.27	184.27	184.27	180.74	170.72	170.72	170.72	167.22	167.22	\$248,600
Destination Park - Lake Wilcox	-	-	-	-	3.53	13.55	13.55	13.55	17.05	17.05	\$623,900
Linear Parks	42.67	42.67	42.67	42.67	42.67	42.67	42.67	42.67	42.67	42.67	\$248,600
Urban Squares	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	\$5,692,800
Passive Open Space (including Trails)	44.92	47.19	47.46	49.71	49.99	50.20	50.20	52.00	52.00	52.50	\$493,700
Total	770.47	774.14	776.18	778.43	780.62	784.45	802.68	805.28	805.98	808.78	

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	0.0044	0.0043	0.0042	0.0041	0.0041	0.0041	0.0042	0.0041	0.0040	0.0040

10 Year Average	2009-2018
Quantity Standard	0.0042
Quality Standard	\$307,521
Service Standard	\$1,292

D.C. Amount (before deductions)	10 Year
Forecast Population	41,960
\$ per Capita	\$1,292
Eligible Amount	\$54,195,116



**Town of Richmond Hill
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 Baseball (lit & Irrigated)	4	4	4	4	4	4	4	4	4	4	\$987,600
Senior Softball (lit & Irrigated)	1	1	1	1	1	1	1	1	1	1	\$573,400
Senior Softball (lit)	13	13	13	12	12	12	12	12	12	12	\$417,600
Senior Soccer (lit & Irrigated)	11	11	9	9	9	9	10	10	10	10	\$545,400
Senior Soccer (lit & Unirrigated)	-	-	-	-	-	-	-	-	-	-	\$327,600
Senior Soccer (Artificial Turf)	-	-	2	3	3	3	3	3	3	3	\$1,513,000
Tennis (lit and colour coated)	15	21	21	21	21	21	21	21	21	21	\$116,300
Tennis (lit)	34	28	28	28	28	28	28	28	28	28	\$98,500
Bocci (lit)	4	4	4	6	6	6	6	6	6	6	\$57,900
Unlit Sportsfields:											
Senior Softball (Unlit & Unirrigated)	4	4	4	2	2	2	2	2	2	2	\$156,300
Junior Softball (Unlit & Unirrigated)	16	16	16	19	19	19	19	19	18	18	\$99,800
Senior Soccer A (Unlit & Irrigated)	-	-	-	1	1	1	1	1	1	1	\$245,200
Senior Soccer (Unlit & Unirrigated)	4	4	4	2	2	2	2	2	2	2	\$99,900
Junior Soccer (Unlit & Unirrigated)	8	8	6	7	7	7	8	8	9	9	\$73,900
Mini Soccer (Unlit & Unirrigated)	18	18	18	16	16	18	18	18	18	18	\$46,800
Soccer Practice Field	2	2	2	2	2	2	2	2	2	2	\$34,100
Tennis (Unlit)	28	28	28	30	30	32	32	32	32	32	\$50,600
Bocci (Unlit)	2	2	2	2	2	2	2	2	2	2	\$41,000
Basketball Courts	83	83	86	86	86	88	88	88	88	88	\$33,700
Fitness Equipment - Fitness Station	3	4	4	4	5	5	5	5	5	5	\$46,100
Fitness Equipment - Fitness Station with Safety Surface	-	-	-	-	-	1	1	1	2	2	\$66,500
Amphitheatre	2	2	2	2	2	2	2	2	2	2	\$229,000
Fieldhouse/Washrooms	12	12	12	12	12	12	11	11	11	11	\$260,600
Fieldhouse/Washrooms - Lake Wilcox	-	-	-	-	-	-	1	1	1	1	\$589,400
Gazebo/Shelter - Neighbourhood Park	42	43	44	44	48	51	52	52	53	53	\$129,000
Gazebo/Shelter - Community/Destination Park	1	1	1	1	1	2	2	3	5	5	\$254,200
Playground - Community Parks (3 units req.)	54	57	57	57	57	57	59	58	58	58	\$120,000
Playground - Local Parks (2 units req.)	88	92	92	92	92	93	100	100	100	102	\$105,600



**Town of Richmond Hill
Service Standard Calculation Sheet**

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

Description	2009		2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Playground - Parkettes (1 unit req.)	52		53	53	54	54	54	54	58	58	\$199,200
Playground - Barrier Free (3 units eq)	3		3	3	3	3	3	3	3	3	\$223,400
Off Leash Area	1		1	2	2	2	2	2	2	2	\$51,500
Ropes Course	-		1	1	1	1	1	1	1	1	\$203,200
Water Play Facilities	9		9	9	9	9	10	11	12	12	\$301,900
Water Play with Recirculation system	1		2	2	2	2	2	2	2	2	\$727,700
Multi-Use Court (Sports Court) - unlit	-		-	-	-	-	1	2	2	3	\$164,800
ulti-Use Court (Sports Court) - lit	-		-	-	-	-	-	-	-	1	\$307,700
al	515		529	533	539	551	565	567	576	580	

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	0.0029	0.0029	0.0029	0.0028	0.0028	0.0029	0.0029	0.0029	0.0029	0.0029

10 Year Average	2009-2018
Quantity Standard	0.0029
Quality Standard	\$138,672
Service Standard	\$402

D.C. Amount (before deductions)	10 Year
Forecast Population	41,960
\$ per Capita	\$402
Eligible Amount	\$16,874,214



**Town of Richmond Hill
Service Standard Calculation Sheet**

Service: Parkland - Skate Trails & Skateboard Parks
Unit Measure: Square Metres of Skate Trails & Skateboard Parks

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/ Square Metre)
Skate Trail	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	\$990
Skateboard Parks	4,054	4,054	4,054	4,054	4,054	4,054	4,054	4,054	4,054	4,054	\$250
Concrete Skatepark	-	-	-	-	-	-	-	-	-	1,609	\$695
Total	5,350	5,350	5,350	5,350	5,350	5,350	5,350	5,350	5,350	6,959	

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	0.0305	0.0298	0.0288	0.0284	0.0280	0.0279	0.0277	0.0274	0.0268	0.0344

10 Year Average	2009-2018
Quantity Standard	0.0290
Quality Standard	\$436
Service Standard	\$13

D.C. Amount (before deductions)	10 Year
Forecast Population	41,960
\$ per Capita	\$13
Eligible Amount	\$530,794



**Town of Richmond Hill
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Vue (\$/Vicle)
Parks											
Total Number of Rental Vehicles		12	13	13	14	14	15	16	18	18	\$24,900
1 Tons		17	17	17	18	18	18	18	19	19	\$103,200
Attachments		46	51	52	53	53	53	53	53	53	\$6,200
Down Size Pickup		3	3	3	3	3	3	3	3	3	\$43,400
Other Equipment		160	179	179	179	179	179	182	182	182	\$26,000
Full Size Pickup/vans		6	6	6	6	6	6	7	8	8	\$39,800
Loaders/Backhoes		3	3	4	4	4	4	4	4	4	\$90,700
Other Vehicles		23	23	24	25	25	25	26	26	26	\$21,100
Trucks over 1.5 tons		9	9	9	9	9	9	9	9	10	\$211,200
Sidewalk Sweeper		-	-	-	-	-	1	1	1	1	\$183,300
Recreation											
Ice Resurfacers		7	7	7	7	7	7	7	7	7	\$102,000
Pick-up Trucks		2	2	2	2	2	2	2	2	2	\$66,300
Off Road Utility Vehicle/Gator		1	1	1	1	1	1	1	1	1	\$20,000
Shared vehicles with roads:											
Bucket Truck	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.10	\$316,200
Crane Truck	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.10	\$280,500
Chipper	2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	\$56,100
Stumper	3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.25	\$51,000
One Ton Truck	7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.70	\$102,000
Pick-up	8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	\$66,300
Trailer	8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	\$20,400
Zero Turns per Crew	6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	\$25,500
Dump Trailers	2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	\$20,400
Total	290	305	330	333	337	337	339	345	349	350	

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	0.0017	0.0017	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.0017	0.0017

10 Year Average	2009-2018
Quantity Standard	0.0018
Quality Standard	\$35,961
Service Standard	\$65

D.C. Amount (before deductions)	10 Year
Forecast Population	41,960
\$ per Capita	\$65
Eligible Amount	\$2,716,071



**Town of Richmond Hill
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Building Value (\$/sq.ft.)	Value/ft² with land, site works, etc.
Community Centres												
Richvale Community Centre	19,298	19,298	19,298	19,298	19,298	19,298	19,298	19,298	19,298	19,298	\$444	\$1,763
Bayview Hill Community Centre	34,600	34,600	34,600	34,600	34,600	34,600	34,600	34,600	34,600	34,600	\$414	\$1,056
Spruce Ave Community Hall	5,000	-	-	-	-	-	-	-	-	-	\$260	\$1,076
Lions Hall	5,470	5,470	-	-	-	-	-	-	-	-	\$243	\$1,558
Lake Wilcox Community Hall	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	\$271	\$1,140
Elgin West Community Centre	21,100	21,100	21,100	21,100	21,100	21,100	21,100	21,100	21,100	21,100	\$450	\$1,298
Rouge Woods Community Centre	28,700	28,700	28,700	28,700	28,700	28,700	28,700	28,700	28,700	28,700	\$428	\$1,419
Langstaff Discovery Centre	23,010	23,010	23,010	23,010	23,010	23,010	23,010	23,010	23,010	23,010	\$424	\$467
Oak Ridges Community Centre/Fitness/Pool	-	-	-	60,655	60,655	60,655	60,655	60,655	60,655	60,655	\$524	\$855
Meeting Rooms/Banquet Facilities												
Connor Room	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	\$522	\$612
Richmond Hill Room - Elgin Barrow	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	\$318	\$5,535
Norm Taylor Room - Oak Ridges Rec Centre	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	\$318	\$4,748
Signature Tao Inc. - 8763 Bayview Avenue	-	-	-	-	-	-	-	-	1,001	1,001	\$255	\$570
Indoor Pools												
Centennial	20,250	20,250	20,250	20,250	20,250	20,250	20,250	20,250	20,250	20,250	\$513	\$742
Richvale Community Centre	17,999	17,999	17,999	17,999	17,999	17,999	17,999	17,999	17,999	17,999	\$444	\$490
Lois Hancey Aqua. Centre	30,200	30,200	30,200	30,200	30,200	30,200	30,200	30,200	30,200	30,200	\$558	\$1,697
Bayview Hill Community Centre	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	\$414	\$456
Elgin West Pool	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	\$450	\$496
Arenas												
Elgin Barrow	73,650	73,650	73,650	73,650	73,650	73,650	73,650	73,650	73,650	73,650	\$318	\$351
Oak Ridges	35,900	35,900	35,900	35,900	35,900	35,900	35,900	35,900	35,900	35,900	\$318	\$351
Elvis Stojko	35,600	35,600	35,600	35,600	35,600	35,600	35,600	35,600	35,600	35,600	\$294	\$764
Ed Sackfield	41,600	41,600	41,600	41,600	41,600	41,600	41,600	41,600	41,600	41,600	\$310	\$803
Richmond Green (Tom Graham)	75,100	75,100	75,100	75,100	75,100	75,100	75,100	75,100	75,100	75,100	\$363	\$557
Fitness Centres												
Centennial	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	\$513	\$566
Ed Sackfield	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	\$319	\$352
Bayview Hill Community Centre	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	\$414	\$456
Special Town Wide Facilities												
Railway Station - Soccer	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	\$241	\$1,699
Richmond Green Field House	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	\$428	\$472
Richmond Green Field House for Sports Dome	-	-	-	-	-	-	-	4,600	4,600	4,600	\$657	\$887



**Town of Richmond Hill
Service Standard Calculation Sheet**

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

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Building Value (\$/sq.ft.)	Value/ft ² with land, site works, etc.
Richmond Green Sports Dome	-	-	-	-	-	-	-	95,000	95,000	95,000	\$26	\$191
Rich Grn Sports Complex	31,128	31,128	31,128	31,128	31,128	31,128	31,128	31,128	31,128	31,128	\$303	\$2,505
Richmond Green Fair Building	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$203	\$2,586
Richmond Green Fair Building	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	\$146	\$161
Eyer Homestead	-	-	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	\$428	\$472
George Forester House and Barns	-	7,920	7,920	7,920	7,920	7,920	7,920	7,920	7,920	7,920	\$303	\$334
Robert Holland Interpretive Centre	1,781	1,781	1,781	1,781	1,781	1,781	1,781	1,781	1,781	1,781	\$203	\$224
Boynnton Farm House	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	\$146	\$161
David Dunlop Observatory	-	-	-	-	-	-	-	-	20,600	20,600	\$1,701	\$2,165
Senior Centres												
McConaghy Centre	26,100	26,100	26,100	26,100	26,100	26,100	26,100	26,100	26,100	26,100	\$408	\$625
Other												
Oak Ridges (land only - acres)	12	12	12	-	-	-	-	-	-	-	\$434,887	\$434,887
Recreation Space - 225 East Beaver Creek	12,055	12,055	12,055	12,055	12,055	12,055	12,055	12,055	12,055	12,055	\$419	\$751
Total	612,803	615,723	614,253	674,896	674,896	674,896	674,896	774,496	796,097	796,097		

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	3.4918	3.4240	3.3106	3.5822	3.5380	3.5225	3.4919	3.9713	3.9820	3.9359

10 Year Average	2009-2018
Quantity Standard	3.6250
Quality Standard	\$866
Service Standard	\$3,138

D.C. Amount (before deductions)	10 Year
Forecast Population	41,960
\$ per Capita	\$3,138
Eligible Amount	\$131,664,606



**Town of Richmond Hill
Service Standard Calculation Sheet**

Service: Library Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Building Value (\$/sq.ft.)	Value/ft ² with land, site works, etc.
Central	107,515	107,515	107,515	107,515	107,515	107,515	107,515	107,515	107,515	107,515	\$573	\$842
Richvale	8,200	8,200	8,200	8,200	8,200	8,200	8,200	8,200	8,200	8,200	\$467	\$1,132
Oak Ridges Moraine	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	19,300	\$430	\$617
Richmond Green Library	12,440	12,440	12,440	12,440	12,440	12,440	12,440	12,440	12,440	12,440	\$430	\$682
Total	134,455	134,455	134,455	134,455	134,455	134,455	134,455	134,455	134,455	147,455		

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	0.7661	0.7477	0.7247	0.7137	0.7049	0.7018	0.6957	0.6894	0.6725	0.7290

10 Year Average	2009-2018
Quantity Standard	0.7146
Quality Standard	\$832
Service Standard	\$595

D.C. Amount (before deductions)	10 Year
Forecast Population	41,960
\$ per Capita	\$595
Eligible Amount	\$24,956,969



**Town of Richmond Hill
Service Standard Calculation Sheet**

Service: Library Collection Materials & Vehicles
Unit Measure: No. of library collection items and vehicles

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Books	509,050	436,194	442,756	436,108	444,394	520,277	516,996	388,755	363,240	371,841	\$47
Periodicals	29,489	30,082	26,633	22,660	23,090	20,819	19,191	18,459	16,581	16,811	\$9
Audio Visual Materials	79,300	68,161	70,910	72,389	73,764	87,596	84,354	98,110	85,557	83,837	\$56
eDatabases	87	87	105	117	119	94	93	67	61	63	\$4,390
eBooks/eAudiotapes	-	-	-	8,731	10,048	15,250	27,373	25,613	34,813	35,857	\$47
Ford F450 Cube Van	1	1	1	1	1	1	1	1	1	1	\$37,638
al	617,927	525	405	540,006	551,416	644,037	648,008	531,005	500,253	508,410	

Population	175,497	179,826	185,541	188,404	190,755	191,594	193,274	195,022	199,925	202,268
Per Capita Standard	3.52	2.97	2.91	2.87	2.89	3.36	3.35	2.72	2.50	2.51

10 Year Average	2009-2018
Quantity Standard	2.9616
Quality Standard	\$48
Service Standard	\$141

D.C. Amount (before deductions)	10 Year
Forecast Population	41,960
\$ per Capita	\$141
Eligible Amount	\$5,905,031



Appendix C

Long-Term Capital and Operating Cost Examination



Appendix C: Long-Term Capital and Operating Cost Examination

Town of Richmond Hill 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 Town'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	
	Average Useful Life	Factor
Roads	20	0.04116
Facilities	40	0.01656
Public Works Vehicles	10	0.09133
Fire Vehicles	15	0.05783
Fire Small Equipment & Gear	8	0.11651
Parkland Development, Amenities & Trails	30	0.02465
Library Materials	10	0.09133



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 the Town's 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 D-1
TOWN OF RICHMOND HILL
Operating and Capital Expenditure Impacts
for Future Capital Expenditures

SERVICE	GROSS COST LESS BENEFIT TO EXISTING	ANNUAL LIFECYCLE EXPENDITURES	ANNUAL OPERATING EXPENDITURES	TOTAL ANNUAL EXPENDITURES
1. Engineering				
1.1 Engineering	245,093,930	17,051,354	16,161,887	33,213,241
2. Public Works Facilities & Fleet				
2.1 Depots and Domes	21,415,957	1,330,686	616,526	1,947,212
2.2 PW Rolling Stock	785,000	129,864	22,599	152,463
3. Fire Protection Services				
3.1 Fire facilities	6,351,361	238,064	4,460,262	4,698,326
3.2 Fire vehicles	2,599,000	243,259	1,825,155	2,068,414
3.3 Small equipment and gear	193,440	23,742	135,844	159,586
4. Outdoor Recreation Services				
4.1 Parkland development, amenities & trails	57,013,766	3,372,121	5,015,155	8,387,276
4.2 Parks vehicles and equipment	1,113,400	184,196	97,939	282,135
5. Indoor Recreation Services				
5.1 Recreation facilities	132,589,022	7,647,930	2,854,315	10,502,245
6. Library Services				
6.1 Library facilities	20,536,779	1,040,432	2,256,130	3,296,562
6.2 Library materials	3,074,336	434,144	337,740	771,884
7. Administration				
7.1 Studies	5,136,324	0	0	0
Total	495,902,315	31,695,792	33,783,553	65,479,345



Appendix D

The Approach to the Calculation of the Charge



Appendix D: The Approach to the Calculation of the Charge

D.1 Introduction

This Appendix addresses the requirements of 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 D-1.

D.2 Services Potentially Involved

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

A number of these services are defined in s. 2 (4) of the D.C.A. as being ineligible for inclusion in D.C.s. These are shown as “ineligible” on Table D-1. Two ineligible costs defined in 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 Town’s D.C. are indicated with a “Yes.”

D.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. 5 (1) 3, which requires that Town 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 D-1
 The Process of Calculating a Development Charge under the Act
that must be followed

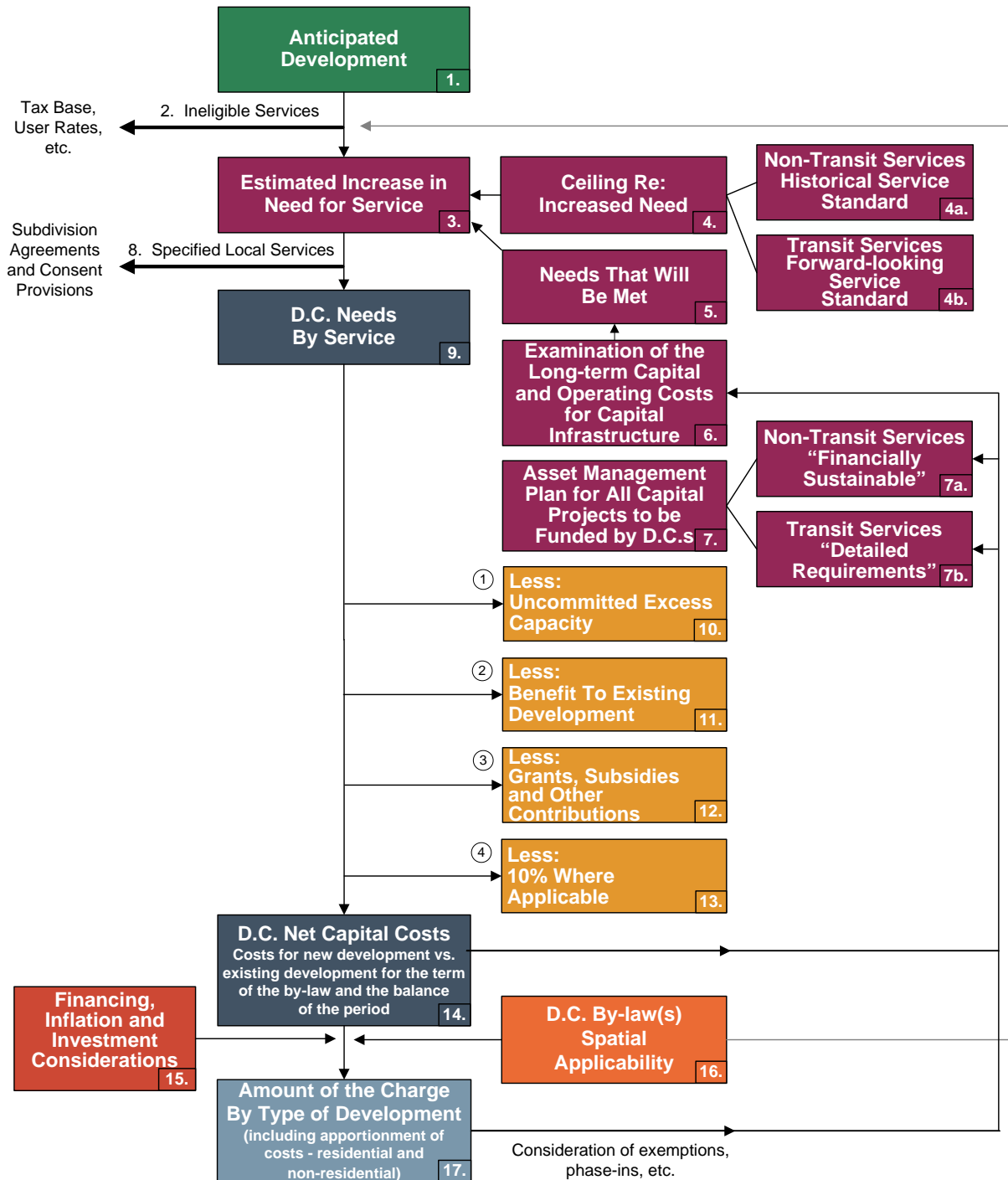




Table D-1
Categories of Municipal Services to be Addressed as Part of the Calculation

Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
1. Services Related to a Highway	Yes	1.1 Arterial roads	100
	Yes	1.2 Collector roads	100
	Yes	1.3 Bridges, Culverts and Roundabouts	100
	No	1.4 Local municipal roads	0
	Yes	1.5 Traffic signals	100
	Yes	1.6 Sidewalks and streetlights	100
	Yes	1.7 Active Transportation	100
2. Other Transportation Services	n/a	2.1 Transit vehicles ¹ & facilities	100
	n/a	2.2 Other transit infrastructure	100
	No	2.3 Municipal parking spaces - indoor	90
	No	2.4 Municipal parking spaces - outdoor	90
	Yes	2.5 Works Yards	100
	Yes	2.6 Rolling stock ¹	100
	n/a	2.7 Ferries	90
	n/a	2.8 Airport	90
3. Stormwater Drainage and Control Services	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 ¹	100
	Yes	4.3 Small equipment and gear	100

¹with 7+ year life time

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



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
5. Outdoor Recreation Services (i.e. Parks and Open Space)	Ineligible	5.1 Acquisition of land for parks, woodlots and E.S.A.s	0
	Yes	5.2 Development of area municipal parks	90
	Yes	5.3 Development of district parks	90
	Yes	5.4 Development of municipal-wide parks	90
	Yes	5.5 Development of special purpose parks	90
	Yes	5.6 Parks rolling stock ¹ and yards	90
6. Indoor Recreation Services	Yes	6.1 Arenas, indoor pools, fitness facilities, community centres, etc. (including land)	90
	Yes	6.2 Recreation vehicles and equipment ¹	90
7. Library Services	Yes	7.1 Public library space (incl. furniture and equipment)	90
	Yes	7.2 Library vehicles ¹	90
	Yes	7.3 Library materials	90
8. Electrical Power Services	Ineligible	8.1 Electrical substations	0
	Ineligible	8.2 Electrical distribution system	0
	Ineligible	8.3 Electrical system rolling stock	0
9. Provision of Cultural, Entertainment and Tourism Facilities and Convention Centres	Ineligible	9.1 Cultural space (e.g. art galleries, museums and theatres)	0
	Ineligible	9.2 Tourism facilities and convention centres	0
10. Wastewater Services	n/a	10.1 Treatment plants	100
	Yes	10.2 Sewage trunks	100
	n/a	10.3 Local systems	0
	Yes	10.4 Vehicles and equipment ¹	100

¹with 7+ year life time



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
11. Water Supply Services	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 ¹	100
12. Waste Management Services	Ineligible	12.1 Landfill collection, transfer vehicles and equipment	0
	Ineligible	12.2 Landfills and other disposal facilities	0
	n/a	12.3 Waste diversion facilities	90
	n/a	12.4 Waste diversion vehicles and equipment ¹	90
13. Police Services	n/a	13.1 Police detachments	100
	n/a	13.2 Police rolling stock ¹	100
	n/a	13.3 Small equipment and gear	100
14. Homes for the Aged	n/a	14.1 Homes for the aged space	90
	n/a	14.2 Vehicles ¹	90
15. Child Care	n/a	15.1 Child care space	90
	n/a	15.2 Vehicles ¹	90
16. Health	n/a	16.1 Health department space	90
	n/a	16.2 Health department vehicles ¹	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 ¹	90
21. Hospital Provision	Ineligible	21.1 Hospital capital contributions	0

¹with 7+ year life time



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

¹with a 7+ year life time

²same percentage as service component to which it pertains

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



D.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.

D.5 Capital Forecast

Paragraph 7 of 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, Town Council must indicate “...that it intends to ensure that such an increase in need will be met” (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 Town’s approved and proposed capital budgets and master servicing/needs studies.



D.6 Treatment of Credits

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

D.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. 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 Town spending all reserve fund monies prior to renewing each by-law, which would not be a sound basis for capital budgeting. Thus, the Town will use these reserve funds for the Town’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 Town's D.C. Reserve Fund Balance by service at December 31, 2018 is shown below:

Service	Totals
	\$25,732,770.17
	\$3,223,842.51
	(\$1,758,361.29)
	(\$5,427,565.56)
	\$9,024,978.17
	(\$1,718,215.37)
	(\$3,070,218.87)
	\$26,007,229.76

Note: Amounts in brackets are Deficit balances.

D.8 Deductions

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

- 85. the level of service ceiling;
- 86. uncommitted excess capacity;
- 87. benefit to existing development;
- 88. anticipated grants, subsidies and other contributions; and
- 89. 10% reduction for certain services.

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

D.8.1 Reduction Required by Level of Service Ceiling

This is designed to ensure that the increase in need included in D.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."

¹ Reserve balance to be combined with Administration Studies.



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.

D.8.2 Reduction for Uncommitted Excess Capacity

Paragraph 5 of 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 Town'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.

D.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:



90. The repair or unexpanded replacement of existing assets that are in need of repair;
91. An increase in average service level of quantity or quality (compare water as an example);
92. The elimination of a chronic servicing problem not created by growth; and
93. 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 section D.8.1 is related but is not the identical requirement. Sanitary, storm and water trunks are highly localized to growth areas and can be more readily allocated in this regard than other services such as services related to a highway, which do not have a fixed service area.

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

In the case of services such as recreation facilities, community parks, libraries, etc., the service is typically provided on a Town-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.



D.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).

D.8.5 The 10% Reduction

Paragraph 8 of s. 5 (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 4.

D.9 Municipal-wide vs. Area Rating

This step involves determining whether all of the subject costs are to be recovered on a uniform municipal-wide basis or whether some or all are to be recovered on an area-specific basis. Under the amended D.C.A., it is now mandatory to “consider” area-rating of services (providing charges for specific areas and services), however, it is not mandatory to implement area-rating. Further discussion is provided in section 6.4.4.

D.10 Allocation of Development

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



D.11 Asset Management

The new legislation now requires that a D.C. background study must include an Asset Management Plan (A.M.P.) (s. 10 (2) c. 2). The A.M.P. 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 A.M.P. 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 A.M.P., 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 H.

D.12 Transit

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

- A. Transit no longer requires the statutory 10% mandatory deduction from the net capital cost (s. 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 Regulations) 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 Town does not currently, and in the near future does not intend to, provide transit services. Therefore, the above calculations and reporting requirements are not required.



Appendix E

By-law Implementation



Appendix E: By-law Implementation

E.1 Public Consultation Process

E.1.1 Introduction

This chapter addresses the mandatory, formal public consultation process (section E.1.2), as well as the optional, informal consultation process (section E.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 E.1.4 addresses the anticipated impact of the D.C. on development from a generic viewpoint.

E.1.2 Public Meeting of Council

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

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

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

E.1.3 Other Consultation Activity

There are three broad groupings of the public who are generally the most concerned with Town 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 Town 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 Town 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.

E.2 Anticipated Impact of the Charge on Development

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

On the other hand, D.C.s or other Town 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.



E.3 Implementation Requirements

E.3.1 Introduction

Once the Town 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.

E.3.2 Notice of Passage

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

- 94. 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;
- 95. s.10 (4) lists the persons/organizations who must be given notice; and
- 96. s.10 (5) lists the eight items which the notice must cover.

E.3.3 By-law Pamphlet

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

- 97. A description of the general purpose of the D.C.s;



98. The “rules” for determining if a charge is payable in a particular case and for determining the amount of the charge;
99. The services to which the D.C.s relate; and
100. 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 Town must give one copy of the most recent pamphlet without charge, to any person who requests one.

E.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 Town 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 Town 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.

E.3.5 Complaints

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

101. The amount of the charge was incorrectly determined;
102. The reduction to be used against the D.C. was incorrectly determined; or
103. 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 Town Council to the L.P.A.T.



E.3.6 Credits

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

E.3.7 Front-Ending Agreements

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

E.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 section 51 or section 53 of the Planning Act, except for:

104. “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
105. “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. 59 (4) of the D.C.A. requires that the municipal approval authority for a draft plan of subdivision under 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 Town in question is a commenting agency, in order to comply with s. 59 (4) of the D.C.A. it would need to provide to the approval authority, information regarding the applicable Town D.C.s related to the site.

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

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



Appendix F

Development Charge Reserve Fund Policy



Appendix F: Development Charge Reserve Fund Policy

F.1 Legislative Requirements

The Development Charges Act, 1997 (D.C.A.) requires D.C. 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:

106. 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);
107. The municipality shall pay each D.C. it collects into a reserve fund or funds to which the charge relates;
108. 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);
109. 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
110. 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:

111. Opening balance;



112. Closing balance;
113. Description of each service and/or service category for which the reserve fund was established (including a list of services within a service category);
114. 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);
115. 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;
116. Amounts borrowed, purpose of the borrowing and interest accrued during previous year;
117. Amount and source of money used by the municipality to repay municipal obligations to the D.C. reserve fund;
118. 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);
119. 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
120. A statement as to compliance with 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 F-1 and Attachments 1 and 2 set out the format for which annual reporting to Council should be provided.

F.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 F-1
Annual Treasurer's Statement of D.C. Reserve Funds

Description	Services to which the Development Charge Relates							Total
	Non-Discounted Services			Discounted Services				
	Engineering	Public Work Facilities & Fleet	Fire Protection Services	Outdoor Recreation Services	Indoor Recreation Services	Library Services	Adminisration	
Opening Balance, January 1, _____								0
Plus:								
Development Charge Collections								0
Accrued Interest								0
Repayment of Monies Borrowed from Fund and Associated Interest ¹								0
Sub-Total	0		0		0	0		0
Less:								
Amount Transferred to Capital (or Other) Funds ²								0
Amounts Refunded								0
Amounts Loaned to Other D.C. Service Category for Interim Financing Credits ³								0
Sub-Total	0		0		0	0		0
Closing Balance, December 31, _____	0		0		0	0		0

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

² See Attachment 1 for details

³ See Attachment 2 for details

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



Attachment 1
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 Financin	Grants, Subsidies Other Contributions					
Engineering											
Capital Cost A											
Capital Cost B											
Capital Cost C											
Sub-Total - Engineering	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0
Fire Protection Services											
Capital Cost D											
Capital Cost E											
Capital Cost F											
Sub-Total - Fire Protection Services	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0
Library Services											
Capital Cost G											
Capital Cost H											
Capital Cost I											
Sub-Total - Library Services	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0



Attachment 2
Statement of Credit Holder Transactions

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



Appendix G

Local Service Policy



Appendix G: Local Service Policy

TOWN OF RICHMOND HILL GENERAL POLICY GUIDELINES ON DEVELOPMENT CHARGE AND LOCAL SERVICE FUNDING FOR ROAD-RELATED, STORMWATER MANAGEMENT, WATER AND SANITARY SEWER WORKS

General

It is assumed that:

- a. All background information provided by private professional consultants or other agencies is complete and accurate. Although data submitted from external sources was crosschecked, detailed verification of information provided by others was not part of this study
- b. All growth-related services normally provided by the Region of York, such as regional roads traffic signals at regional road, intersections, trunk transmission sewers, trunk transmission watermains, water system storage and trunk pumping facilities, will be included in the appropriate Region of York by-laws, and, therefore, are excluded from the Town's cost estimates.

The cost of certain other works within regional road allowances are the responsibility of the Town as outlined below under "Boundary Roads".

- c. The costs of the services shared by two or more development areas are shared on a pro-rata calculation based on population projections. Industrial and commercial areas are based on "equivalent population.
- d. Markups of 7.5% for contingencies, 7.5% for engineering and should be added to the net construction costs where appropriate.
- e. Construction costs are calculated based on the appropriate unit costs of January 2019.



- f. All costs estimated prior to January 2019 are to be updated to January 2019 using appropriate inflation factors. In accordance with the index of Statistic Canada Quarterly Construction Price Statistics.
- g. The cost of service connections to individual properties will not be included in the cost.
- h. Detailed analysis of collector road, water supply, sanitary sewage and storm drainage systems is not part of this study. The size and location of collector roads, trunk watermains, trunk sanitary sewers, trunk storm sewers and appurtenant works for areas without detailed studies, such as master servicing plans, will be estimated on the basis of experience in similar existing areas.

Collector Roads

It is assumed that:

- a. Collector roads are roads with a right of way greater than 20 meters and designated as a collector road in the relevant planning documents or associated master servicing plan.
- b. The base cost of roads in residential areas is the cost of a road having a right of way width of 20 meters and a pavement width of 8.5 meters.
- c. The base cost of roads in industrial areas is the cost of a road having a right of way width of 23 meters and a pavement width of 9.75 meters.

Watermains

It is assumed that:

- a. Trunk watermains are 250 mm or larger in diameter.
- b. The base cost of watermains is the cost of a 200mm watermain at a depth of 1.8 meters.
- c. The gross unit prices for watermains used in the cost schedules will include the cost of appurtenances such as valves chambers and fittings.



Sanitary Sewers

It is assumed that:

- a. Trunk sanitary sewers are 300 mm or larger in diameter.
- b. The base cost of sanitary sewers is the cost of a 250 mm sanitary sewer at a depth of 3.0 meters.
- c. The gross unit prices for sanitary sewers used in the cost schedules will include the cost of appurtenances such as maintenance holes.

Storm Sewers

It is assumed that:

- a. Trunk storm sewers are 750 mm or larger in diameter.
- b. The base cost of storm sewers is the cost of a 675 mm storm sewer at a depth of 3.0 meters.
- c. The gross unit prices for storm sewers used in the cost schedules will include the cost of appurtenances such as maintenance holes.
- d. Stream enclosures are not considered as trunk storm sewers and, therefore, are not included in the Town's estimates. Stream enclosures are considered to be for the benefit of the proponent and, therefore, the costs, are the responsibility of the proponent.

Boundary Roads

It is assumed that:

- a. A boundary road is a concession road and may be designated as a municipal road, a regional road or a provincial highway.
- b. The cost of road construction per se on boundary roads which have been designated as appropriate.



- c. The cost of sidewalks, landscaping and streetlighting associated with boundary roads is the responsibility of the Town.



Appendix H

Asset Management Plan



Appendix H: 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 (A.M.P.) related to new infrastructure. Section 10 (3) of the D.C.A. provides:

“The asset management plan shall,

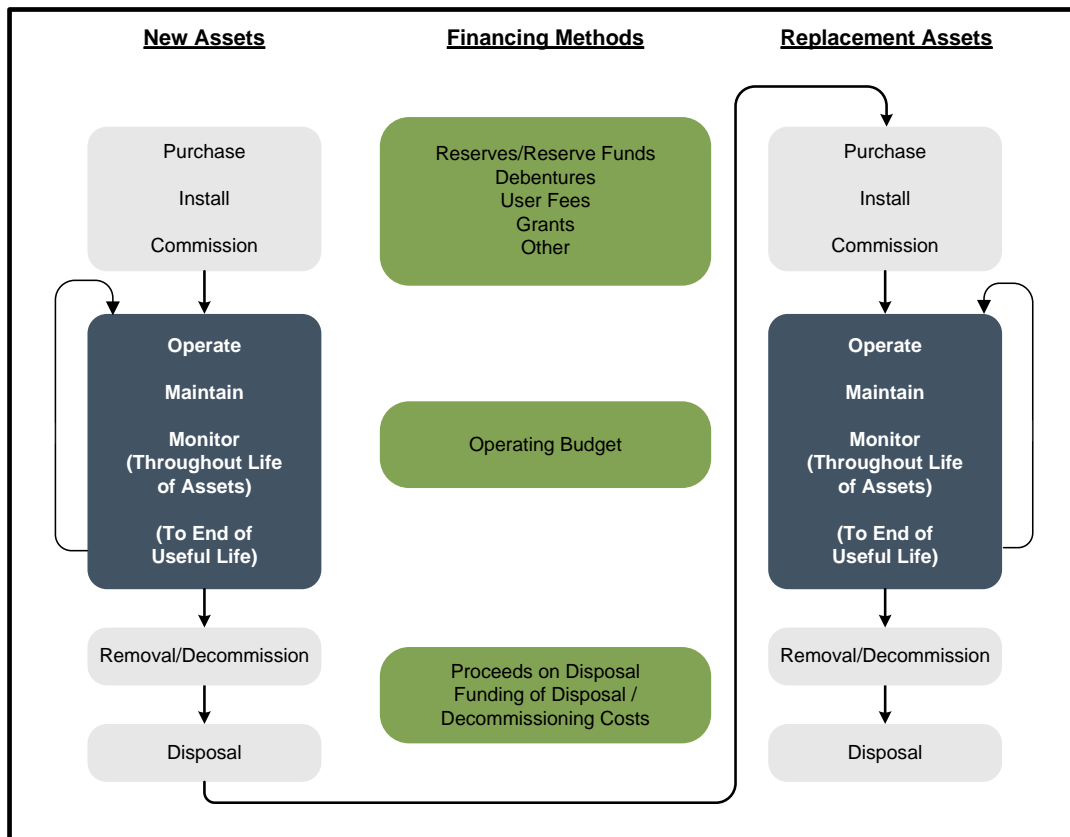
- (a) deal with all assets whose capital costs are proposed to be funded under the development charge by-law;
- (b) demonstrate that all the assets mentioned in clause (a) are financially sustainable over their full life cycle;
- (c) contain any other information that is prescribed; and
- (d) be prepared 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 A.M.P. provides for the long-term investment in an asset over its entire useful life along with the funding. The schematic below identifies the costs for an asset through its entire lifecycle. For growth-related works, the majority of capital costs will be funded by the D.C. non-growth-related expenditures will then be funded from non-D.C. revenues as noted below. During the useful life of the asset, there will be minor maintenance costs to extend the life of the asset along with additional program related expenditures to provide the full services to the residents. At the end of the life of the asset, it will be replaced by non-D.C. financing sources.



Figure H-1
Summary of A.M.P. Schematic



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

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

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

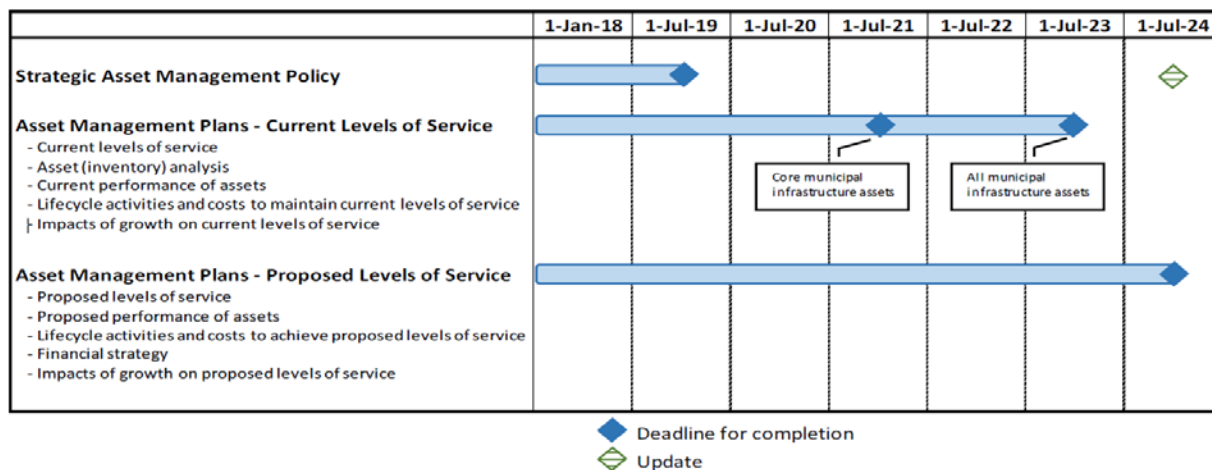
Asset management strategy: the asset management strategy is the set of planned actions that will seek to generate the desired levels of service in a sustainable way, while managing risk, at the lowest lifecycle cost.



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

The above provides for the general approach to be considered by Ontario municipalities. Currently, there is not a mandated approach for municipalities hence leaving discretion to individual municipalities as to how they plan for the long-term replacement of their assets. However, on June 4, 2015, the Province passed the Infrastructure for Jobs and Prosperity Act (I.J.P.A.) which, over time, will require municipalities to undertake and implement asset management plans for all infrastructure they own. On December 27, 2017, the Province of Ontario released Ontario Regulation 588/17 under I.J.P.A. which has 3 phases that municipalities must meet:

Figure H-2
Timeline of I.J.P.A. Requirements



Every municipality in Ontario will have to prepare a strategic asset management policy by July 1, 2019. Municipalities will be required to review their strategic asset management policies at least every five years and make updates as necessary. The subsequent phases are as follows:

121. Phase 1 – Asset Management Plan (by July 1, 2021):
 - For core assets – Municipalities must have the following:
 - i. Inventory of assets;
 - ii. Current levels of service measured by standard metrics; and



- iii. Costs to maintain levels of service.
- 122. Phase 2 – Asset Management Plan (by July 1, 2023):
 - Same steps as Phase 1 but for all assets.
- 123. Phase 3 – Asset Management Plan (by July 1, 2024):
 - Builds on Phase 1 and 2 by adding:
 - i. Proposed levels of service; and
 - ii. Lifecycle management and Financial strategy.

Once the requirements of I.J.P.A. are implemented, the requirement for an asset management plan in the D.C. process will be removed.

As this report is for 2019 (along with the additional area specific by-laws), this analysis needs to take into account information from the prior 2016 area specific D.C. studies along with the revised 2019 area specific D.C. studies. 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 Town's A.M.P., 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 2016 and 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 \$77.17 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 \$41.21 million. This amount, totalled with the existing operating revenues of



\$302.57 million, provide annual revenues of \$343.78 million by the end of the period.

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

Town of Richmond Hill
 Asset Management – Future Expenditures and Associated Revenues
 2019\$

	Sub-Total	2031 (Total)
Expenditures (Annualized)		
Annual Debt Payment on Non-Growth Related Capital ¹		7,210,864
Annual Debt Payment on Post Period Capital ²		9,617,613
Lifecycle:		
Annual Lifecycle - Town Wide Services	\$35,458,143	
Annual Lifecycle - Area Specific Services ³	\$720,900	
Sub-Total - Annual Lifecycle	\$36,179,043	\$36,179,043
Incremental Operating Costs (for D.C. Services)		\$33,783,553
Total Expenditures		\$77,173,460
Revenue (Annualized)		
Total Existing Revenue ⁴		\$302,569,425
Incremental Tax and Non-Tax Revenue (User Fees, Fines, Licences, etc.)		\$41,205,939
Total Revenues		\$343,775,364

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

² Interim Debt Financing for Post Period Benefit

³ All infrastructure costs included in Area Specific by-laws have been valued as of 2019 for asset management purposes (including proposed new by-laws)

⁴ As per Sch. 10 of FIR



Appendix I

Proposed Development Charge By-law



Appendix I: Proposed Development Charge By-law

THE CORPORATION OF THE TOWN OF RICHMOND HILL

BY-LAW NO. 52-19

A By-law to Enact a Town-Wide Development Charges By-Law for the Town of Richmond Hill

WHEREAS subsection 2(l) of the *Development Charges Act*, 1997, S.O. 1997, c.27, (the "Act") provides that the council of a municipality may pass by-laws for the imposition of development charges against land if the development of the land would increase the need for services arising from development of the area to which the by-law applies;

AND WHEREAS the Council of the Town of Richmond Hill has received and considered a Development Charges Study dated March 26, 2019 respecting the imposition of development charges in the Town of Richmond Hill;

AND WHEREAS subsection 9(1) of the Act provides that a development charge by-law expires five years after the day it comes into force unless it expires or is repealed earlier;

AND WHEREAS the Council of the Town of Richmond Hill held a public meeting on the 17th day of April, 2019 to consider the enactment of this by-law, and has given appropriate notice in accordance with the Act;

NOW THEREFORE THE COUNCIL OF THE TOWN OF RICHMOND HILL ENACTS AS FOLLOWS:

Definitions

1. In this By-law,
 - (a) "Act" means the Development Charges Act, 1997, S.O. 1997, c. 27, as amended or superseded;



- (b) “accessory building” means a building or structure that is naturally and normally incidental to or subordinate in purpose or both, and exclusively devoted to a principal use, building or structure;
- (c) “apartment building” means any residential building containing two or more dwelling units where the residential units are connected by an interior corridor whether or not any of the units have an independent entrance either directly or through a common vestibule;
- (d) “banquet hall” means buildings or structures or any part of a building or structure used or designed or intended for use primarily for the purpose of catering to banquets, weddings, receptions or similar social functions for which food and beverages are served;
- (e) “Building Code Act” means the Building Code Act, 1992, S.O. 1992, c.23;
- (f) “development” means any activity or proposed activity in respect of land that requires one or more of the approvals referred to in section 3 of this By-law and includes the development or redevelopment of land or the redevelopment, expansion, extension or alteration of use of a building or structure;
- (g) “development charge” means a charge imposed pursuant to this By-law;
- (h) “Development Charges Act” means the Development Charges Act, 1997, S.O. 1997, Chapter 27;
- (i) "derelict building" means a building or structure that is vacant, neglected, poorly maintained, and unsuitable for occupancy which may include a building or structure that: (a) is in a ruinous or dilapidated condition; (b) the condition of which seriously depreciates the value of land or buildings in the vicinity; (c) is in such a state of non-repair as to be no longer suitable for human habitation or business purposes; (d) is an allurements to children who may play there to their danger; (e) constitutes a hazard to the health or safety of the public; (f) is unsightly in relation to neighboring properties because the exterior finish of the building or structure is not maintained, or; (g) is a fire hazard to itself or to surrounding lands or buildings;



- (j) “dwelling unit” means any part of a building or structure used, designed or intended to be used as a domestic residence in which one or more persons may sleep and are provided with culinary and sanitary facilities for their exclusive use;
- (k) “existing industrial building” has the meaning set out in the Development Charges Act;
- (l) “grade” means the average level of finished ground adjoining a building or structure at all exterior walls;
- (m) “gross floor area” means,
 - (i) in the case of a residential building or structure or in the case of a mixed-use building or structure with respect to the residential portion thereof, the aggregate of the areas of each floor above grade of a dwelling unit measured between the exterior faces of the exterior walls of the building or structure or from the centre line of a common wall separating a dwelling unit from another dwelling unit or other portion of a building;
 - (ii) in the case of a non-residential building or structure, or in the case of a mixed-use building or structure with respect to the non-residential portion thereof, the aggregate of the areas of each floor, whether 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 a non-residential use and a residential use, excluding, in the case of a building or structure containing an atrium, the sum of the areas of the atrium at the level of each floor surrounding the atrium above the floor level of the atrium, and excluding, in the case of a building containing parking spaces other than a parking structure, the sum of the areas of each floor used, or designated or intended for use for the parking of motor vehicles unless the parking of motor vehicles is the principal use of the building or structure, and, for the purposes of this definition, the non-residential portion of a mixed-use building is deemed to include one-half of any area common to the residential



use and non-residential use portions of such mixed-use building or structure but shall not include any common area used exclusively by or for the residential use portion of such mixed-use buildings or structures;

- (n) “heritage building” means a building or structure which is designated to be of cultural heritage value or interest, or that is included in the register as a property of cultural value or interest, pursuant to the Ontario Heritage Act, as amended;
- (o) “hotel” means a commercial establishment offering lodging mainly to travelers and sometimes to permanent residents, and may include other services such as restaurants, meeting rooms and stores, that are available to the general public;
- (p) “institution” 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;
- (q) “large apartment” means a row dwelling or a dwelling unit in a low density multiple building or an apartment building that is 700 square feet or larger in size;
- (r) “live work unit” means any part of a building or structure that includes a dwelling unit as well as a space intended for non-residential use;
- (s) “local board” has the meaning set out in Section 1 of the Development Charges Act;
- (t) “low density multiple building” means any residential building containing two or more dwelling units other than a row dwelling or semi-detached dwelling, where the residential units are not connected by an interior corridor and each unit has an independent entrance either directly or through a common vestibule;



- (u) “mixed-use buildings” means land, buildings or structures used, or designed or intended for use, for a combination of non-residential and residential uses;
- (v) “non-residential use” means a building or structure used for other than a residential use and shall include retail uses;
- (w) "non-retail uses" means all non-residential uses other than retail uses and shall include offices;
- (x) "offices" means lands, buildings or structures used or designed or intended for use for the practice of a profession, the carrying on of a business or occupation or the conduct of a nonprofit organization and shall include but not be limited to the office of a physician, lawyer, dentist, architect, engineer, accountant, real estate or insurance agency, veterinarian, surveyor, appraiser, financial institution, contractor, builder, and developer;
- (y) “owner” means the owner of land or a person who has made application for an approval for the development of land;
- (z) “parking structure” means a building or structure principally used for the parking of motor vehicles and shall include a building or structure, or any part thereof, where motor vehicles are stored prior to being sold or rented to the general public;
- (aa) “place of worship” means a building or structure, or that part thereof, that would be exempt from taxation as a place of worship pursuant to the Assessment Act, R.S.O. 1990, c. A.31, as amended or superseded;
- (bb) “Planning Act” means the Planning Act, R.S.O. 1990, c. P.13, as amended or superseded;
- (cc) “public hospital” means a hospital governed by the Public Hospitals Act, R.S.O. 1990, c. P.40, as amended;
- (dd) “Region” means the Regional Municipality of York;



- (ee) “residential use” includes all buildings or structures or portions thereof used for residential occupancy and includes buildings or structures used for single detached dwellings, semi-detached dwellings, low density multiple and apartment units;
- (ff) "retail uses" means all buildings or structures used for the sale or rental or offer for the sale or rental of goods or services to the general public for consumption or use and shall include but not be limited to a banquet hall, parking structure and a hotel ,as well as any building or structure used for the sale or rental of goods or services where membership is a precondition to a person being able to acquire the goods or services at that place, but shall exclude an office;
- (gg) “row dwelling” means a dwelling unit in a residential building consisting of more than two dwelling units having one or two vertical walls, but no other parts, attached to another dwelling;
- (hh) “school board” means a board as defined in Section 1(1) of the Education Act;
- (ii) semi-detached dwelling” means a dwelling unit in a residential building consisting of two dwelling units having one vertical wall, but no other parts, attached to another dwelling unit, where the residential units are not connected by an interior corridor;
- (jj) “services” means services designated in this By-law;
- (kk) “small apartment” means a row dwelling or a dwelling unit in a low density multiple building an apartment building that is less than 700 square feet in size
- (ll) “single detached dwelling” means a residential building consisting of one dwelling unit that is not attached to another structure; and
- (mm) “Town” means The Corporation of the Town of Richmond Hill.



Designation of Services

2. The categories of services for which development charges are imposed under this by-law are as follows:
 - (a) Engineering
 - (b) Public Works Facilities & Fleet
 - (c) Fire Protection Services
 - (d) Indoor Recreation Services
 - (e) Outdoor Recreation Services
 - (f) Library Services
 - (g) Administration

Components of the services designated in 2(a) through 2(g) are described in Schedule "A".

Lands Affected

3. This By-law applies to all lands within the geographic boundaries of the municipality of the Town of Richmond Hill in the Regional Municipality of York.

Approvals for Development

4. A development charge is payable by the owner pursuant to this By-law in connection with the following approvals for the development of land:
 - (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 9 of the Condominium Act, 1998, S.O. 1998, c. 19; or
- (g) the issuing of a permit under the Building Code Act in relation to a building or structure.

Multiple Approvals

- 5. (a) Where two or more of the actions described in subsections 4(a) to (g) inclusive, are required before land to which a development charge applies can be developed, only one development charge shall be levied in accordance with the provisions of this By-law.
- (b) Notwithstanding subsection (a), if two or more of the actions described in subsections 4(a) to (g) inclusive occur at different times with respect to the same lands and result in additional development of those lands, an additional development charge in respect of such additional development shall be calculated and paid in accordance with the provisions of this By-Law and the provisions of Sections 6, 8, 10, 11 and 12 shall be applicable in calculating the additional development charge.

Calculation of Development Charges

- 6. Except as otherwise set out in this By-law, the development charge with respect to the development 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 to be constructed;
 - (b) in the case of non-residential development, or the non-residential portion of a mixed-use development, based upon the gross floor area in square metres of the proposed building or structure or addition thereto.



Schedule of Services for Development Charges

7. (a) The services for which the development charge is imposed, as designated in Section 2 of this By-law, and the amount of the development charge payable with respect to any of the approvals mentioned in subsections (a) to (g) of Section 4 of this By-law shall be calculated in accordance with Schedules “B” and “C” to this By-law, subject to any exemptions, reductions, credits and other qualifications provided in this By-law.

(c) **Non-Retail Uses and Retail Uses**

Notwithstanding any other provision in this By-law, in the case of lands, buildings or structures used, designed or intended to be used for both non-retail and retail uses, the development charges otherwise applicable to such development under subsection 7(a) shall be determined on the following basis:

- (i) as between the non-retail uses and the retail uses, the principal use of the development shall be that use which has the greater gross floor area;
- (ii) subject to (iii), the development charges under subsection 7(a) applicable to such principal use as determined under subsection (i) shall be applied to the total non-residential gross floor area of the development; and
- (iii) if the principal use is for a hotel, the development charge shall be twenty-five (25%) percent of the prevailing retail rate for the total gross floor area of the hotel, and each suite to be used for the purposes of providing lodging shall be charged the prevailing small apartment rate.

Indexing of Development Charges

8. Development charges imposed pursuant to this By-law shall be adjusted annually, without amendment to this By-law, commencing on the first day of July in the year following the enactment of this By-law and every subsequent year, in accordance with the Act.



Timing of Calculation and Payment

9. (a) The development charge shall be calculated as of, and shall be payable, on the date a building permit is issued in relation to a building or structure on land to which the development charge applies.
- (b) Notwithstanding subsection (a) an owner and the Town may enter into an agreement respecting the timing of the payment of a development charge, or a portion thereof, and the terms of such agreement shall then prevail over the provisions of this By-law.

Exemptions for Intensification of Residential Lands Uses and Enlargement of Existing Industrial Buildings

10. (a) This By-law does not apply with respect to approvals related to the residential use of land, buildings or structures that would have the effect only:
 - (i) of permitting the enlargement of an existing dwelling unit; or
 - (ii) of creating one or two additional dwelling units in an existing residential building as prescribed, and subject to the prescribed restrictions, in prescribed classes of buildings, pursuant to regulations made under the Act.
- (b) 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:
 - (i) Subject to subsection 10(b)(iii), 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;

- (ii) Subject to subsection 10(b)(iii), if the gross floor area is enlarged by more than 50 per cent 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) 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.



- (iii) For the purposes of calculating the extent to which the gross floor area of an existing industrial building is enlarged in subsections 10(b)(i) and 10(b)(ii), 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.
- (iv) For the purposes of this subsection (b), 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.
- (v) Notwithstanding the definition of “gross floor area” set out in Section 1 of this By-law, for the purposes of this subsection (b) only, “gross floor area” shall have the meaning set out in Ontario Regulation 82/98 made pursuant to the Development Charges Act.

Reduction of Charges for Redevelopment

11. Where, as a result of the redevelopment of land, a building or structure existing on the land within 48 months prior to the date of payment of development charges in regard to such redevelopment was, or is to be demolished, in whole or in part, or converted from one principal use to another, in order to facilitate the redevelopment, the development charges otherwise payable with respect to such redevelopment shall be reduced by the following amounts:
- (a) in the case of a residential building or structure, or in the case of a mixed- use building or structure, the residential uses in the mixed-use building or structure, an amount calculated by multiplying the applicable development charge under



- subsection 6 of this by-law by the number, according to type, of dwelling units that have been or will be demolished or converted to another principal use; and
- (b) in the case of a non-residential building or structure or, in the case of mixed-use building or structure, the non-residential uses in the mixed-use building or structure, an amount calculated by multiplying the applicable development charges under subsection 6 of this by-law by the gross floor area that has been or will be demolished or converted to another principal use; provided that such amounts shall not exceed, in total, the amount of the development charges otherwise payable with respect to the redevelopment. The 48 month time frame shall be calculated from the date of the issuance of the demolition permit.
12. For the purposes of subsection 11, the onus is on the applicant to produce evidence to the satisfaction of the Town, acting reasonably, to establish the following:
- (a) the number of dwelling units that have been or will be demolished or converted to another principal use; or
 - (b) the non-residential gross floor area that has been or will be demolished or converted to another principal use; and
 - (c) in the case of a demolition, that the dwelling units and/or non-residential gross floor area were demolished within 48 months prior to the date of the payment of development charges in regard to the redevelopment.
13. Any building or structure, that is determined to be derelict, or the equivalent of derelict by the Council of the Town, shall be eligible for development charge credits in accordance with section 14.
14. Any building or structure deemed derelict, or the equivalent of derelict in accordance with subsection 13 shall be eligible for development charge credits if a building permit is issued for a building or structure on the lands previously occupied by the deemed derelict residential building or structure within 120 months or less of the issuance of demolition permit for the deemed derelict building or structure. The calculation of the development charge credit shall be made in accordance with Section 11, the total amount of which shall be based on



the time that has passed between the date of issuance of the demolition permit and the date of issuance of the building permit as set out in Schedule D.

No Refunds Arising Out of Reductions or Credits

15. Notwithstanding anything in this By-law to the contrary, whenever a reduction or credit is allowed against a development charge otherwise payable pursuant to this By-law and the total of such amounts exceeds the amount of the development charge payable pursuant to this By-law, no further reduction(s) or credit(s) shall be allowed and no refund shall be payable.

Exemptions

16. Notwithstanding the provisions of this by-law, development charges shall not be imposed with respect to:
- (a) buildings or structures to be owned by and used for the purposes of the Town, the Region or a local board;
 - (b) buildings or structures to be owned by a school board and used for school board purposes;
 - (c) buildings or structures to be used as a public hospital;
 - (d) the gross floor area of a place of worship up to a maximum of 464.5 square metres (5,000 square feet) or in respect of that portion of the gross floor area of a place of worship which is used as an area for worship, whichever is greater;
 - (e) the relocation of a residential heritage building within the boundaries of the Town of Richmond Hill; and
 - (f) the creation or addition of an accessory building not exceeding 100 square metres (1,076.39 square feet) of gross floor area save and except for any live work units with a retail component, for which development charges will be payable on the retail portion.

Payment By Money and Credits for the Provision of Services

17. (a) Payment of development charges shall be by cash or by certified cheque.



- (b) Where any development charge, or any part thereof, remains unpaid after the date on which it is payable, the amount unpaid shall be added to the tax roll and collected in the same manner as taxes.
- (c) In the alternative to payment by the means provided in subsection (1), the Town may, by an agreement entered into with the owner, accept the provision of services in lieu of the payment of all or any portion of a development charge pursuant to subsection (1) of Section 38 of the Act.
- (d) If, pursuant to an agreement, the Town allows an owner to perform work that relates to a service to which a development charge relates, the amount of the credit towards the development charge for such work shall be the reasonable cost of doing such work as agreed by the Town and the Owner, provided however, that no credit may be given for any part of the cost of the work that relates to an increase in the level of service that exceeds the average level of service described in paragraph 4 of subsection 5(1) of the Act.
- (e) In any agreement made in accordance with subsection 15(c) of this by-law, the Town may agree to give a credit in relation to another service to which this by-law relates.
- (f) In any agreement respecting credits arising from a development charge payable under any other development charge by-law, the Town may agree to give a credit related to a development charge payable under this by-law.

Reserve Funds

- 18. Development charge payments received by the Town pursuant to this by-law shall be maintained in a separate reserve fund or funds for each service to which the development charge relates and shall be spent only for the capital costs determined under paragraphs 2 to 8 of subsection 5(1) of the Act.

Interest on Refunds

- 19. (a) Where this By-law, in whole or in part, or any development charge prescribed hereunder is amended or repealed by Order of the Ontario



Municipal Board, or if a development charge that has already been paid is reduced by the Council of the Town pursuant to Section 20 of the Act, or by the Ontario Municipal Board pursuant to Section 24 of the Act, the Treasurer for the Town shall calculate forthwith the amount of any refund or overpayment to be refunded as a result of the said amendment or repeal.

- (b) Refunds that are required to be paid under subsection (a) shall be paid to the owner who made the payment.
- (c) Refunds that are required to be paid under subsection (a) shall be paid with interest to be calculated as follows:
 - (i) Interest shall be calculated in accordance with the Bank of Canada rate from the date on which the overpayment was collected to the date on which the refund is paid;
 - (ii) Interest on refunds for the period for which interest is payable pursuant to subsection (a) shall be calculated and paid on a fluctuating basis in accordance with the quarter-yearly adjustment of the interest rate as established in subsection (iii);
 - (iii) The Bank of Canada interest rate in effect on the date of coming into force of this By-law shall be adjusted quarter-yearly thereafter on the first business day of January, April, July and October in each year to the rate established by the Bank of Canada on that date of the adjustment.

Schedules

20. 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” - Town-Wide Development Charges:

Residential Development Charges by Unit Type

Schedule “C” - Town-Wide Development Charges:



Non-Residential Development Charges by Square Metre of Gross Floor Area by Retail Uses and Non-Retail Uses

Schedule "D": Calculation of Development Charges Credits provided to
Derelict Buildings

Date By-law Effective

21. This By-law shall come into force and effect on the date of enactment.

Repeal of Existing By-law

22. By-law No. 52-14 is hereby repealed.

Short Title

23. The short title of this By-law is the "Town of Richmond Hill Town-Wide
Development Charges By-law, 2019".



PASSED THIS 28TH DAY OF MAY, 2019.

Mayor

Town Clerk



SCHEDULE “A” TO BY-LAW NO. 47-19

DESIGNATED MUNICIPAL SERVICES UNDER THIS BY-LAW

100% Eligible Services – Town Wide Services

Engineering

- Roads and Related
- Water

Public Works Facilities & Fleet

- Public Works Facilities
- Public Works Fleet

Fire Protection Services

- Fire Facilities
- Fire Vehicles
- Small Equipment and Gear

90% Eligible Services – Town Wide Services

Outdoor Recreation Services

- Parkland Development, Amenities & Trails
- Park Vehicles

Indoor Recreation Services

- Recreation Facilities

Library Services

- Library Facilities



- Library Materials

Administration

- Studies



SCHEDULE "B" TO BY-LAW NO. 47-19

TOWN OF RICHMOND HILL TOWN-WIDE DEVELOPMENT CHARGES RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	RESIDENTIAL			
	Single and Semi-Detached Dwelling	Apartments - Large \geq 700 sq.ft.	Apartments - Small $<$ 700 sq.ft.	Other Multiples
Municipal Wide Services:				
Engineering	7,498	4,925	2,882	6,089
Public Works Facilities & Fleet	856	562	330	694
Fire Protection Services	456	300	175	371
Outdoor Recreation Services	3,482	2,286	1,337	2,827
Indoor Recreation Services	4,652	3,055	1,788	3,777
Library Services	1,194	783	458	968
Administration	292	190	112	237
Total Municipal Wide Services	18,430	12,102	7,081	14,963

NOTE:

All charges are subject to adjustment in accordance with the terms of Section 8 of this by-law.

Additional development charges applicable to other services and to specific areas may be imposed pursuant to other development charge by-laws.



SCHEDULE "C" TO BY-LAW NO. 47-19

TOWN OF RICHMOND HILL TOWN-WIDE DEVELOPMENT CHARGES NON-RESIDENTIAL DEVELOPMENT CHARGES BY SQUARE METRE OF GROSS FLOOR AREA

BY RETAIL USE AND NON-RETAIL USE

Service	NON-RESIDENTIAL			
	Retail (per sq.m. of Gross Floor Area)	Non-Retail (per sq.m. of Gross Floor Area)	Retail (per sq.ft. of Gross Floor Area)	Non-Retail (per sq.ft. of Gross Floor Area)
Municipal Wide Services:				
Engineering	12	43.76	5.59	4.07
Public Works Facilities & Fleet	30	4.63	0.59	0.43
Fire Protection Services	12	2.15	0.29	0.20
Outdoor Recreation Services	63	3.44	0.43	0.32
Indoor Recreation Services	19	4.57	0.57	0.42
Library Services	61	1.18	0.15	0.11
Administration	15	1.61	0.20	0.15
Total Municipal Wide Services	84.12	61.35	7.81	5.70

NOTE:

All charges are subject to adjustment in accordance with the terms of Section 8 of this by-law.

Additional development charges applicable to other services and to specific areas may be imposed pursuant to other development charge by-laws.



**SCHEDULE “D”
TO BY-LAW NO. 47-19**

**TOWN OF RICHMOND HILL
TOWN-WIDE DEVELOPMENT CHARGES
CALCULATION OF DEVELOPMENT CHARGES CREDITS PROVIDED TO
DERELICT BUILDINGS**

Number of Months From Date of Demolition Permit to Date of Building Permit Issuance	Credit Provided (%)
Up to and including 48 months	100
Greater than 48 months up to and including 72 months	75
Greater than 72 months up to and including 96 months	50
Greater than 96 months up to and including 120 months	25
Greater than 120 months	0