

Clause 6 in Report No. 3 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on February 15, 2018.

6

Draft 2018 Development Charge Background Study and Proposed Draft Bylaw Amendment

Committee of the Whole recommends adoption of the following recommendations contained in the report dated January 26, 2018 from the Commissioner of Finance:

- 1. Council receive the draft 2018 Development Charge Background Study and proposed draft bylaw amendment (the "Bylaw") (Attachment 1).
- Council endorse the proposed changes and clarifications to the treatment of structured parking and car dealerships as contained in this report, the 2018 Development Charge Background Study and proposed draft bylaw amendment (Attachment 1).
- 3. Council delegate to:
 - a) the Commissioner of Finance the authority to schedule and give notice for the public meeting required by the Development Charges Act, 1997 (the "Act") to be held on March 22, 2018 and any subsequent public meetings, and
 - b) the Committee of the Whole the authority to hold the March 22, 2018 public meeting.
- 4. The draft Bylaw be brought forward for consideration for approval by Regional Council at its May 17, 2018 meeting.
- 5. The Regional Clerk circulate this report to the local municipalities and to the Building Industry and Land Development Association York Chapter (BILD).

Report dated January 26, 2018 from the Commissioner of Finance now follows:

1. Recommendations

It is recommended that:

- 1. Council receive the draft 2018 Development Charge Background Study and proposed draft bylaw amendment (the "Bylaw") (Attachment 1).
- 2. Council endorse the proposed changes and clarifications to the treatment of structured parking and car dealerships as contained in this report, the 2018 Development Charge Background Study and proposed draft bylaw amendment (Attachment 1).
- 3. Council delegate to:
 - a. the Commissioner of Finance the authority to schedule and give notice for the public meeting required by the *Development Charges Act, 1997* (the "Act") to be held on March 22, 2018 and any subsequent public meetings, and
 - b. the Committee of the Whole the authority to hold the March 22, 2018 public meeting.
- 4. The draft Bylaw be brought forward for consideration for approval by Regional Council at its May 17, 2018 meeting.
- 5. The Regional Clerk circulate this report to the local municipalities and to the Building Industry and Land Development Association York Chapter (BILD).

2. Purpose

This report supports the tabling of the Regional Municipality of York's proposed 2018 Development Charge Background Study and amending Bylaw. It also highlights changes to the current development charge rates and bylaw, including the treatment of structured parking.

3. Background

Council directed staff to bring back a potential amendment adding "Part B" road projects to the development charge bylaw

When Council approved the 2017 Development Charge Bylaw on May 25, 2017, it also directed staff to bring back an amendment by March 31, 2018 that would add all of the roads projects in "Part B" of Contingency Schedule G of the 2017 Development Charge Bylaw into the rate calculation.

A contingency schedule is a list of proposed capital projects, with associated development charge rate increases, that would become part of the bylaw, should certain conditions be met (trigger event). The projects on "Part B" of Contingency Schedule G were subject to five financial triggers being met:

- 1. The province extend the power to raise revenues from new sources to the Region
- 2. Council approve the implementation of those new revenue sources
- 3. Council approve the specific project(s) as part of its 10-year capital plan
- 4. Council approve the allocation of new revenue sources to the project(s)
- 5. No additional debt would be required as a result of funding the project(s)

The 56 projects on "Part B" of Contingency Schedule G were identified as part of the 2016 Transportation Master Plan. Their inclusion was based on consultations with local municipalities and the Region's roads prioritization model. The five-part precondition to trigger the associated rate increases was chosen to ensure that the Region would be able to fund the additional projects in a fiscally prudent way.

The treatment of structured parking will also be affected by the proposed bylaw amendment

As part of the consultation process for the 2017 Development Charge Bylaw, some stakeholders expressed concern with respect to the treatment of structured parking. Staff have reviewed the treatment of all structured parking and are proposing some changes as part of this amendment. The scope of the review included:

 Accessory-use structured parking, including those servicing malls, hotels, and offices

• Structured parking used by car dealerships (stand-alone, below-grade or above-grade)

The 2018 Development Charge Bylaw and Background Study will be made available on February 15, 2018

To amend a development charge bylaw, a new background study must be prepared which underpins the rates in the amending bylaw. The *Act* requires that this background study be made available to the public for a minimum of 60 days prior to the passing of the bylaw, and at least two weeks prior to a statutorily required public meeting. Both the draft amending bylaw and the background study will be available on the Region's website on February 15, 2018.

A public meeting to receive feedback on the proposed Bylaw amendment is anticipated to precede the meeting of the Committee of the Whole on March 22, 2018. Feedback from the public meeting will be considered as part of the final 2018 Bylaw amendment that will be brought to Council for consideration on May 17, 2018, with a coming-into-force date of July 1, 2018. The coming-into-force date was chosen to coincide with the annual indexing of rates. Table 1 describes the statutory requirements, Council engagements, and the applicable dates.

Table 4

I able 1					
Key Dates in Regional B	Sylaw Amendment	Process			
Deliverable	Date	Time elapsed			
2018 Background Study and draft Bylaw amendment publicly released with a report (includes recommendation authorizing public notice)	February 15, 2018	7 days			
Notice of public meeting published in all Metroland newspapers	February 22, 2018] 28 01			
Public meeting immediately prior to Committee of the Whole Week 2	March 22, 2018	days days*			
2018 Development Charge Bylaw amendment report to Committee of the Whole Week 2	May 10, 2018	56 days			
2018 Development Charge Bylaw amendment to Council for anticipated approval	May 17, 2018	JJ			
2018 Development Charge Bylaw amendment and rates come into effect	July 1, 2018				

*Note: The *Development Charges Act, 1997* requires that a background study be available to the public at least 60 days prior to passing the Bylaw.

Stakeholders were consulted during the development of this background study

Beginning in December 2017, staff consulted representatives from local municipalities and the Building Industry and Land Development Association – York Chapter (BILD). Staff met with representatives from the local municipalities on two occasions and the BILD working group on two occasions. Topics discussed include:

- Scope of the amendment
- Preliminary impact on rates
- Treatment of structured parking in the amended bylaw

The requirement under the *Act* to consider area-specific rates has already been met

Under section 10 of the *Act*, municipalities are required to consider area-specific development charges in their background study. As part of the 2017

Development Charge Background Study and Bylaw staff considered the potential for implementing area-specific charges. It was determined that the Region should continue with its existing practice of region-wide rates for the 2017 Bylaw (with the exception of wastewater rates for the Village of Nobleton). Chief among the considerations was the fact that the changes to the Growth Plan could affect the spatial distribution of the growth forecast, which is an essential input in determining the benefiting population and employment growth that is needed when creating an area-specific development charge. These growth forecasts will be developed through the Municipal Comprehensive Review process currently underway.

It was determined through consultation with Legal Services and Hemson Consulting Ltd. (the consultants retained by the Region to advise on development charge matters) that the consideration of area-specific charges as identified in the 2017 Development Charge Background Study, including the analysis and rationale, remains applicable to the 2018 Development Charge Background Study.

4. Analysis and Implications

A development charge bylaw must balance competing requirements

Any development charge bylaw has to balance the competing challenges and requirements of the Growth Plan and the *Act* (Figure 1).



Figure 1 Balancing competing requirements

A substantial investment in new infrastructure will be required in order to achieve the growth target mandated by the provincial Growth Plan. Development charges are a tool to recover the cost of growth-related infrastructure. However, development charges do not cover the full cost of growth, as the *Act* limits and delays cost recovery through statutory deductions (i.e., benefit to existing deductions, ten per cent statutory deductions, post-period benefit deductions), exemptions and ineligible services. Also, changes to the *Act* in 2015 added a requirement for municipalities to demonstrate that all infrastructure assets funded under a development charge bylaw are financially sustainable.

The 2017 Development Charge Bylaw balanced these requirements while ensuring sufficient roads infrastructure would be in place to achieve growth to 2031. The 2018 Bylaw amendment builds on the roads infrastructure program.

Ultimately, development charges cannot generate sufficient revenue to fund the needed growth-related infrastructure in the Region. Therefore, new revenue sources are required to meet growth objectives in a financially sustainable way.

The proposed draft 2018 Bylaw amendment will not affect the development charge rates for other services

The proposed draft 2018 Development Charge Bylaw amendment adheres to the Council direction to add the 56 roads projects from "Part B" of Contingency Schedule G to the 2017 Bylaw. The change to the development charge rates as a result of the proposed amendment only pertains to the 56 roads projects being

added¹. The Region will continue to collect development charges for all other services based on what was included in the 2017 Development Charge Bylaw.

In addition, other key assumptions and inputs will remain the same as they were in the 2017 Development Charge Background Study. These include:

- Residential and non-residential growth forecasts, including the forecast horizon (2017 to 2031)
- Development charge calculation methodologies
- Debt and reserve balances

Any change made to the 2017 Development Charge Bylaw through an amendment could be subject to appeal. By limiting the scope of the proposed 2018 Bylaw amendment, the basis of potential appeals will be narrowed.

The 2018 Bylaw amendment includes an additional \$1.49 billion of gross project costs for roads growth infrastructure

Compared to the 2017 Background Study main project list, including Contingency List B will add \$1.49 billion in gross project costs and \$1.35 billion in development-charge-eligible costs to the rate calculation (Table 2). The difference will be a future tax levy pressure.

Table 2 Summary of Project Costs						
Gross Project Costs	2017 Development Charge Background Study (\$ Millions)	2018 Background Study (\$ Millions)	Difference (\$ Millions)			
Roads Services	2,798.7	4,284.2	1,485.5			
Roads Development Charge Eligible Costs (2017-2031)	1,947.5	3,295.0	1,347.6			

*Note: Numbers shown here are 2017 costs and may not sum due to rounding

¹ Note: In addition the rates also reflect a technical adjustment to project 233 in the 2017 Development Charge Background Study. The adjustment is discussed on page 8 of this report.

While the cost of the additional roads projects was presented as part of the 2017 Background Study, a few technical adjustments are now being proposed.

First, the cost for the Transportation Demand Management Project (project number 233 in the 2017 Background Study) was incorrectly calculated and presented. The correct gross cost estimate should have been \$34.3 million, \$10.7 million higher than the amount included in the 2017 Background Study.

Second, 16 projects in "Part B" of Contingency Schedule G included environment assessment costs that had already been accounted for as part of the Roads Main Project List. These costs (\$13.5 million in gross project costs) have now been excluded from the rate calculation.

Overall, adding the 56 projects to the rate calculation will result in a residential development charge rate for a single family dwelling before indexing of \$57,525, representing a \$9,195 (19 per cent) increase above the current rates.

Table 3 shows a breakdown of these changes to the development charge rate for a single family dwelling before indexing.

industration of Changes to Single Failing Dweining Rate				
Change	Gross Cost Increase (Decrease)	Impact on Rate		
	(\$ Millions)	(\$)		
Addition of 56 roads projects to the Bylaw	1,488.3	9,209		
Adjustment to the environmental assessment costs for 16 projects added	(13.5)	(83)		
Adjustment to the Transportation Demand Management Project	10.7	69		
Total	1485.5	9,195		

Table 3Illustration of Changes to Single Family Dwelling Rate

*Note: Numbers may not sum due to rounding

The rate changes subject to this amendment will include an inflationary factor of 2.4 per cent to adjust the costs from 2017 to 2018 dollars. The inflationary factor is based on the annual average of the Statistics Canada's Quarterly Construction Price Index for the past ten years. This is the same factor used for all other services currently in the 2017 Development Charge Background Study.

An amended asset management plan has been prepared in accordance with the *Act*

The *Act* requires municipalities to prepare an asset management plan as part of their Background Study that will demonstrate that all assets funded by the bylaw are financially sustainable over their lifecycle. The asset management plan can be found in Chapter 7 of the draft 2018 Development Charge Background Study (*Attachment 1*).

Asset management is an integrated, lifecycle approach that brings together physical and financial aspects of existing and planned infrastructure systems. The goal is to minimize costs over time while providing the desired level of service with an appropriate level of risk.

An asset management plan covering the main project list was included in the 2017 Development Charge Background Study. It accounted for the full operating and capital requirements related to both existing and future assets, enabling an estimate of the impact of growth on both user rates and the tax levy.

The 56 road projects to be added to the rate calculation create additional lifecycle needs and tax levy impact

The proposed draft 2018 Development Charge Bylaw Amendment is scoped to amend the roads program. However, in order to have a full understanding of the asset management needs of all assets funded by Regional development charges, the full range of services are discussed in Chapter 7 of the attached draft background study (*Attachment 1*).

Table 4 summarizes the total 100-year period lifecycle costs of the assets funded through the 2017 Bylaw as amended by the draft 2018 bylaw.

Table 4 Summary of Growth Projects and Lifecycle Needs							
\$ Millions Main Project List Contingency List B							
Service Area	Gross Project Cost	100-Year Lifecycle Needs	Gross 100-Year Project Lifecycle Cost Needs		100-Year Lifecycle Needs		
Rate-Funded:							
Water ²	603	1,207	-	-	1,207		
Wastewater ²	1,793	6,675	-	-	6,675		
Sub-Total –Rate	2,395	7,883	-				
Tax Levy-Funded							
Roads ²	2,810	4,755	1,474	2,450	7,206		
Transit	382	1,921	-	-	1,921		
Toronto-York Spadina Extension ³	282	-	-	-	-		
Police ²	227	1,098	-	-	1,098		
Waste Diversion	10	56	-	-	56		
Public Works ²	152	311	-	-	311		
Paramedic Services	52	123	-	-	123		
Public Health	17	156	-	-	156		
Social Housing	185	294	-	-	294		
Courts	22	40	-	-	40		
Sub-Total –Tax Levy	4,139	8,754	-	2,450	11,204		
Grand Total	6,534	16,637	1,474	2,450	19,087		

1. Totals may not add due to rounding

2. 2017-2031 planning period for new growth projects. For all other services, a 2017-2026 planning period was used

3. Lifecycle costs will be fully funded by the City of Toronto

Table 5 summarizes the user rate impact of water and wastewater growth projects. Table 5 is unchanged from the 2017 Development Charge Background Study.

Table 5 Summary of Rate Supported Growth Projects (2017-2031)						
Description (\$ Millions)	Total	2017-2021	2022-2026	2027-2031		
Gross Project Costs	2,395	557	884	954		
User Rate Funding (Reserves)	15	15	0	0		
% of Project cost to be recovered from User Rates	0.7%	2.8%	0.0%	0.0%		
Potential Growth-Related Billing Revenue Requirements	30	2	10	17		

User rate impacts have been fully accounted for through water and wastewater rate increases approved by Council in 2015 and the related projects are deemed to be financially sustainable.

Tables 6 and 7 summarize the operating impacts of tax-levy-related projects included in the 2017 Bylaw, as amended by the draft 2018 Development Charge Bylaw amendment. The analysis differentiates between the projects already captured by the 2017 Development Charge Bylaw and rates, and those that are added as part of this proposed bylaw amendment.

Table 6
Summary of Tax Levy Supported Growth Projects –
Main Project List, 2017 Bylaw (2017-2031)

Description (\$ Millions)	Total	2017-2021	2022-2026	2027-2031
Gross Project Costs	4,139	1,983	1,290	866
Tax Levy Funding (Reserves)	901	400	258	243
% of Project cost to be recovered from Tax Levy	21.8%	20.2%	20.0%	28.1%
Potential Growth-Related Tax Levy Requirements	301	56	104	140

Contingency Schedule G,	Fart D F	rojects, 2017	Dylaw (201	7-2031)
Description (\$ Millions)	Total	2017-2021	2022-2026	2027-2031
Gross Project Costs	1,475	34	668	773
Tax Levy Funding (Reserves)	137	13	106	18
% of Project cost to be recovered from Tax Levy	9.3%	38.4%	15.9%	2.3%
Potential Growth-Related Tax Levy Requirements	65	12	23	30

Summary of Tax Levy Supported Growth Projects –
Contingency Schedule G, "Part B" Projects, 2017 Bylaw (2017-2031)

Table 7

The tax levy requirements summarized in Tables 6 and 7 above are considered financially sustainable because they can be absorbed by the tax base over the forecast period through tax levy increases. Including non-growth tax levy requirements, the tax levy increase related to the main project list is estimated to be in the range of 3.5 to 4.0 per cent per year. Adding the projects from Contingency List B would increase this estimate by approximately 30 basis points, to a range of 3.8 per cent to 4.3 per cent per year.

However, in the current term, it has been Council's objective to keep annual tax levy increases at three per cent or less. Although additional analysis through the annual budget process will aim to mitigate the tax rate impacts noted above, current estimates suggest that meeting Council's tax levy target while undertaking all of the projects included in the 2017 Development Charge Bylaw as amended by the proposed draft 2018 Bylaw will require additional revenues above and beyond what can be generated through a three per cent annual tax levy increase. A total of approximately \$110 million per year in additional revenue would be required. This additional revenue need is approximately \$30 million higher than the additional revenue needed to fund the projects included in the 2017 Development Charge Bylaw.

These estimates have a degree of uncertainty as they are based on a number of critical assumptions about future service levels, cost pressures, and length of time to build reserves to fund future asset management requirements. They are based on the best information available at this time and will continue to be reviewed and analyzed through the annual budget process.

Appeals of the 2017 Bylaw and the 2018 amendment may be combined

There were six appeals of the 2017 Development Charge Bylaw. They relate to parking structures, road projects and the treatment of funeral homes on cemetery grounds. The first prehearing of the six appeals is not expected to be held until the middle of March, at the earliest. The timing of the 2018 amendment is such that appellants of the amendment may seek to combine their appeals with any they have filed under the 2017 Bylaw. Staff have begun to engage the appellants to scope their appeals.

If an appeal of the Region's bylaw amendment were successful, resulting in a reduced roads rate, the Region would be required to refund the difference between the development charges paid under the amended bylaw and the rate determined as a result of the appeal.

Proposed Changes to the Treatment of Structured Parking

Surface parking and structured parking are treated differently under the *Development Charges Act*, 1997

The *Development Charges Act, 1997* permits the collection of development charges for structured parking. Section 2(2) of the *Act* lists the types of development for which development charges can be levied.

Structured parking requires a building permit for buildings or structures, issued under the *Building Code Act, 1992;* this is one of the triggers for levying development charges under Section 2(2) of the *Act.*

Surface parking does not trigger any of the events listed under Section 2(2) of the *Act*. Therefore no development charges can be levied.

Structured parking can be categorized into five typologies based on use

Structured parking in the Region primarily exhibits five typologies based on use. Table 8 below summarizes those typologies.

-	
Typology based on use*	Notes
Non-residential	
Accessory-use parking (e.g., for shopping malls, offices, places of worship, hotels, etc.)	For employees, visitors, and patronsAccessible to the general public
Vehicle storage in retail motor vehicle establishments	Not accessible to general public
Vehicle storage in non-retail motor vehicle establishments	Not accessible to general public
Structured parking to generate revenue from short-term rental parking	 Standalone paid parking structure Accessible to the general public for a fee
Residential	
Accessory parking (e.g., condominiums and rental properties)	 Used by residents and not accessible to the general public

Table 8Summary of structured parking typology

*Note: All can be above or below grade, attached to a structure, within a structure or a standalone structure

The Region's 2017 Development Charge Bylaw already exempts most structured parking

Most of structured parking that has been built in the Region has been for an accessory use. The Region does not levy a development charge on this type of structure.

Consistent with its historic approach, the Region's 2017 Development Charge Bylaw exempts all below grade or above grade accessory use structured parking, whether residential or non-residential.

Since 2012, development charges have been levied on structured parking when it is used by retail motor vehicle establishments, including car dealerships and motor vehicle repair shops, to store motor vehicles for sale, rental or servicing. These structures can be within the car dealership (or repair shop) or built as a standalone structure. In both instances the Bylaw levies the retail rate on the gross floor area of the structure.

While the Region's Bylaw could permit a development charge for structured parking accessory to shopping malls, hotels or standalone paid parking, no developments have ever come forward that would trigger a charge.

The treatment of vehicle storage within a car dealership has been the subject of development charge complaints in recent years

There were three complaints dealing with the treatment of parking structures under the Region's 2012 Development Charge Bylaw. Council dismissed the complaints. However they were subsequently appealed to the Ontario Municipal Board (the "Board").

Only one of these complaints has been dealt with by the Board. In that complaint, the Board ruled that a portion of the below-grade parking structure was exempt from development charges, based on zoning bylaw requirements. The complainant did not dispute the levying of the retail rate on the remaining area. The other two complaints have yet to be heard at the Board.

There were also two appeals of the Region's 2017 Development Charge Bylaw relating to automotive dealerships and parking structures

The Region also received two appeals of its 2017 Development Charge Bylaw regarding the treatment of structured parking used for the storage of motor vehicles prior to sale or servicing: one from a consortium of car dealerships, and one from Weins Canada.

The appellants have taken the position that structured parking for storing vehicles prior to sale or rent should not be charged the retail rate.

Structured parking requires Regional infrastructure services

Structured parking requires infrastructure services. Both customers and delivery vehicles use the Region's road network to get to the structure. In addition, they also require water servicing capacity to comply with fire prevention codes.

While the initial use for structured parking in retail motor vehicle establishments may be for vehicle storage, these areas often evolve over time to other functions such as service bays, detailing, and showrooms. These functions all require greater use of infrastructure services.

Market forces, as opposed to development charges, will be the catalyst for a more compact form of development

The Region has consistently levied the retail rate on car dealerships. Notwithstanding this, since 2012 there have been, on average, five new car dealerships built every year, averaging about 30,000 square feet (some as large as 90,000 square feet).

Furthermore, between 2005 and 2016, five new car dealerships were built with structured parking, and four of those were within the last five years. This move toward interior storage is likely due to the availability and cost of land and the business model of the car manufacturer, including the need to better secure and maintain their vehicles. Although the storing of vehicles inside dealerships has been led by higher-end dealerships, brands of all classes are expected to follow as land becomes increasingly scarce and more expensive.

Staff propose to levy the Industrial, Office, Institutional rate on standalone structured parking used to store motor vehicles

Under the 2017 Development Charge Bylaw, standalone structured parking used to store motor vehicles would be levied the retail rate. Staff are proposing to change this treatment to the Industrial, Office, Institutional rate, which would be consistent with other warehousing functions.

As compared to the treatment under the 2017 Bylaw, there would be some negative impact on collections, although staff do not believe the impact to be significant.

Finally, any parking spaces within these structures used for employee and customer parking would still be exempt from development charges. Staff will evaluate this on a case-by-case basis.

Staff propose to continue levying the retail rate on vehicle storage areas in car dealerships

Staff are not proposing to change the treatment of vehicle storage areas in car dealerships. The rationale for not changing the treatment of these areas in car dealerships is:

• Recognition that these areas are not just being used for storage and have additional retail uses (e.g., detailing, showroom, servicing, etc.). In some cases, areas originally used for storage may be changed to other uses after building permit issuance

- Consistency with the treatment of merchandise storage in other retail changing the treatment of storage in car dealerships could give rise to an appeal from other retailers
- Consistency with what neighboring municipalities do

As is the case for standalone structured parking used to store motor vehicles, any parking spaces used for employee and customer parking could be exempt from development charges.

The Board has held that service bays within car dealerships are a retail function

One of the arguments of the appellants to the 2017 Development Charge Bylaw is that service bays within car dealerships should be levied the Industrial/Office/Institutional rate, as this is not a directly retail function.

A decision by the Board in *Shanahan Ltd. v. Region of York (2013)* concluded that the use of service bays to perform warranty work, "is a direct function of the retail sale of a new vehicle and is not a separate and distinct use of [sic] function from the retail activity of selling such goods as new or used cars and trucks to the general public" and as such service department areas (bays) fall "squarely within the definition of retail".

The 2018 Bylaw will clarify that all retail motor vehicle establishments with vehicle storage for sale, lease or servicing/repair purposes should be treated as retail

Aside from car dealerships, other retail motor vehicle establishments may also have requirements to store vehicles for sale, lease or servicing. These include vehicle brokerages, long-term leasing facilities, service repair shops open to the public and other similar uses. Similar to car dealerships, the Region's development charge bylaws have always treated these types of establishments as retail.

Under the 2018 Bylaw amendment, these establishments will continue to be treated as retail, including, but not limited to, areas within the structure that are used for vehicle storage.

Staff propose that the bylaw permit a blended rate for motor vehicle establishments with significant vehicle storage area

There may be instances where a proposed car dealership (or other types of retail motor vehicle establishments) includes significant storage areas. While these are not expected to be common, staff propose to amend the Bylaw so that a blended rate of retail and industrial/office/institutional could be applied.

In these instances, the retail rate would be capped at two times the gross floor area of the retail motor vehicle establishment. The gross floor area above and beyond that of the retail motor vehicle establishment would be levied the industrial/office/institutional rate.

The proposed treatment of structured parking used to store motor vehicles is in line with neighbouring municipalities

Staff have reviewed the bylaws of all local municipalities, as well as neighbouring upper-tier and single-tier municipalities. The proposed changes and clarification to the treatment of structured parking and the clarifications to the treatment of car dealerships are reasonably consistent with other municipalities (see Table 9 for further detail).

structured parking used to store motor vehicles						
Municipality Car dealerships Standalone structured parking used to store motor vehicles						
York Region – 2018 Development Charge Bylaw Amendment	Retail	Industrial/Office/Institutional				
City of Markham	Retail	Industrial/Office/Institutional				
Town of Richmond Hill	Retail	Non-retail				
All other local municipalities	Non-residential	Non-residential				
City of Toronto*	Non-industrial	Industrial				
Durham Region Commercial		Industrial				
Peel Region Non-industrial		Industrial				
Simcoe County	Non-residential	Non-residential				
Halton Region	Retail	Exempt				

Table 9

Interjurisdictional summary of treatment of car dealerships and standalone structured parking used to store motor vehicles

*Note: Development charges are only levied only on ground floor.

Staff recommend clarifying the treatment for structured parking accessory to shopping malls and hotels

Although in practice this has not happened, under the 2017 Development Charge Bylaw, the Region could levy the retail rate on structured parking accessory to retail establishments, such as malls and hotels. There is a strong rationale for exempting this type of structured parking in the Region's bylaw:

- Brings treatment of shopping mall accessory parking in line with all other accessory use parking structures
- Development charges are levied on the primary structure

Staff are therefore proposing that the bylaw be amended to clarify that structured parking accessory to shopping malls or hotels be exempt from development charges.

5. Financial Considerations

The draft 2018 residential roads development charge rate is 65 per cent higher than the current rate

The residential class will see the highest increase in the roads development charge rate (by 65 per cent) compared to the current road rate (see Table 10).

Summary of residential development charge rates*								
Rate Class	Curr Develo Char (Nov 8, (\$	Current evelopment Charges Change (\$) Change ov 8, 2017) (\$)		Change (\$)		nge		
	Roads	Total	Roads**	Total	Roads	Total		
Single & Semi- detached	14,206	48,330	9,195	57,525	65%	19%		
Multiple Unit Dwelling	11,435	38,899	7,402	46,301	65%	19%		
Apartments (>= 700 Sqft)	8,311	28,273	5,379	33,652	65%	19%		
Apartments (< 700 Sqft)	6,072	20,636	3,930	24,566	65%	19%		

Table 10
Summary of residential development charge rates*

*Note: Does not include Nobleton wastewater rates.

**Note: All rate changes subject to this amendment have had an inflationary factor of 2.4 per cent applied.

The proposed non-residential roads development charge rates are similarly higher than current rates

Table 11 compares the roads and total development charge rates for the nonresidential classes.

Summa	ry of resid	ential de	velopment o	charge r	ates*	
Rate Class	Curr Develop Char (Nov 8, (\$)	ent oment ges 2017))	Change	(\$)	Chan	ge
	Roads	Total	Roads**	Total	Roads	Total
Retail (\$/sqft)	17.87	39.89	11.23	51.12	63%	28%
Industrial/Office/ Institutional (\$/sqft)	5.26	17.87	3.29	21.19	62%	18%
Hotel (\$/sqft)	3.69	7.93	2.10	10.03	57%	26%

 Table 11

 Summary of residential development charge rates

*Note: Does not include Nobleton wastewater rates.

**Note: All rate changes subject to this amendment have had an inflationary factor of 2.4 per cent applied.

If the proposed rates are adopted, York Region will have the highest development charges among the 905 municipalities for all classes of development

Currently, York Region's residential and office development charge rates (Regional portion) are the second highest among the 905 upper tier municipalities (second to Peel). If the proposed Bylaw amendment and rates are adopted, York Region's residential and office development charge rates will exceed that of Peel's, making the rates the highest amongst the surrounding 905 Regions.

If the proposed rates are adopted, York Region's retail and industrial/office/ institutional rates will be the highest among the 905 municipalities.

Should Council adopt the proposed rates, the combined upper tier and local municipal development charge would range from \$68,298 in Georgina to \$92,536 in King.

Figure 2 below compares the ranges of development charge rates for the upper tier and lower tier municipalities in the 905 area for all classes. For each upper

tier municipality, the highest and lowest combined municipal development charge rates for a single family dwelling are presented.





Note: On January 9, 2018, the City of Toronto tabled their 2018 Development Charge Background Study and Bylaw. If the rates as tabled were passed, the development charge rate for a single-family detached would increase from \$41,251 to \$88,391.

Rates imposed by the 2017 Development Charge Bylaw will be subject to indexing on July 1, 2018

The rates under this amendment would not be indexed on July 1st, 2018 as an inflationary factor has already been applied.

Rates imposed by the 2017 Bylaw for all other services will be indexed on July 1st, 2018. This includes the portion of the rates pertaining to roads services on the main list of the 2017 Development Charge Background Study.

The Region's indexing, done annually on July 1, uses Statistics Canada's Quarterly Construction Price Index, which will be published by Statistics Canada in May 2018. Over the past ten years, the annual index has averaged 2.4 per cent.

6. Local Municipal Impact

Development charges fund growth-related infrastructure that benefits residents and businesses across the Region

Development charges fund vital growth-related infrastructure, which helps local municipalities support growth and development. The road projects being added to the development charge background study and proposed bylaw will benefit future residents and businesses in the entire Region.

The Region's development charge bylaw also influences the bylaws of local municipalities. Regional staff have engaged with local municipalities through the development of this proposed bylaw amendment.

Regional staff consulted local municipalities regarding proposed clarifications to the treatment of structured parking

Development charges for non-residential structured parking are paid at building permit stage and therefore collected by the local municipalities. In addition, some of the Region's local municipalities are currently updating their development charge bylaws.

Regional staff have consulted with local municipal staff on the proposed clarifications to the treatment for standalone structured parking used to store motor vehicles and structured parking accessory to shopping malls.

7. Conclusion

The draft 2018 Development Charge Background Study and amended draft Bylaw will be tabled on February 15, 2018. This report highlights changes to the proposed bylaw, including revisions to the treatment of structured parking.

A further report will be brought forward for consideration by Council on May 17, 2018, which will include updates to the proposed 2018 Bylaw following the consideration of public input and continued consultations with all stakeholders.

For more information on this report, please contact Edward Hankins, Director, Treasury Office, at 1-877-464-9675 ext. 71644.

The Senior Management Group has reviewed this report.

January 26, 2018

Attachments (1)

8161059

Accessible formats or communication supports are available upon request



THE REGIONAL MUNICIPALITY OF YORK

2018 Development Charge Background Study – Bylaw Amendment

DRAFT As Released February 15, 2018



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Executive Summary

When York Regional Council approved the 2017 Development Charge Bylaw on May 25, 2017, it also directed staff to bring back an amendment by March 31, 2018 that would add all of the road projects in "Part B" of Contingency Schedule G of the 2017 Development Charge Bylaw to the rate calculation. These 56 road projects were identified as part of the 2016 Transportation Master Plan.

To amend a development charge bylaw, a new background study must be prepared, which underpins the rates in the amending bylaw. This Background Study has been prepared in accordance with the *Development Charges Act, 1997,* to support the calculation of new rates to amend the existing Region-wide Development Charge Bylaw (2017-35). The proposed amending bylaw has an anticipated coming-into-force date of July 1, 2018.

This Bylaw amendment only proposes to change the roads program. Other services will not be affected by this proposed bylaw amendment.

In addition, given the short time frame between the enactment of the 2017 Bylaw, and this proposed amendment, other key assumptions and inputs will remain the same as the 2017 Development Charge Background Study. These include:

- Residential and non-residential growth forecasts, including the forecast horizon (2017 to 2031)
- Development charge calculation methodologies
- Debt and reserve balances

2018 Development Charge Bylaw Amendment

The 2018 Development Charge Bylaw amends the 2017 Development Charge Bylaw as it pertains to the roads program and the treatment of structured parking (including associated sections). For the roads program, changes include the addition of the 56 roads projects in "Part B" of Contingency Schedule G to the 2017 Development Charge Bylaw, as well as some technical adjustments.

All other services will continue to be funded under the 2017 Development Charge Bylaw.

The amended development charge rates are proposed to take effect on July 1st, 2018 to coincide with the annual indexing of York Region's development charges (discussed further in Section 5).

The Roads development charge rate calculated as part of this amendment has an inflationary factor of 2.4 per cent applied, as all costs are in 2017 dollars. These rate changes would not be indexed on July 1, 2018. The inflationary factor is based on the 10 year average of the Quarterly Construction Price Index of Non-Residential

Building Construction (NRBC) provided by Statistics Canada. The NRBC index is based on the aggregate of the construction price indices for the commercial, industrial and institutional structures.

In addition to addressing Council direction regarding the addition of projects, this background study also addresses the development charge treatment of structured parking.

Development Charge Cost Summary

Table ES.1 provides a comparison of the current total regional development charge rates and the total development charge rates (before indexing) should Regional Council approve the proposed amendment.

Currently, the charge for a single-detach unit is \$48,330 which is proposed to increase to \$57,252. Similarly, the amended development charges for retail development increase from \$39.89 to \$51.12 per sq.m. The industrial/office/institutional charge increases from \$17.90 to \$21.19 per sq.m. Finally, the charge for Hotels also increases from \$7.93 to \$10.03 per sq.m.

Table ES.1

Comparison of Existing and Calculated Roads Development Charges

Dacidantic	l - Der Sindle I	Dotachod II	tin					Nor	ו-Residential - F	Per Sqft					
-					Retail			Indu	strial/Office/Ins	titutional			Hotel		
ŵ	July 2018 ¹ Proposed Charge	Char	egu	January 2018 Current Charge	July 2018 ¹ Proposed Charge	Cha	əɓu	January 2018 Current Charge	July 2018 ¹ Proposed Charge	Chai	agr	January 2018 Current Charge	July 2018 ¹ Proposed Charge	Chan	ge
9	\$23,401	\$9,195	64.72%	\$17.87	29.10	\$11.23	62.85%	\$5.26	8.55	\$3.29	62.47%	\$3.69	5.79	\$2.10	56.84%

¹ July 2018 charge shown here is before indexing for those projects not subject to this Bylaw amendment

Note: Numbers may not sum due to rounding

Table ES.2 provides a comparison of the costs in the 2017 Background Study with the costs in the proposed 2018 Background Study. Compared to the costs in the 2017 Background Study main project list, including Contingency List B in the bylaw will add \$1.49 billion in gross project costs and \$1.35 billion in development charge eligible costs to the rate calculation. The balance represents a tax levy pressure.

Project Costs (\$ Millions)	2017 DC Background Study	2018 Background Study	Difference
Roads Service Gross Costs	2,798.67	4,284.19	1,485.52
Roads DC Eligible Costs (2017-2031)	1,947.45	3,295.02	1,347.57

Table ES.2: 2018 Roads Development Charge Summary

Table ES.3 provides a comparison of the current and calculated amended roads development charge rates by residential unit type and non-residential use on a per sq.m. and per sq.ft. basis.
Table ES.3

 York Region

 York Comparison of Existing and Calculated Development Charges

 By Type of Development

		January 2018 Current Charge			July 2018* Proposed Charge	
Type of Development	Hard and General Services	GO Transit	Total	Hard and General Services	GO Transit	Total
Residential (Per Dwelling Unit)						
Single and Semi-detached	\$47,978	\$352	\$48,330	\$57,173	\$352	\$57,525
Multiple Unit Dwelling	\$38,622	\$277	\$38,899	\$46,024	\$277	\$46,301
Apartments (>= 700 Sqft)	\$28,069	\$204	\$28,273	\$33,448	\$204	\$33,652
Apartments (< 700 Sqft)	\$20,507	\$129	\$20,636	\$24,437	\$129	\$24,566
Non-residential (Per Sqft of Gross Floo	r Area)					
Retail	39.89	\$0.00	\$39.89	\$51.12	\$0.00	51.12
Industrial/Office/Institutional	17.90	\$0.00	\$17.90	\$21.19	\$0.00	21.19
Hotel	26.7	\$0.00	\$7.93	\$10.03	\$0.00	10.03
Non-residential (Per Sqm of Gross Floo	r Area)					
Retail	\$429.36	\$0.00	\$429.36	\$550.27	\$0.00	\$550.27
Industrial/Office/Institutional	\$192.66	\$0.00	\$192.66	\$228.04	\$0.00	\$228.04
Hotel	\$85.38	\$0.00	\$85.38	\$107.93	\$0.00	\$107.93
Note: The table above shows developmen	it charges for GO Tran	sit which are imposed	under a separate by	-law and are not being	I updated as part of th	is review. In

addition, development in Nobleton is excluded in this table and subject to a separate charge for Wastewater Treatment Services. *July 2018 charge shown here is before indexing for those projects not subject to this Bylaw amendment Table ES.4 provides a summary of the current Go Transit development charge rates. These rates are not proposed to be changed as part of this amendment.

Development Type	Go Transit Development Charge Rate (\$)
Single & Semi-detached	352
Multiple unit Dwelling	277
Apartments (>=700 square feet)	204
Apartments (<700 square feet)	129

 Table ES.4: Go Transit Development Charges (As of February 15, 2018)

Full Cost Development Charge Rates

The development charge rates calculated in this background study are based on a full cost recovery methodology. That is, no discount of the residential or non-residential DC rates has been applied to the calculation of DC rates.

1.0 Introduction and Background

1.1 Purpose

When Council approved the 2017 Development Charge Bylaw on May 25, 2017, it also directed staff to bring back an amendment by March 31, 2018 that would add all of the roads projects in "Part B" of Contingency Schedule G of the 2017 Development Charge Bylaw into the rate calculation.

The 56 projects on "Part B" of Contingency Schedule G were identified as part of the 2016 Transportation Master Plan. Their inclusion in the 2017 Development Charge Background study was based on consultations with local municipalities and the Region's roads prioritization model.

In addition to addressing Council's direction regarding Contingent List B projects, staff also reviewed the development charge treatment of structured parking during this bylaw amendment, including:

- Accessory-use structured parking, including those servicing shopping malls, hotels, and offices
- Structured parking used by car dealerships (stand-alone, below or above-grade)

The two tables below summarize York Region's current development charge rates as of February 15, 2018. Note that the rates below do not include the Wastewater development charge rates for the town of Nobleton.

	Single and Semi-detached (\$)	Multiple Unit Dwelling (\$)	Apartments (>= 700 Sqft) (\$)	Apartments (< 700 Sqft) (\$)
Water	9,170	7,382	5,365	3,920
Wastewater	18,853	15,177	11,030	8,058
Roads	14,206	11,435	8,311	6,072
Transit	1,309	1,053	766	559
Subway	2,531	2,038	1,481	1,082
Other Soft Services	1,909	1,537	1,116	816
GO Transit	352	277	204	129
Grand Total	48,330	38,899	28,273	20,636

Table 1.1: Current Residential Development Charge Rates(As of February 15, 2018)

Note: Does not include Nobleton Wastewater Development Charge Rates

	Retail	Industrial/ Office/ Institutional	Hotel
	(\$ per Sqft)	(\$ per Sqft)	(\$ per Sqft)
Water	5.54	3.44	0.98
Wastewater	10.67	7.02	1.98
Roads	17.87	5.26	3.69
Transit	1.82	0.53	0.43
Subway	3.11	0.91	0.61
Other Soft Services	0.88	0.74	0.24
GO Transit	N/A	N/A	N/A
Grand Total	39.89	17.90	7.93

Table 1.2: Current Non-residential Development Charge Rates(As of February 15, 2018)

Note: Does not include Nobleton Wastewater Development Charge Rates

1.3 Statutory development charge calculation requirements

Section 10(1) of the *Development Charges Act*, *1997* sets out the requirements for a municipality to complete a Background Study prior to the passage of a Development Charges By-law or amendment. Subsection 10(2) identifies what is to be included in the Development Charges Background Study. These legislative requirements are shown in Figure 1.1 and are discussed below:

- s.10(2)(a) estimate the amount, type and location of development to which the development charge [amendment] is to apply;
- s.10(2)(b) establish the eligible growth-related costs and services (as determined under paragraphs 2 to 8 of Subsection 5(1) of the Development Charges Act) to which the development charge by-law [amendment] would relate;
- s.10(2)(c) examine, for each service to which the development charge bylaw [amendment] relates, the long term capital and operating costs for the capital infrastructure required.

- s.10(2)(c.1) consideration for the use of more than one development charge by-law to reflect different needs for services in different areas.
- s.10(2)(c.2)(3) an asset management plan deals with all assets proposed to be funded under the development charges by-law that demonstrates that assets are financially sustainable over their full life cycle.

Figure 1.1 shows the statutory requirements for calculating a development charge. For further info please see the detailed schematic on Table 1-2 to be found on page 15 of the Region's 2017 Development Charge Background Study.



Figure 1.1: Statutory Requirements for Calculating a Development Charge

1.4 Development Charges Bylaw Amendment Process

The *Development Charges Act, 1997* allows a municipality to amend an existing Development Charges by-law. Section 19 of the *Development Charges Act, 1997* sets out the requirements related to this procedure:

19. (1) Sections 10 to 18 apply, **with necessary modifications**, to an amendment to a development charges by-law other than an amendment by, or pursuant to an order of, the Ontario Municipal Board. [emphasis added]

19. (2) In an appeal of an amendment to a development charges bylaw, the Ontario Municipal Board may exercise its powers only in relation to the amendment.

Further to Section 19(1), the requirements of Sections 10 to 18 of the *Development Charges Act, 1997* are summarized as follows:

- Complete a Development Charge Background Study (s.10);
- Development Charges Bylaw [amendment] must be passed within one year of the completion of the Background Study (s.11);
- Hold at least one public meeting prior to passage of by-law [amendment] (Background Study must be available 60 days prior to the passing of the Development Charges Bylaw and the Background Study and Development Charges Bylaw must be available at least two weeks prior to the public meeting)(s.10(4))(s.12);
- The municipality must give notice of passage of bylaw [amendment] within 20 days of the by-law being passed. The notice must identify the last day for appealing the by-law (s.13);
- Anyone may appeal the bylaw [amendment] to the Ontario Municipal Board (OMB)(s.14);
- Outlines the duties of the Clerk if an appeal is received (s.15);
- Outlines role and powers of OMB if an appeal is received (s.16);
- Effective date of OMB repeals and amendments is the day the bylaw [amendment] came into force (s.17); and
- Outlines rules governing refunds under an OMB order (s.18).

In simple terms, to amend a Development Charges Bylaw, a municipality must go through the same public process associated with enacting a Development Charges Bylaw. A Background Study outlining the purpose of and rationale for the amendment is required. This document serves as the Background Study required under s.10 of the *Development Charges Act, 1997*.

A municipality also must hold a public meeting regarding the proposed amendment after having provided 20 days' notice of the meeting. The municipality is required to have

made the background study and proposed amendment by-law available at least two weeks prior to the public meeting.

Section 19(2) of the *Development Charges Act*, 1997 is important because it allows for an amendment to an existing bylaw to be passed without exposing the unaltered portions of the by-law to appeal. When amending a Development Charges Bylaw, only the section(s) of the bylaw amended or added is subject to appeal and consideration by the Ontario Municipal Board.

1.5 How does the 2018 Development Charge Bylaw Amendment relate to the 2017 Development Charge background study

The proposed draft 2018 Development Charge Bylaw amendment does not repeal or replace the Region's 2017 Development Charge Bylaw. This proposed amendment intends to amend the roads development charge rates contained in the 2017 Bylaw by adding 56 roads projects from "Part B" of Contingency Schedule G into the rate calculations (pages 31 of 47 of Bylaw No. 2017-35). In addition, this proposed amendment aims to review, clarify and change the development charge treatment of structured parking.

All other services and associated DC rate calculations are not changed under the proposed amendment, and will continue to be funded under the 2017 Development Charge Bylaw.

The policies and rules set out in Bylaw 2017-35 are unchanged with the exception of the treatment of parking structures which is being reviewed through the proposed amendment.

Other key assumptions and inputs will remain the same as the 2017 Development Charge Background Study. These include:

- Residential and non-residential growth forecasts, including the forecast horizon (2017 to 2031)
- Development charge calculation methodologies
- Debt and reserve balances

While cost assumptions remained generally consistent with the 2017 Background Study, a number of minor adjustments were made as follows:

- 16 projects in "Part B" of Contingency Schedule G included \$13.5 million in gross project costs related to environment assessment that had already been accounted for as part of the Roads Main Project List. They have been removed from the rate calculation.
- The Transportation Demand Management Project (project number 233 in the 2017 Background Study) was incorrectly calculated and presented. The correct

gross cost estimate should have been \$34.3 million rather than \$23.6 million included in the 2017 Background Study.

The impact on these corrections is listed in Table 1.3 below:

Change	Gross Cost Increase (Decrease) (\$ Millions)	Impact on Rate (\$)
Adjustment to the environmental assessment costs for 16 projects added	(13.5)	(83)
Adjustment to the Transportation Demand Management Project	10.7	69
Total	(2.8)	-14

Table 1.3: Illustration of Changes to Single Family Dwelling Rate

*Note: Numbers may not sum due to rounding

1.6 Council approvals sought

At this stage in the process, the Background Study and proposed Development Charge Bylaw amendment are being tabled for information purposes, as part of the consultation process and in accordance with the *Development Charges Act, 1997*.

When that process is complete and final development charge recommendations are made to Council on May 17, 2018, approval will be sought for the 2018 Development Charge Bylaw amendment and the Background Study, including:

- Council expressing its intent to undertake the adopted capital forecast to ensure that the increase in need for service will be met;
- The development charge rates for roads;
- The amended development-related capital program for roads; and
- Changes to the bylaw.

All of the above will be subject to any amendments or addenda that may be produced prior to the passing of the Bylaw.

Table 1.4: Timeline of Key Dates

Deliverables	Date
Consultations with stakeholders	December 2017 - May 2018
2018 Development Charge Background Study and Bylaw amendment publicly released Report to Council on Draft 2018 Development	February 15, 2018
Charge Background Study and Proposed Draft Bylaw Amendment:	February 15, 2018
Notice of first public meeting published	February 22, 2018
Public meeting immediately prior to the meeting of the Committee of the Whole Two	March 22, 2018
2018 Bylaw Amendment to Council for consideration of passage	May 17, 2018
Newspaper notice of bylaw passage 2017 Development Charge Bylaw comes into force	By 20 days after passage July 1, 2018
Last day for bylaw appeal	40 days after passage
Region makes pamphlet available	By 60 days after in force date

2.0 Anticipated Development in York Region

The development forecast used in the 2018 bylaw amendment is consistent with what underlines the 2017 Development Charge Bylaw. The forecast period is from 2017 to mid-2031.

As in the case of the 2017 Development Charge Bylaw update, York Region's Municipal Comprehensive Review process, which intends to address growth and development to 2041 and complies with the new Growth Plan policies, has not yet been completed. It is anticipated that once a new York Region forecast to 2041 is prepared, the development charges growth and development forecast would be revised accordingly and a new background study prepared prior to the expiration of the 2017 Development Charge Bylaw (No. 2017-35), in 2022.

The 2031 mid-year population forecast of 1,545,700 (excludes institutional population) is based on anticipated levels of housing growth in York Region, taking into consideration demographic trends, the timing of servicing infrastructure, market demand, and intensification policy targets.

The net population growth from year end 2016 to mid-year 2031 is estimated to be approximately 367,800 (excluding institutional population). The employment forecast for mid-2031 is 780,000 with growth of approximately 178,000 over the14.5 year forecast period. This population and employment forecast is consistent with the forecasts underlying the Region's Water and Waste water and Transportation Master Plans.

2.1 Population

The methodology used to generate the forecast is outlined in Attachment 2 of the November 2015 York Region staff report on the Preferred Growth Scenario.

Net population growth refers to the total growth in population taking into account both population in new housing units and the decline in population in existing units. The net population growth from year-end 2016 to mid-year 2031 is estimated at approximately 367,800. For the purposes of calculating development charges, the population forecast is adjusted to include the Census undercount but does not include the Region's institutional population.

Over the forecast period, there is a shift in the Region's housing mix to higher density forms of housing. This change in housing mix is required to respond to the changing demographics of the Region and to meet the intensification policy requirements. The forecast incorporates a declining PPU from 2016 to 2031.

Factors including a relatively low fertility rate, the anticipated increase in nonfamily households and one person households as well as an aging population will all contribute to a declining average household size. Figure 2.1 below shows the historic and forecast housing growth by type in the Region.



Figure 2.1: Historic and Forecast Housing Growth (2007-2031)

Table 2.1 summarizes the population and housing unit forecast for the DC growth forecast.

Year-end	Population (Excluding institutional population)	Single & Semi- detached	Multiple unit Dwelling ¹	Apartments ²	Total Households
2011	1,074,700	239,145	52,325	37,739	329,209
2016	1,177,900	256,270	61,524	50,641	368,435
2026	1,418,000	294,138	85,270	80,433	459,841
2031 (mid-year)	1,545,700	308,273	97,729	98,683	504,685
2016-2026 Growth	240,100	37,868	23,746	29,792	91,406
2016-2031 (mid-year) Growth	367,800	52,003	36,205	48,042	136,250

Table 2.1: Residential Growth Forecast Summary

¹Multiple dwellings consist of row and duplex units.

²Apartment category consists of bachelor, 1 bedroom and 2+ bedroom apartments

The following Table 2.2 shows the forecast housing growth by type of structure (singles and semis, multiples and apartments). From 2017 to mid-2031, the Region is expected to add 136,250 residential units. Of which, 38 per cent are expected to be single and semi-detached homes, 27 per cent are expected to be multiples (rows and duplex units), and the remaining 35 per cent are expected to be apartments.

 Table 2.2: Residential Unit and Population Forecast by Single Year (Year-end)

	Single & Semi- detached	Multiple unit Dwelling ¹	Apartments ²	Total	Housing Growth	Population	Population Growth
2016	256,270	61,524	50,641	368,435	8,407	1,177,900	22,100
2017	260,377	63,611	53,058	377,045	8,610	1,199,000	21,100
2018	264,521	65,809	55,681	386,011	8,965	1,222,300	23,300
2019	268,665	68,007	58,303	394,976	8,965	1,245,600	23,300
2020	272,810	70,206	60,926	403,941	8,965	1,268,900	23,300
2021	276,651	72,563	63,854	413,067	9,126	1,292,800	23,900
2022	280,188	75,079	67,087	422,354	9,287	1,317,400	24,600
2023	283,725	77,596	70,321	431,641	9,287	1,342,000	24,600
2024	287,262	80,112	73,555	440,928	9,287	1,366,700	24,700
2025	290,799	82,628	76,788	450,215	9,287	1,391,400	24,700
2026	294,138	85,270	80,433	459,841	9,626	1,418,000	26,600
2027	297,279	88,039	84,488	469,806	9,965	1,446,300	28,300
2028	300,420	90,808	88,544	479,772	9,965	1,474,700	28,400
2029	303,561	93,576	92,600	489,737	9,965	1,503,100	28,400
2030	306,702	96,345	96,655	499,702	9,965	1,531,500	28,400

	Single & Semi- detached	Multiple unit Dwelling ¹	Apartments ²	Total	Housing Growth	Population	Population Growth
2031 ²	308,273	97,729	98,683	504,685	4,983	1,545,700	14,200
0							

Source: York Region

¹Multiple dwellings consist of row and duplex units.

²Figures shown are for 2031 mid-year

The PPU assumptions in Table 2.3 are based on Statistics Canada data that allows for the calculation of York Region average PPU's by housing type for dwellings built between 2001 and 2011.

Table 2.3: Persons per unit Assumptions for Development Charge Calculations

Housing Type	10-year Average Persons per Unit	14.5-year Average Persons per Unit
Singles and Semi's	3.74	3.74
Multiples (Rows, Duplexes)	3.01	3.01
Apartments > = 700 square feet	2.19	2.19
Apartments < 700 square feet	1.60	1.60
Total Apartments	1.91	1.91
Total Units	2.96	2.90

Source: York Region

¹The Total Units PPU is based on the unit type PPU's weighted by housing forecast mix

²PPU's in Table 2.3 are adjusted to include the Census undercount

³10 Year and 14.5 average PPU's are based on average PPU's observed in housing units built in York Region from 2001 to 2011

³PPU's for apartments >= 700 square feet are based on observed PPU's in 1 bedroom or less apartments

⁴PPU's for apartments < 700 square feet are based on observed PPU's in 2+ bedroom apartments

Gross population growth only includes the population in new housing units, with no consideration for the decline in the existing population base. For the 10-year DC period, the growth in gross population of 270,100 was estimated by applying the persons per unit (PPU) by dwelling type to the forecast of housing units. (Table 2.4). The calculation of population in new housing units for the 14.5 year DC period to 2031 is also based on the same PPU assumptions. Using this method, the gross population increase from 2016 to 2031 is estimated at 395,400 (Table 2.5).

REGION OF YORK TEN YEAR GROWTH FORECAST END - 2016 to END 2026

Estimated December 31, 2016 population	1,177,900				
Average number of persons per unit (ppu) is assume	ed to be:				
		Linked		Housing Mix	
Singles and Semis		3.74	х	41.4%	1.55
Multiples (Rows and Duplex)		3.01	х	26.0%	0.78
Apartments		1.91	х	32.6%	0.62
				100%	
Weighted Average					2.96
Based on average ppu for units built between 2001 and 2	011 in York Region				
	HOUSEHOLDS	PC	PULATION	N	
OCCUPANTS OF NEW HOUSING UNITS FROM END OF 2011 TO END OF 2021					
Unit growth	91.406				
Multiplied by persons per unit	2.96				
Gross population increase			270,120		
DECLINE IN HOUSING UNIT OCCUPANCY OVER END OF 2011 TO MID 2021 PERIOD					
December 31, 2016 occupied household estimate	368,435				
multiplied by ppu decline rate	0.0815				
total population decline			30,020		
Forecast for year end 2026	459,841		1,418,000		
Net Population Increase			240,100		

Notes for the 2026 Growth Forecast

Estimated December 31 2016 population:

Includes the 2011 Census population with an undercount adjustment plus CMHC housing completion data from May 2011 to June 2016 plus estimates for additional units to be completed in 2016 times the 2016 forecast ppu; does not include the estimated institutional population.

Occupants of new housing units from end of 2016 to end of 2026:

Unit Growth

Based on York Region household forecast to year end 2026 minus year end 2016 household estimate.

Persons per unit (PPU):

Based on Census 2011 information for households in newly constructed units for the 2001 to 2011 period, adjusted for Census undercount

Weighted PPU average:

Based on estimated forecast mix for the 2016 to 2026 period.

Gross Population Increase:

Unit growth times weighted ppu

Decline in Housing Unit Occupancy over end of 2016 to end of 2026 period:

December 31, 2016 occupied household estimate:

Based on 2011 occupied household Census total plus CMHC housing completions from May 2011 to June 2016 plus estimate of units under construction to be completed in 2016.

PPU decline rate:

(Gross population increase plus year end 2016 population estimate minus 2026 year end population forecast) divided by 2016 year end household estimate.

Total population decline:

PPU decline rate times 2016 year end household estimate

Forecast end of 2026:

Households - 2026 year end forecast; population - 2026 year end forecast (does not include institutional population)

Net Population Increase:

2026 year end forecast minus 2016 year end estimate

Table 2.5

REGION OF YORK 14.5 YEAR GROWTH FORECAST END - 2016 to MID 2031

Estimated December 31, 2016 population	1,177,900				
Average number of persons per unit (ppu) is assumed	d to be:				
		Linked		Housing Mix	(
Singles and Semis		3.74	х	38.2%	1.43
Multiples (Rows and Duplex)		3.01	х	26.6%	0.80
Apartments		1.91	х	35.3%	0.67
•				100.0%	
Weighted Average					2.90
Based on average ppu for units built between 2001 and 20	11 in York Region				
	HOUSEHOLDS	F	POPULATIO	N	
OCCUPANTS OF NEW HOUSING UNITS FROM END OF 2016 TO MID 2031					
Unit growth	136 250				
Multiplied by persons per unit	2 00				
Gross nonulation increase	2.50		305 370		
			555,575		
DECLINE IN HOUSING UNIT OCCUPANCY OVER END OF 2016 TO MID 2031 PERIOD					
December 31, 2016 occupied household estimate	368 435				
multiplied by ppu decline rate	0.0749				
total population decline	0.0743		27 579		
total population decline			21,519		
Forecast Mid 2031	504,685		1,545,700)	
Net Population Increase			367,800		

Notes for 2031 Growth Forecast

Estimated December 31 2016 population:

Includes the 2011 Census with an undercoverage adjustment plus CMHC housing completion data from May 2011 to June 2016 plus estimates for additional units to be completed in 2016 times the 2016 forecast ppu; does not include the estimated institutional population.

Occupants of new housing units from end of 2016 to mid 2031:

Unit Growth

Based on York Region household forecast to mid-year 2031 minus year end 2016 household estimate.

Persons per unit (PPU):

Based on Census 2011 information for all households from York Region Forecast, adjusted for the Census undercount

Weighted PPU average:

Based on estimated forecast mix for the 2016 to 2031 period.

Gross Population Increase:

Unit growth times weighted ppu

Decline in Housing Unit Occupancy over end of 2016 to mid-2031 period:

December 31, 2016 occupied household estimate:

Based on 2011 occupied household Census total plus CMHC housing completions from May 2011 to June 2016 plus estimate of units under construction to be completed to 2016.

PPU decline rate:

(Gross population increase plus year end 2016 population estimate minus 2031 mid year population forecast) divided by 2016 year end household estimate.

Total population decline:

PPU decline rate times 2016 year end household estimate

Forecast mid year 2031:

Households - 2031 mid year forecast; population - 2031 mid year forecast (does not include institutional population)

Net Population Increase:

2031 mid year forecast minus 2016 year end estimate

2.2 Employment

The 2031 employment forecast is 780,000 with growth of approximately 178,000 over the 14.5 year forecast period. The methodology for the employment forecast is documented in Attachment 2 of the November 2015 York Region staff report on the Preferred Growth Scenario. An estimate for employment growth in new building space is generated, and divided into four building types: industrial, office, institutional and retail. Figure 2.2 below shows historic and forecast employment growth by five-year period from 2006 to 2031.



Figure 2.2: York Region Historic and Forecast Employment Growth

¹Figure 2.2 shows historic forecast year-end to year-end employment growth with the exception of 2031 which is to mid-year.

The employment growth by building type (industrial, office, institutional and retail) is estimated by first examining the forecast by the three employment categories – major office, employment land and population-related employment (Table 2.6).

The shares of growth for each employment category within the four building types were estimated by examining historical shares of employment growth using building permit data from 2004 to 2013 and York Region employment survey data from 2015. The hotel employment forecast which is a component of the retail forecast was derived separately and is based on per capita and per employee ratios to forecast anticipated hotel development in the Region.

To derive the total employment growth that will generate new floor space (Table 2.6), the following deductions are made:

1. Work-at-Home Employment

Work-at-home employment forecast is based on a projection that calculates

work-at- home as a share of the Region's labour force. Work-at-home employment is forecast to increase slightly over the forecast period, from approximately 7.5 to 8 per cent of employment in the Region from 2016 to 2031.

2. Employment Growth and GFA growth Adjustment Factor

An adjustment factor is applied to the employment growth (less the work-at-home growth) to account for employment growth that does not require new floor space. Recent development trends suggest that the forecast employment growth does not align with growth occurring in new space. This could be due to existing space achieving planned occupancy (previously unoccupied space), and/or through renovations of existing space allowing for higher employment density. In addition, the adjustment factor also accounts for the anticipated continued increase in contracting out and growth in no-fixed place of work employment. The adjustment factor is a necessary modification to the employment forecast.

In total the adjustment factor is approximately 10 per cent and ranges from 5 per cent for office, institutional and retail employment to 20 per cent for industrial employment. The higher adjustment factor for the industrial sector accounts for higher levels of increased off-site employment and contract employment within this sector.

Table 2.6: Employment Growth Forecast

	Total		Work	Employment	Emp	loyment Gr	owth by	/ Building Ty	be	Employment	Emp	loyment Gr	owth b	y Building T	/pe
	Employment End of Year	Growth	at Home Share	Growin Less Work at Home	Retail	Industrial	Office I	nstitutional	Hotel	Growth in Buildings	Retail	Industrial	Office	Institutional	Hotel
2017	617,600	15,400	7%	14,328	3,777	4,740	4,086	1,672	53	12,900	3,585	3,792	3,882	1,588	53
2018	633,000	15,400	7%	14,328	3,774	4,740	4,086	1,672	55	12,900	3,583	3,792	3,882	1,588	55
2019	648,400	15,400	%2	14,328	3,774	4,740	4,086	1,672	55	12,900	3,583	3,792	3,882	1,588	55
2020	663,850	15,450	7%	14,374	3,787	4,756	4,100	1,677	55	12,942	3,595	3,804	3,895	1,593	55
2021	676,850	13,000	%2	12,095	3,182	4,001	3,449	1,411	51	10,890	3,020	3,201	3,277	1,340	51
2022	687,350	10,500	10%	9,448	2,404	2,759	3,146	1,092	47	8,562	2,281	2,207	2,989	1,038	47
2023	697,850	10,500	10%	9,448	2,404	2,759	3,146	1,092	47	8,562	2,281	2,207	2,989	1,038	47
2024	708,350	10,500	10%	9,448	2,404	2,759	3,146	1,092	47	8,562	2,281	2,207	2,989	1,038	47
2025	718,750	10,400	10%	9,358	2,381	2,732	3,116	1,082	47	8,480	2,259	2,186	2,961	1,028	47
2026	729,500	10,750	10%	9,673	2,460	2,824	3,221	1,118	49	8,766	2,334	2,260	3,060	1,062	49
2027	740,700	11,200	11%	10,002	2,621	2,819	3,303	1,207	52	9,079	2,488	2,255	3,138	1,147	52
2028	751,900	11,200	11%	10,002	2,621	2,819	3,303	1,207	52	9,079	2,488	2,255	3,138	1,147	52
2029	763,100	11,200	11%	10,002	2,621	2,819	3,303	1,207	52	9,079	2,488	2,255	3,138	1,147	52
2030	774,350	11,250	11%	10,047	2,633	2,831	3,317	1,213	52	9,120	2,499	2,265	3,152	1,152	52
mid 2031	780,000	5,650	11%	5,046	1,323	1,422	1,666	609	26	4,580	1,255	1,138	1,583	579	26
2017	7 to mid-2031 sum	177,800		161,928	42,166	49,520	50,476	19,023	742	146,403	40,020	39,616	47,953	18,072	742

The forecast growth in non-residential space is derived by multiplying the employment growth for each building type with employee density assumptions. The employment density assumptions were derived by examining industry standards and by examining the observed employment densities of buildings constructed between 2004 and 2013 using building permit data and information from the 2015 York Region employment survey. The following Table 2.7 summarizes the employment densities used in the non-residential space forecast.

Employment Type	Square Feet per Employee
Industrial	800
Office	275
Institutional	900
Retail	430
Hotel	2,000

Table 2.7: Non-Residential GFA per Employee Assumptions

Application of the above employment density assumptions by employment type yields the following non-residential gross floor area (Table 2.8).

Table 2.8: New Gross Floor Area (in Square Feet)

				New Gr	oss Floor Area - ;	Square Feet				
	Retail	Industrial	Office	Institutional	Hotel	Total	Non-Retail	Retail	Hotel	Total
Floor Space Per Worker	430	800	275	006	2,000					
2017	1,458,420	3,033,720	1,067,548	1,429,136	106,037	7,094,861	5,530,404	1,458,420	106,037	7,094,861
2018	1,453,659	3,033,720	1,067,548	1,429,136	110,798	7,094,861	5,530,404	1,453,659	110,798	7,094,861
2019	1,453,659	3,033,720	1,067,548	1,429,136	110,798	7,094,861	5,530,404	1,453,659	110,798	7,094,861
2020	1,458,537	3,043,570	1,071,014	1,433,776	111,000	7,117,896	5,548,360	1,458,537	111,000	7,117,896
2021	1,218,291	2,560,932	901,177	1,206,413	102,354	5,989,168	4,668,523	1,218,291	102,354	5,989,168
2022	907,415	1,765,600	821,985	933,884	93,714	4,522,599	3,521,469	907,415	93,714	4,522,599
2023	907,415	1,765,600	821,985	933,884	93,714	4,522,599	3,521,469	907,415	93,714	4,522,599
2024	907,415	1,765,600	821,985	933,884	93,714	4,522,599	3,521,469	907,415	93,714	4,522,599
2025	898,077	1,748,785	814,157	924,990	93,517	4,479,526	3,487,932	898,077	93,517	4,479,526
2026	926,103	1,807,638	841,557	956,120	98,863	4,630,280	3,605,314	926,103	98,863	4,630,280
2027	987,763	1,803,933	862,838	1,032,265	104,405	4,791,205	3,699,037	987,763	104,405	4,791,205
2028	987,763	1,803,933	862,838	1,032,265	104,405	4,791,205	3,699,037	987,763	104,405	4,791,205
2029	987,763	1,803,933	862,838	1,032,265	104,405	4,791,205	3,699,037	987,763	104,405	4,791,205
2030	992,437	1,811,987	866,690	1,036,874	104,607	4,812,594	3,715,550	992,437	104,607	4,812,594
mid 2031	498,555	910,020	435,271	520,741	52,404	2,416,992	1,866,032	498,555	52,404	2,416,992

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3.0 Roads Capital Forecasts and Development Charge Recoverable Costs

3.1 Program description

The capital program included in the 2018 Development Charge Bylaw Amendment is based on the Region's 2017 Development Charge Background Study.

When Council approved the 2017 Development Charge Bylaw on May 25, 2017, it also directed staff to bring back an amendment by March 31, 2018 that would add all of the roads projects in "Part B" of Contingency Schedule G of the 2017 Development Charge Bylaw into the rate calculation. This amendment includes those additional projects. All other Roads projects identified in the 2017 Development Charge Background Study remain unchanged. It should be noted that the Region's 2018 Development Charge Bylaw amendment still does not include all of the projects in the 2016 Transportation Master Plan.

The projects in the roads capital program are categorized as follows:

- Grade separation
 - New structures
 - o Widening
- 400-series interchanges and ramp extensions
- Jog elimination/intersection improvement
- Mid-block crossing
- New Arterial road link
- Reconstruction
- Road widening
 - o Rural areas
 - o Urban areas
 - HOV corridor
- Urbanization
- Intersection and miscellaneous capital
- Programs and studies
- Ongoing projects

The methodologies and assumptions for all projects included in the 2018 Development Charge Bylaw amendment remain the same as what was used for the 2017 Development Charge Background Study and Bylaw. Finally, the 2018 Development Charge Bylaw amendment does not change any of the projects' timing or scope.

3.2 Level of service

As depicted in Figure 3.1, the proposed transportation improvement program continues to anticipate a declining road kilometre per capita level of service over the long term.



Figure 3.1: Historical Level of Service

Note: 2017 to 2041 paved lane kilometers based on 2016 Transportation Master Plan and therefore includes linear kilometers not currently funded within this Development Charges Bylaw.

The networks of road and transit improvements identified in the 2016 Transportation Master Plan represent the ultimate build-out of transit, roads, active transportation and goods movement networks to the year 2041 to meet the growth plan. To meet evolving needs of York Region's growing population, network improvements will be phased in over the next 25 years. The Transportation Master Plan recognizes that York Region's road network plays a foundational role in providing an interconnected system of mobility, enabling the provision of YRT/Viva's transit services. History has demonstrated that simply expanding the road network will not solve congestion issues. The Region will ensure the most effective use of road space and financial resources over the long term by designing and operating Regional streets to maximize capacity to move people. This proposed policy principle will support the Region's ability to meet the mobility needs of today's users while ensuring corridors can adapt in the future to meet the changing travel needs, including High Occupancy Vehicle / Transit lanes and new technologies including autonomous and connected vehicles and supporting the development of a finer grid network.

The Transportation Master Plan recommends that, to maintain an acceptable level of transportation service, some capacity deficiencies in the road network be supplied through the implementation of active transportation and Transportation Demand Management initiatives and transit infrastructure. The Transportation Master Plan further recognized that the transportation programs and improvements identified in the plan cannot address all the capacity demands needed to support the Region through the planning period which will result in many corridors operating at a poorer level of service than today.

The interjurisdictional nature of mobility in the Greater Toronto Hamilton Area will continue to increase the complexity of service delivery in York Region. Further, the success of the Region's Transportation Master Plan will be heavily dependent on leveraging successful partnerships with other levels of government. The Province's recent commitment to deliver Regional Express Rail and to build new Provincial highway facilities will require continued cooperation with Metrolinx, Ontario Ministry of Transportation, other Provincial Ministries, and the Federal Government.

3.3 Benefit to existing development deduction

Consistent with the 2017 Development Charge Background Study and Bylaw, the benefit to existing development deduction will be assigned to projects based on a standard categorization as defined in Table 3.1. This table is a general guideline to the proportion of the capital cost attributed to development in each case. Projects may deviate from these classifications based on an individual assessment.

York Region has historically applied a minimum 10% BTE to all road projects as a deduction for elements such as repaving existing lanes, sub-base reconstruction, and rehabilitation of existing structures. This standard reduction is maintained.

However, the base reduction would not apply to the construction of new or missing arterial road links; including mid-block crossings and interchange ramp extensions.

The Region's population and employment growth between 2017 and 2031 (mid- year) is forecasted to be approximately 22.4% of the total population and employment anticipated for mid-2031. It is the position of York Region, that the maximum Benefit to Existing shall not exceed 75% of the total Regional contribution to a project.

Table 3.1: Transportation Project Categorization for Benefit to Existing

Project Category	Benefit to Existing	Proportion Attributed to Development
NEW REGIONAL INFRASTRUCTURE		
New Arterial Road Link	0%	100%
New arterial roads are identified to supp development areas. Typically, in many of functions as a main street through the H these new communities, the new arterial collector as well as an arterial road and new arterial road is designed as a by-pa and villages which will negatively impact distance.	ort Greenfield and leveloping commu amlet. To service I roads are constru- traverse the comm ss to distribute tra the existing deve	I provincially designated inities the existing arterial road the transportation needs of ucted to serve as a major nunity. In many incidences the iffic away from existing nodes lopment by increasing travel
Missing Arterial Road Link	0%	100%
The construction of a missing arterial roa redistribution of arterial travel. However, is needed to support future population a service in the corridor will be negatively	ad link would bene as the demand fo nd employment gr impacted.	efit existing development in a or the missing arterial road link owth, the overall level of
Grade Separation; New Structure	0-20%	80%-100%
Construction of new rail grade separatio exposure index from when the need was Plan) and the time of construction. If the than 100%, then all of the costs will be a exposure index is less than 100%, then rail exposure increase).	ns will be based o s identified (i.e. the increase in the ra attributed to growth the benefit to exis	on the difference in the rail e 2016 Transportation Master il exposure index is greater n. If the increase in the rail ting will be calculated as (1-
CAPACITY IMPROVEMENTS		
Road Widening; Urban Area	10%	90%
Capital improvement, including road wid the urban boundary to support proposed lanes and 4 – 6 lanes.	enings and interse I growth. May inclu	ection improvements, within ude widenings from 2 – 4
Road Widening; Rural Area	10%	90%
Capital improvement, including road wid growth and densities in the towns and vi include widenings from 2 – 4 lanes and 4	enings within rura Ilages outside the 4 – 6 lanes.	l areas. To support increased main urban areas. May

Project Category	Benefit to Existing	Proportion Attributed to Development
Road Widening; HOV Lanes	10%	90%
Arterial road widenings to support multi- these corridors are to increase the perso support car and van pooling and transit.	passenger vehicle on trip capacity of	e trips. Improvements along the corridor through lanes to
Grade Separation; Widening	10%	90%
The benefit to existing for the road wider when being constructed concurrently.	ning project will ap	oply to the grade separation
Jog Elimination / Intersection Improvement	10%	90%
Major intersection improvements includin support proposed growth. Benefit to exist and geometric improvements, however in modifications to existing signals to account reduce the level of service for existing de	ng jog elimination sting arises from c n many cases, the mmodate for exan evelopment.	of regional intersections to apacity and safety increases addition of new signals or nple, protected phasing, may
CONTRIBUTION TO INFRASTRUCTUR	RE	
Mid-Block Crossing	0%	100%
To support the Regional share for new n support new growth areas.	nid-block crossing	s of 400 series highways to
400-Series Interchange	10%	90%
To support the Regional share for interc to support new growth areas. The benef normally offset by increased traffic cong	hange improveme it of an added inte estion created by	nts and/or new interchanges rchange to existing users is proposed growth.
Interchange Ramp Extensions	0%	100%
To support the Regional share for new in highways to support new growth areas.	nterchange ramp e	extensions from 400 series
MISCELLANEOUS POLICIES AND PRO	OGRAMS	
Reconstruction to Regional standard; Growth Areas	60%	40%

Project Category	Benefit to Existing	Proportion Attributed to Development
Road improvements, road structural cap improvements to support increased dem existing or urban growth areas. May incl general purpose lanes, structural design geometric improvements, and improvem	acity improvemen and related to gro ude, but not limite , intersection impr ents to shoulder v	ts and road volume capacity wth within or supporting d to, reconstruction of existing ovements, turn lanes, vidths.
Reconstruction to Regional standard; Others Areas	75%	25%
Road improvements, road structural cap improvements to support increased dem limited to, reconstruction of existing gene intersection improvements, turn lanes, g shoulder widths.	acity improvemen and related to gro eral purpose lanes eometric improve	ts and road volume capacity wth. May include, but not s, structural design, ments, and improvements to
Programs and Studies	10%	90%
May include, but not limited to, Master P and initiatives required to support planne	lans, transportaticed growth.	on planning studies, programs
MISCELLANEOUS CAPITAL		
Include general road improvements, stre gravel, hard and surface treated roads to demand related to growth.	etscaping, urbani o Regional standa	zation and conversion of rd to support increased
Urbanization	10%	90%
Intersection and Miscellaneous Capital	10 to 75%	25% to 90%
Streetscaping	20%	80%
Remaining Gravel Roads	75%	25%
Remaining Surface Treated Roads	75%	25%

3.4 Post period benefit deduction

As was the case with the 2017 Background Study and Bylaw, York Region's methodology for undertaking the post period benefit analysis is as follows

1. Consistent with the Development Charges Act, 1997 where maintaining a fixed

level of service is the standard measure, the Region will establish an average level of service (LOS) for the past ten years, referred hereafter as "Base". The objective is to maintain the same traffic level of service as the Base for the Development Charge Bylaw planning horizon, referred hereafter as "Future". Consistent with that methodology proposed for the 2017 Development Charge Bylaw, York Region proposes that V/C ratios for 2016 be used to represent the average LOS "Base", and 2031 to represent the "Future".

The total cost of the capital projects identified as required by 2031 will be included (2017 to 2031) in the PPB analysis, while projects identified in the Transportation Master Plan as required post 2031 have been assigned a post period benefit of 100%.

- 2. To maintain theoretical consistency in the analysis, traffic volumes on the Regional road system were modeled for the Base and Future, and V/C ratios for three scenarios computed.
 - a) Future volumes on Base network
 - b) Base volumes on Base network
 - c) Future volumes on Future network
- 3. For each scheduled improvement in the roads section of the Development Charges Bylaw, the morning peak period peak demand is tested against two thresholds as follows:

Threshold 1:

Volumes $_{\rm Future}$ / Capacity $_{\rm Base}$ are less than (0.80 or 0.90)

The purpose of Threshold 1 is to ensure that specific projects identified in the Transportation Master Plan are required to support development identified within the planning horizon. In other words, where the future demand compared to the base capacity exceeds a volume to capacity ratio of 0.90 in an urban environment and 0.80 in a rural setting, the project is necessary to maintain the historical level of service. In the case of a road widening, the increase is measured in terms of the "minimum" number of lanes that need to be added to the road system in order to maintain the quality of the base network.

Threshold 2:

(V/C)_{Future} < (V/C)_{Base}

The purpose of Threshold 2 is to ensure that the quality of the base road network, defined as Level of Service, has not been improved by the scheduled improvement. In other words, there may be a potential for Post

Period Benefit if the quality of the road segment, defined as the Volume / Capacity of the road project, improves over time.

A Post Period Benefit will be considered for projects that satisfy both thresholds. The amount of Post Period Benefit will be calculated as defined in Step 4.

4. For projects identified in Step 3 for consideration of a Post Period Benefit, a reduction in the project shall be calculated as:

$$\frac{(V/C)_{Future} - (V/C)_{Base}}{(V/C)_{Base}}$$

The reduction shall be calculated for both directions and the lower of the two reductions utilized.

5. If a reduction is applied to a specific project to accommodate Post Period Benefit, it is anticipated that this reduction will be considered for recovery in development charges calculations in a period beyond the existing Bylaw horizon.

This PPB methodology is not applicable to Grade Separations, mid-block crossings, new Regional Roads, Programs and Studies and Miscellaneous Capital Expenditures.

However, where the Transportation Master Plan identifies a project need beyond the planning horizon, the project will be assigned a 100% post period benefit.

Further, the Background Study has historically identified a growth component in major reconstruction capital projects. These improvements provide additional lane capacity to support growth within the planning horizon of the background study. As such, no post period benefit is applicable.

3.5. Grants, subsidies and other contributions

Any anticipated grants, subsidies and other contributions have been deducted from the development charge eligible costs in accordance with the requirements of the *Development Charges Act, 1997.* The grants are primarily from other levels of government; however, the amounts vary by project and are not based on a set formula. For the projects included in the 2018 Development Charge Bylaw Amendment, the anticipated grants/subsidies are approximately \$362.4 million.

3.6 10 per cent statutory deduction

Services that relate directly or indirectly to the provision of transportation do not require a 10 per cent deduction under s.s. 5(1) 8 of the *Development Charges Act*,

1997.

3.7 Residential vs non-residential allocation

The system of network improvements recommended in the Transportation Master Plan identify infrastructure requirements needed to support a multi-modal network for all trip purposes and for all trips originating from or destined to York Region.

This includes additional transit infrastructure, roads infrastructure and a systems of sidewalks and trails to further enable active transportation. The residential vs. nonresidential allocation documented here also applies to the Toronto-York Subway Extension and Transit services.

The residential vs non-residential allocation is determined through the net incremental population and employment growth approach.

	Increment (2017 to 2031 mid-year)	%
Population ¹	367,800	72
Employment ²	146,403	28
Total	514,203	100

Table 3.2: Incremental Growth for Population and Employment

Note: ¹ Population, excludes Institutional population.

² Employment, excluding those with no fixed place of work and work at home.

3.7.1 Non-residential cost allocation

For the purpose of rate calculation, the non-residential share of the total capital cost is further allocated between retail, non-retail (industrial, office and institutional) and hotel uses. The cost allocation is determined based on the share of trips generated using the Institute of Transportation Engineers (ITE) Trip Generation rates.

Trip generation rates are used by transportation professionals for estimating the number of trips generated by specific types of developments or land uses. A trip generation rate is the number of trips (vehicle trips, pedestrian trips, and/or transit trips) that can be expected to access and exit a site over a given period of time, expressed over an independent variable, such as trips per 1000 sq. ft. gross floor area, or per hotel suite. For each non-residential sector, an average trip generation rate was developed based on a sample of land use categories.

To capture the travel characteristics of all land use categories, an average of the AM peak hour and PM peak hour trip generation rate was estimated. Furthermore, consistent with industry practices, retail trip rates were further reduced by 20 per cent to accommodate "pass-by" trips. Pass-by trips are defined as trips that would have traveled on a street adjacent to a retail center even if the retail was not constructed.

Where data is available, the peak of the land use, (the trips generated for each land use during the peak period of the land use) was used in the analysis.

Using the above methodology, the non-residential share of the costs is allocated to the three land uses based on the percentages below:

Non-residential Land Use	Allocation of DC Eligible Costs
Retail	46.89%
Non-retail (Industrial/Office/Institutional)	52.30%
Hotel	0.81%
Total	100.00%

Table 3.3: Non-Residential Land Use (Based on Trip Generation)

3.8 Project list

Table 3.4 outlines the Historic Level of Service calculation for the 2018 Development Charge Bylaw and is the as in the 2017 Development Charge Background Study.

Table 3.5 summarizes the projects used to calculate the Roads DC rate as included in the 2017 DC Background Study.

Table 3.6 summarizes the additional capital projects included in the amended Roads development charge calculation identified in the 2018 DC Background Study.

Roads Number of Lane Km Historic Level of Service

Description	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Lane KM of Regional Road	3,366	3,399	3,428	3,455	3,487	3,523	3,559	3,593	4,030	4,071
Total (#)	3,366	3,399	3,428	3,455	3,487	3,523	3,559	3,593	4,030	4,071
Population + Employment	1,457,850	1,491,650	1,514,350	1,552,650	1,594,850	1,636,400	1,673,200	1,707,250	1,741,850	1,780,100
Per 1,000 Capita Standard	2.3089	2.2787	2.2637	2.2252	2.1864	2.1529	2.1271	2.1046	2.3136	2.2870

I		80
	2007-2016	2.224
	10 Year Average	Quantity Standard (km per 1,000 Capita)

York Region 2018 Development Charge Background Study

Roads

Growth related Capital Costs

Council Approved Standard of Service

Quantity of Service	Historical 2007 - 2016
Average lane-kilometres of Regional Road per 1,000 Capita (Pop + Employment)	2.22

Recoverable Cost Calculations for Roads projects imposed under the 2017 Development Charge Bylaw:

				Less		Less	Potential Develo	opment Charge Rec	overable Costs		Residential and Nor	n-residential Split	
Project	Project Description		Gross Project Cost		New Municipal				Post Period Benefit	2	ž	on-Residential Share	
Number	(2017-2031)	6umi	(2017-2031)	Grants and Subsidies	Cost	Benefit to Existing	Charge Eligible	Growth Costs (2017-2031)	Level of Service	Kesidential	Retail	Industrial/Office/ Institutional	Hotels
							Cost		Beyond 2031)	71.53%	13.35%	14.89%	0.23%
2017 Roads "N	Main list" costs												
1 to 7	Rail grade separation	2017-2026	214,154,384	96,905,937	117,248,448	0	117,248,448	117,248,448	0	83,865,621	15,654,704	17,458,533	269,590
8	New Arterial Road Link	2024-2031	1,500,000	0	1,500,000	0	1,500,000	1,500,000	0	1,072,922	200,276	223,353	3,449
9 to 10	Interchange (New)	2019-2031	43,906,700	40,250,000	3,656,700	365,670	3,291,030	3,291,030	0	2,354,012	439,410	490,041	7,567
11 to 14	Interchange Improvements	2017-2026	45,100,000	25,900,000	19,200,000	1,920,000	17,280,000	17,280,000	0	12,360,061	2,307,180	2,573,027	39,732
15 to 16	Missing Link	2017-2031	33,265,000	0	33,265,000	0	33,265,000	33,265,000	0	23,793,832	4,441,455	4,953,226	76,486
17 to 24	New Midblock Crossing	2017-2031	228,236,977	152,152,651	76,084,326	30,800	76,053,526	76,053,526	0	54,399,664	10,154,466	11,324,525	174,870
25 to 53	Widen to 4 lanes	2017-2031	297,439,357	0	297,439,357	29,743,936	267,695,421	265,518,611	2,176,810	189,920,495	35,451,345	39,536,263	610,508
54 to 106	Widen to 6 lanes	2017-2031	854,209,478	16,558,109	837,651,369	83,765,137	753,886,232	753,886,232	0	539,240,718	100,656,903	112,255,198	1,733,413
107 to 223	Reconstruction	2017-2026	340,143,785	6,137,955	334,005,830	222,835,344	111,170,486	111,170,486	0	79,518,169	14,843,190	16,553,512	255,615
224 to 229	Miscellaneous and Intersection Capital	2017-2031	492,214,692	0	492,214,692	130,145,762	362,068,929	362,068,929	0	258,981,132	48,342,489	53,912,802	832,506
230 to 239	Programs and Studies	2017-2031	171,837,574	16,593,534	155,244,040	15,020,549	140,223,491	140,223,491	0	100,299,240	18,722,271	20,879,564	322,416
240 to 255	Ongoing Projects	2017-2021	57,427,000	7,943,000	49,484,000	4,948,400	44,535,600	44,535,600	0	31,855,482	5,946,276	6,631,442	102,401
256 to 259	Outstanding Credits	2017-2026	19,233,639	0	19,233,639	0	19,233,639	19,233,639	0	13,757,462	2,568,025	2,863,928	44,224
	Total	2017-2031	2,798,668,586	362,441,186	2,436,227,400	488,775,597	1,947,451,802	1,945,274,992	2,176,810	1,391,418,810	259,727,991	289,655,415	4,472,777

York Region

2018 Development Charge Background Study

Roads

Growth related Capital Costs

Council Approved Standard of Service

Quantity of Service	Historical 2007 - 2016
Average lane-kilometres of Regional Road per 1,000 Capita (Pop + Employment)	2.22

Recoverable Cost Calculations for Roads projects imposed under the 2018 Development Charge Bylaw Amendment:

				ress		ress	Potential Devel	opment Charge Rec	overable Costs		Residential and Non	residential Split		
Project	Project Description	Tim T	Gross Project Cost		New Municipal		Total Development		Post Period Benefit		No	on-Residential Share		
Number	(2017-2031)	Iming	(2017-2031)	Grants and Subsidies	Cost	Benefit to Existing	Charge Eligible	Growth Costs (2017-2031)	/ Level of Service Deduction	Kesidential	Retail	Industrial/Office/ Institutional	Hotels	
							2021		(Beyond 2031)	71.53%	13.35%	14.89%	0.23%	
Total Projects	adede through this amendment													
Niden to 4 La	nes													
260	Dufferin Street - Major Mackenzie Drive to Teston Road	2022-2026	12,385,000	0	12,385,000	1,238,500	11,146,500	11,146,500	0	7,972,883	1,488,251	1,659,737	25,629	
261	Wellington Street - Yonge Street to Rail Grade Separation	2022-2026	7,090,359	0	7,090,359	709,036	6,381,323	6,381,323	0	4,564,441	852,017	950,192	14,673	
262	14th Avenue - Markham Road to Donald Cousens Parkway	2022-2026	35,598,421	0	35,598,421	3,559,842	32,038,579	32,038,579	0	22,916,596	4,277,707	4,770,610	73,666	
263	Highway 27 - Nashville Road to King Road	2022-2026	44,655,000	0	44,655,000	4,465,500	40,189,500	40,189,500	0	28,746,797	5,365,996	5,984,299	92,408	
264	Warden Avenue - Major Mackenzie Drive to Donald Cousens Parkway	2027-2031	37,688,800	0	37,688,800	3,768,880	33,919,920	33,919,920	0	24,262,284	4,528,898	5,050,745	77,992	
265	Weston Road - Teston Road to Kirby Road	2027-2031	10,920,746	0	10,920,746	1,092,075	9,828,671	9,828,671	0	7,030,265	1,312,298	1,463,509	22,599	
266	Leslie Street - Doane Road to Queensville Sideroad	2027-2031	7,291,302	0	7,291,302	729,130	6,562,172	6,562,172	0	4,693,799	876,164	977,121	15,088	
267	St John's Sideroad - Bathurst Street to Yonge Street	2027-2031	11,424,061	0	11,424,061	1,142,406	10,281,655	10,281,655	0	7,354,275	1,372,779	1,530,959	23,641	
268	Jane Street - Teston Road to Kirby Road	2027-2031	11,739,200	0	11,739,200	1,173,920	10,565,280	10,565,280	0	7,557,147	1,410,648	1,573,192	24,293	
269	Bayview Avenue - Stouffville Road to Bethesda Road	2027-2031	12,307,505	0	12,307,505	1,230,751	11,076,755	11,076,755	0	7,922,995	1,478,939	1,649,351	25,469	
270	Islington Avenue - Willis Road to Langstaff Road	2027-2031	8,683,218	0	8,683,218	868,322	7,814,896	7,814,896	0	5,589,849	1,043,424	1,163,654	17,969	
271	Kennedy Road - Major Mackenzie Drive to Elgin Mills Road	2027-2031	9,320,879	0	9,320,879	932,088	8,388,791	8,388,791	0	6,000,345	1,120,049	1,249,108	19,288	
272	Woodbine Avenue - Woodbine Avenue Bypass to 19th Avenue	2027-2031	32,748,000	0	32,748,000	3,274,800	29,473,200	29,473,200	0	21,081,629	3,935,184	4,388,620	67,768	
273	Leslie Street - Vandorf Sideroad to Wellington Street	2027-2031	9,905,450	0	9,905,450	990,545	8,914,905	8,914,905	0	6,376,665	1,190,295	1,327,447	20,498	
274	St John's Sideroad - Leslie Street to Highway 404	2027-2031	14,201,961	0	14,201,961	1,420,196	12,781,765	12,781,765	0	9,142,557	1,706,588	1,903,231	29,389	
275	Pine Valley Drive - Rutherford to Major Mackenzie	2027-2031	11,884,023	0	11,884,023	1,188,402	10,695,621	10,695,621	0	7,650,378	1,428,051	1,592,600	24,592	
276	Leslie Street-19th Avenue to Stouffville Road	2022-2026	56,194,000	0	56,194,000	5,619,400	50,574,600	50,574,600	0	36,175,065	6,752,587	7,530,661	116,286	
	Subtotal		334,037,925	0	334,037,925	33,403,793	300,634,133	300,634,133	0	215,037,971	40,139,877	44,765,036	691,249	
Widen to 6 La	seu													
277	Keele Street - Highway 7 to Rutherford Road	2022-2026	33,889,897	0	33,889,897	3,388,990	30,500,907	30,500,907	0	21,816,728	4,072,401	4,541,647	70,131	
278	Weston Road - Highway 7 to Langstaff Road	2022-2026	17,756,421	0	17,756,421	1,775,642	15,980,779	15,980,779	0	11,430,752	2,133,712	2,379,571	36,745	
279	16th Avenue - Woodbine Avenue to McCowan Road	2022-2026	63,177,000	0	63,177,000	6,317,700	56,859,300	56,859,300	0	40,670,394	7,591,704	8,466,466	130,737	
280	Kennedy Road - Highway 7 to 16th Avenue	2022-2026	22,326,318	0	22,326,318	2,232,632	20,093,686	20,093,686	0	14,372,638	2,682,856	2,991,991	46,201	
281	Langstaff Road - Keele Street to Dufferin Street	2022-2026	18,504,331	0	18,504,331	1,850,433	16,653,898	16,653,898	0	11,912,222	2,223,585	2,479,799	38,292	

				Less		Less	Potential Devel	opment Charge Rec	overable Costs		Residential and Nor	ו-residential Split	
Project	Project Description		Gross Project Cost		New Municipal		Total David Law and		Post Period Benefit		Ň	on-Residential Share	
Number	(2017-2031)	6umi	(2017-2031)	Grants and Subsidies	Cost	Benefit to Existing	Charge Eligible	Growth Costs (2017-2031)	Level of Service	Kesidential	Retail	Industrial/Office/ Institutional	Hotels
							Cost		Deduction (Beyond 2031)	71.53%	13.35%	14.89%	0.23%
282	Weston Road - Steeles Avenue to Highway 7	2022-2026	36,487,907	0	36,487,907	3,648,791	32,839,116	32,839,116	0	23,489,205	4,384,592	4,889,811	75,507
283	Jane Street - Rutherford Road to Major Mackenzie Drive	2022-2026	18,786,874	0	18,786,874	1,878,687	16,908,187	16,908,187	0	12,094,110	2,257,537	2,517,663	38,877
284	Green Lane - Yonge Street to Highway 404	2022-2026	55,549,963	0	55,549,963	5,554,996	49,994,967	49,994,967	0	35,760,464	6,675,196	7,444,353	114,954
285	Warden Avenue - Steeles Avenue to McNabb Street / MacPherson Street	2027-2031	29,028,000	0	29,028,000	2,902,800	26,125,200	26,125,200	0	18,686,867	3,488,168	3,890,096	60,070
286	Warden Avenue - Highway 7 to 16th Avenue	2027-2031	16,200,000	0	16,200,000	1,620,000	14,580,000	14,580,000	0	10,428,801	1,946,683	2,170,992	33,524
287	Langstaff Road - Weston Road to Jane Street	2027-2031	27,479,250	0	27,479,250	2,747,925	24,731,325	24,731,325	0	17,689,854	3,302,061	3,682,545	56,865
288	Rutherford Road - Pine Valley Drive to Weston Road	2027-2031	14,084,817	0	14,084,817	1,408,482	12,676,335	12,676,335	0	9,067,145	1,692,511	1,887,532	29,147
289	Woodbine Avenue - Hooper Road to Major Mackenzie Drive	2027-2031	33,218,161	0	33,218,161	3,321,816	29,896,345	29,896,345	0	21,384,296	3,991,681	4,451,627	68,741
290	Dufferin Street - Langstaff Road to Rutherford Road	2027-2031	30,545,000	0	30,545,000	3,054,500	27,490,500	27,490,500	0	19,663,440	3,670,459	4,093,392	63,209
291	Kennedy Road - 16th Avenue to Major Mackenzie Drive	2027-2031	17,781,678	0	17,781,678	1,778,168	16,003,510	16,003,510	0	11,447,011	2,136,747	2,382,955	36,797
292	Major Mackenzie Drive - Woodbine Avenue to Kennedv Road	2027-2031	40,128,329	0	40,128,329	4,012,833	36,115,497	36,115,497	0	25,832,739	4,822,046	5,377,671	83,040
293	Weston Road - Langstaff Road to Major Mackenzie Drive	2027-2031	37,017,429	0	37,017,429	3,701,743	33,315,686	33,315,686	0	23,830,087	4,448,223	4,960,774	76,603
294	Highway 7 - Kipling Avenue to Helen Street	2027-2031	65,608,779	0	65,608,779	6,560,878	59,047,901	59,047,901	0	42,235,859	7,883,920	8,792,353	135,769
	Subtotal		577,570,153	0	577,570,153	57,757,015	519,813,138	519,813,138	0	371,812,613	69,404,080	77,401,237	1,195,208
Maintain 6 Iar.	es. Designate HOV.												
295	Warden Avenue - 14th Avenue to Highway 7	2027-2031	230,644	0	230,644	23,064	207,580	207,580	0	148,478	27,715	30,909	477
296	Rutherford Road - Weston Road to Jane Street	2027-2031	246,940	0	246,940	24,694	222,246	222,246	0	158,968	29,674	33,093	511
297	Woodbine Avenue - Steeles Avenue to Hidhwav 7	2027-2031	2,592,000	0	2,592,000	259,200	2,332,800	2,332,800	0	1,668,608	311,469	347,359	5,364
298	Dufferin Street - Highway 407 to Langstaff Road	2027-2031	45,126	0	45,126	4,513	40,613	40,613	0	29,050	5,423	6,047	93
	Subtotal		3,114,710	0	3,114,710	311,471	2,803,239	2,803,239	0	2,005,104	374,281	417,408	6,445
Interchange (I	Vew)												
299	Hwy 404 New Interchange - at St. John's Sideroad	2027-2031	47,820,000	0	47,820,000	4,782,000	43,038,000	43,038,000	0	30,784,276	5,746,320	6,408,446	98,957
	Subtotal		47,820,000	0	47,820,000	4,782,000	43,038,000	43,038,000	0	30,784,276	5,746,320	6,408,446	98,957
Interchange II	mprovements												
300	Hwy 400 Interchange Improvements - at Langstaff Road	2027-2031	14,250,000	0	14,250,000	1,425,000	12,825,000	12,825,000	0	9,173,483	1,712,360	1,909,669	29,489
	Subtotal		14,250,000	0	14,250,000	1,425,000	12,825,000	12,825,000	0	9,173,483	1,712,360	1,909,669	29,489
Rail grade se	paration												
301	Barrie GO Grade Separation - St. John's Sideroad east of Yonge Street	2027-2031	54,126,873	0	54,126,873	0	54,126,873	54,126,873	0	38,715,939	7,226,877	8,059,602	124,454
302	Barrie GO Grade Separation - Davis Drive east of Main Street	2027-2031	42,026,658	0	42,026,658	0	42,026,658	42,026,658	0	30,060,882	5,611,289	6,257,855	96,632
303	Barrie GO Grade Separation - Langstaff Road east of Keele Street	2022-2026	16,385,991	0	16,385,991	0	16,385,991	16,385,991	0	11,720,593	2,187,814	2,439,908	37,676
304	Barrie GO Grade Separation - Teston Road east of Keele Street	2022-2026	22,180,498	0	22,180,498	0	22,180,498	22,180,498	0	15,865,295	2,961,482	3,302,721	51,000
305	Barrie GO Grade Separation - Mulock Drive west of Bayview Avenue	2022-2026	45,869,320	0	45,869,320	0	45,869,320	45,869,320	0	32,809,466	6,124,351	6,830,035	105,467
306	Barrie GO Grade Separation - Green Lane east of Second Concession	2022-2026	5,559,360	0	5,559,360	0	5,559,360	5,559,360	0	3,976,506	742,271	827,800	12,783
307	Richmond Hill GO Grade Separation - Leslie Street south of Stouffville Road (inc. Jog	2027-2031	39,801,250	0	39,801,250	0	39,801,250	39,801,250	0	28,469,090	5,314,158	5,926,487	91,515
308	Richmond Hill GO Grade Separation - 19th Avenue west of Bavview Avenue	2027-2031	21,690,864	0	21,690,864	0	21,690,864	21,690,864	0	15,515,069	2,896,107	3,229,814	49,874
				Less		Less	Potential Develo	pment Charge Reco	verable Costs		Residential and No.	n-residential Split	
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Project	Project Description	Time	Gross Project Cost		New Municipal		Total Davalanmont		Post Period Benefit	inita of the second	ž	on-Residential Share	
Number	(2017-2031)	6uuu	(2017-2031)	Grants and Subsidies	Cost	Benefit to Existing	Charge Eligible	Growth Costs (2017-2031)	Level of Service	Kesidential	Retail	Industrial/Office/ Institutional	Hotels
							1800		(Beyond 2031)	71.53%	13.35%	14.89%	0.23%
309	Stouffville GO Grade Separation - Highway 7 west of Kennedy Road	2022-2026	43,326,355	0	43,326,355	0	43,326,355	43,326,355	0	30,990,531	5,784,821	6,451,383	99,620
310	Stouffville GO Grade Separation - Kennedy Road north of Highway 7	2022-2026	38,616,623	0	38,616,623	0	38,616,623	38,616,623	0	27,621,748	5,155,990	5,750,094	88,791
311	Stouffville GO Grade Separation - McCowan Road north of Highway 7	2022-2026	39,275,873	0	39,275,873	0	39,275,873	39,275,873	0	28,093,297	5,244,011	5,848,258	90,307
	Subtotal		368,859,664	0	368,859,664	0	368,859,664	368,859,664	0	263,838,417	49,249,170	54,923,956	848,120
New arterial c	orridor												
312	Donald Cousens Parkway - Major Mackenzie Drive to Markham Road / Highway 48	2027-2031	17,040,000	0	17,040,000	0	17,040,000	17,040,000	0	12,188,393	2,275,136	2,537,291	39,180
313	Donald Cousens Parkway - 19th Avenue to Warden Avenue	2027-2031	10,076,365	0	10,076,365	0	10,076,365	10,076,365	0	7,207,436	1,345,370	1,500,391	23,169
	Subtotal		27,116,365	0	27,116,365	0	27,116,365	27,116,365	0	19,395,829	3,620,506	4,037,682	62,349
Misc & Int Cal	pital												
314	Intersection, Bottleneck and Miscellaneous Capital	2017-2031	57,467,490	0	57,467,490	5,746,749	51,720,741	51,720,741	0	36,994,878	6,905,617	7,701,324	118,922
315	Various Road Improvements	2017-2031	44,603,492	0	44,603,492	33,452,619	11,150,873	11,150,873	0	7,976,011	1,488,835	1,660,388	25,639
	Subtotal		102,070,982	0	102,070,982	39,199,368	62,871,614	62,871,614	0	44,970,889	8,394,452	9,361,712	144,561
2018 Roads C	ost Changes												
233	Transportation Demand Management Adjustment	2017-2031	10,678,500	0	10,678,500	1,067,850	9,610,650	9,610,650	0	6,874,318	1,283,189	1,431,045	22,098
	Total		1,485,518,299	0	1,485,518,299	137,946,497	1,347,571,802	1,347,571,802	0	963,892,900	179,924,236	200,656,190	3,098,476

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4.0 Development Charge Cash Flow Calculation

This Chapter provides the development charge rate calculations based the Roads Service's "Potential Development Charge Recoverable Cost" in Chapter 3 and the development forecasts in Chapter 2. Where applicable, the residential per capita calculation commences with the inclusion of the uncommitted development charge reserve fund balance for the service, as of the end of 2016. The expenditures to be development charge funded are set out by year and inflated (at 2.4 per cent per year) in the next column. Existing debt payments, plus additional debt payments (associated with debt proceeds revenue which is also shown) are also tabulated. The interest rates assumed for the additional debt payments are consistent with the Region's debt program.

For residential rates, the annual gross Regional population growth forecast is shown and multiplied by the development charge per capita (also inflated at 2.4 per cent per year). The development charge is set in order that that revenue stream is sufficient to fund the capital expenditures and debt payments, while leaving the development charge reserve fund balance at nil by the end of the period in 2031.

The final adjustment that is made to this calculation is to provide for interest earnings/expense on the annual reserve fund transactions. In addition, it is assumed that the various rates applied will increase in the long term. Positive interest earnings are shown for the year where the opening reserve balance for the year is above zero. This earnings figure is then adjusted up or down, depending on whether the in-year transactions were in a surplus or deficit position.

The resultant development charge rate per capita is then carried forward to the summary page at the beginning of each section and multiplied by the average persons per unit occupancy for each residential unit type in order to yield the development charge by housing type.

A similar set of calculations has been made for non-residential development, based on the forecast growth in floor area and the share of costs attributable to nonresidential development.

Tables 4.1 to 4.4 present the development charges which result from these cash flow calculations.

All reserve, debt, growth and interest rate assumptions in the development charge rate calculation remain consistent with the 2017 development charge background study.

The rate calculation here is based on a forecast horizon of 2017 to 2031. An inflation factor of 2.4 per cent has been applied to the rates calculated for the 2017 year to bring it to its 2018 value. Consequently, the 2018 development charge rates subject to this amendment will not be indexed on July 1st, 2018.

The rate underpinning the inflation factor is the 10 year average of the Quarterly Construction Price Index of Non-Residential Building Construction (NRBC) provided by Statistics Canada. The NRBC index is based on the aggregate of the construction price indices for the commercial, industrial and institutional structures. This is the same inflation factor used for the rate calculation in the 2017 Development Charge Background Study.

Roads - Residential Charge Calculations

Assumptio	su	
Gross Population Growth		395,379
Inflation		2%
Interest	Earned	Charged
Opening Balance	1.45% - 3.60%	2.85% - 5.00%
In-year Transactions	0.73% - 1.80%	1.43% - 2.50%
New Debt Term (Years)		10
New Debt interest	Fror	n 2.85% to 5.00%
Target Reserve Balance 2031		\$2,407,341
Discount Rate Applied to Post 2031 Debt Pay	ments	3.60%

2,456	
Calculated Charge per Capita (inflated to 2018)	

	Development		Developr	hent Related Expe	anditures		Annual Gross	Development	Anticipated	In Year	Interest Reven	ne/(Expense)	
Year	Charge Reserve Fund Opening Balance	Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments	Copulation Growth (To mid-year 2031)	Charge (Inflated) per Capita	Development Charge Revenues	Transactions Surplus/ (Deficit)	Opening Reserve Balances	In-Year	Development Charge Reserve
2017	0	(3,456,347)	(3,456,347)	0	0	0	22,682	2,400	54,430,170	50,973,823	0	369,560	51,343,383
2018	51,343,383	(3,456,347)	(3,537,883)	0	0	0	25,047	2,456	61,523,256	57,985,373	1,001,196	565,357	110,895,309
2019	110,895,309	(3,456,347)	(3,621,343)	0	0	0	25,047	2,514	62,974,608	59,353,265	2,606,040	697,401	173,552,015
2020	173,552,015	(3,456,347)	(3,706,772)	0	0	0	25,047	2,574	64,460,198	60,753,426	4,512,352	789,795	239,607,588
2021	239,607,588	(3,456,347)	(3,794,215)	0	0	0	25,692	2,634	67,679,910	63,885,694	6,828,816	910,371	311,232,470
2022	311,232,470	(88,056,294)	(98,944,395)	0	0	0	26,445	2,696	71,305,518	(27,638,877)	9,648,207	(621,875)	292,619,925
2023	292,619,925	(88,056,294)	(101,278,522)	0	0	0	26,445	2,760	72,987,636	(28,290,886)	9,802,767	(671,909)	273,459,897
2024	273,459,897	(88,056,294)	(103,667,712)	0	0	0	26,552	2,825	75,013,132	(28,654,580)	9,160,907	(680,546)	253,285,678
2025	253,285,678	(88,056,294)	(106,113,264)	0	0	0	26,552	2,892	76,782,714	(29,330,550)	8,485,070	(696,601)	231,743,598
2026	231,743,598	(88,056,294)	(108,616,507)	0	0	0	28,595	2,960	84,639,737	(23,976,771)	7,763,411	(569,448)	214,960,789
2027	214,960,789	(101,265,939)	(127,857,140)	0	0	0	30,422	3,030	92,173,326	(35,683,813)	7,738,588	(892,095)	186,123,469
2028	186,122,704	(101,265,939)	(130,873,327)	0	592,279	(7,403)	30,530	3,101	94,681,106	(35,607,346)	6,700,417	(890,184)	156,325,591
2029	156,320,697	(101,265,939)	(133,960,668)	0	606,251	(86,868)	30,530	3,174	96,914,662	(36,526,623)	5,627,545	(913,166)	124,508,453
2030	124,503,998	(101,265,939)	(137,120,839)	0	620,552	(168,206)	30,530	3,249	99,200,907	(37,467,586)	4,482,144	(936,690)	90,581,866
2031	90,577,860	(101,265,939)	(140,355,560)	0	635,191	(2,600,090)	15,265	3,326	50,770,543	(91,549,916)	3,260,803	(2,288,748)	0
Total		(963,892,900)	(1,206,904,495)	0	2,454,273	(2,862,567)	395,379		1,125,537,423		87,618,263	(5,828,776)	

Calculations
Charge
Development
- Retail D
Roads

Assumptio	su	
Retail - GFA Growth		16,043,274
Inflation		2%
Interest	Earned	Charged
Opening Balance	1.45% - 3.60%	2.85% - 5.00%
In-year Transactions	0.73% - 1.80%	1.43% - 2.50%
New Debt Term (Years)		10
New Debt interest	Fror	n 2.85% to 5.00%
Target Reserve Balance 2031		\$449,364
Discount Rate Applied to Post 2031 Debt Pay	ments	3.60%

\$11.23	
Calculated Charge per Capita (inflated to 2018)	

	Development		Developn	nent Related Exp€	enditures		Annual Gross	Development	Anticipated	In Year	Interest Reven	(esthense)	
Year	Charge Reserve Fund Opening Balance	Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments	To mid-year 2031)	Charge (Inflated) per Sqft	Development Charge Revenues	Transactions Surplus/ (Deficit)	Opening Reserve Balances	In-Year	Development Charge Reserve
2017	0	(645,176)	(645,176)	0	0	0	1,458,420	10.97	16,003,577	15,358,401	0	111,348	15,469,750
2018	15,469,750	(645,176)	(660,396)	0	0	0	1,453,659	11.23	16,327,628	15,667,233	301,660	152,756	31,591,398
2019	31,591,398	(645,176)	(675,975)	0	0	0	1,453,659	11.50	16,712,802	16,036,827	742,398	188,433	48,559,056
2020	48,559,056	(645,176)	(691,921)	0	0	0	1,458,537	11.77	17,164,463	16,472,542	1,262,535	214,143	66,508,276
2021	66,508,276	(645,176)	(708,244)	0	0	0	1,218,291	12.05	14,675,409	13,967,165	1,895,486	199,032	82,569,959
2022	82,569,959	(16,436,952)	(18,469,370)	0	0	0	907,415	12.33	11,188,486	(7,280,884)	2,559,669	(163,820)	77,684,924
2023	77,684,924	(16,436,952)	(18,905,068)	0	0	0	907,415	12.62	11,452,426	(7,452,642)	2,602,445	(177,000)	72,657,727
2024	72,657,727	(16,436,952)	(19,351,044)	0	0	0	907,415	12.92	11,722,592	(7,628,452)	2,434,034	(181,176)	67,282,133
2025	67,282,133	(16,436,952)	(19,807,541)	0	0	0	898,077	13.22	11,875,651	(7,931,890)	2,253,951	(188,382)	61,415,812
2026	61,415,812	(16,436,952)	(20,274,807)	0	0	0	926,103	13.54	12,535,134	(7,739,673)	2,057,430	(183,817)	55,549,752
2027	55,549,752	(18,902,719)	(23,866,343)	0	0	0	987,763	13.85	13,685,123	(10,181,220)	1,999,791	(254,531)	47,113,792
2028	47,113,834	(18,902,719)	(24,429,357)	0	110,557	(1,382)	987,763	14.18	14,007,959	(10,312,223)	1,696,098	(257,806)	38,239,903
2029	38,239,181	(18,902,719)	(25,005,652)	0	113,165	(16,215)	987,763	14.52	14,338,411	(10,570,292)	1,376,611	(264,257)	28,781,243
2030	28,780,608	(18,902,719)	(25,595,543)	0	115,835	(31,398)	992,437	14.86	14,746,106	(10,765,001)	1,036,102	(269,125)	18,782,584
2031	18,782,034	(18,902,719)	(26,199,349)	0	118,567	(485,343)	498,555	15.21	7,582,529	(18,983,597)	676, 153	(474,590)	0
Total		(179,924,236)	(225,285,786)	0	458,125	(534,339)	16,043,274		204,018,295		22,894,363	(1,548,792)	

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Assumptio	us	
Industrial/Office/Institutional - GFA Growth		61,144,441
Inflation		2%
Interest	Earned	Charged
Opening Balance	1.45% - 3.60%	2.85% - 5.00%
In-year Transactions	0.73% - 1.80%	1.43% - 2.50%
New Debt Term (Years)		10
New Debt interest	Fror	n 2.85% to 5.00%
Target Reserve Balance 2031		\$501,143
Discount Rate Applied to Post 2031 Debt Pay	ments	3.60%

\$3.29	
Calculated Charge per Capita (inflated to 2018)	

	Development		Developr	nent Related Expe	snditures		Annual Gross	Development	Anticipated	In Year	Interest Reven	iue/(Expense)	
Year	Charge Reserve Fund Opening Balance	Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments	(To mid-year 2031)	Charge (Inflated) per Sqft	Development Charge Revenues	Transactions Surplus/ (Deficit)	Opening Reserve Balances	In-Year	Development Charge Reserve
2017	0	(719,517)	(719,517)	0	0	0	5,530,404	3.21	17,753,724	17,034,207	0	123,498	17,157,705
2018	17,157,705	(719,517)	(736,491)	0	0	0	5,530,404	3.29	18,172,540	17,436,049	334,575	170,001	35,098,331
2019	35,098,331	(719,517)	(753,865)	0	0	0	5,530,404	3.36	18,601,235	17,847,370	824,811	209,707	53,980,218
2020	53,980,218	(719,517)	(771,649)	0	0	0	5,548,360	3.44	19,101,862	18,330,213	1,403,486	238,293	73,952,210
2021	73,952,210	(719,517)	(789,852)	0	0	0	4,668,523	3.52	16,451,926	15,662,073	2,107,638	223,185	91,945,106
2022	91,945,106	(18,330,917)	(20,597,522)	0	0	0	3,521,469	3.61	12,702,445	(7,895,077)	2,850,298	(177,639)	86,722,689
2023	86,722,689	(18,330,917)	(21,083,424)	0	0	0	3,521,469	3.69	13,002,100	(8,081,324)	2,905,210	(191,931)	81,354,643
2024	81,354,643	(18,330,917)	(21,580,788)	0	0	0	3,521,469	3.78	13,308,823	(8,271,965)	2,725,381	(196,459)	75,611,600
2025	75,611,600	(18,330,917)	(22,089,885)	0	0	0	3,487,932	3.87	13,493,041	(8,596,844)	2,532,989	(204,175)	69,343,570
2026	69,343,570	(18,330,917)	(22,610,992)	0	0	0	3,605,314	3.96	14,276,151	(8,334,841)	2,323,010	(197,952)	63,133,786
2027	63,133,786	(21,080,804)	(26,616,366)	0	0	0	3,699,037	4.05	14,992,804	(11,623,562)	2,272,816	(290,589)	53,492,451
2028	53,492,511	(21,080,804)	(27,244,254)	0	123,296	(1,541)	3,699,037	4.15	15,346,489	(11,776,010)	1,925,730	(294,400)	43,347,831
2029	43,347,040	(21,080,804)	(27,886,954)	0	126,205	(18,083)	3,699,037	4.25	15,708,517	(12,070,316)	1,560,493	(301,758)	32,535,460
2030	32,534,766	(21,080,804)	(28,544,816)	0	129,182	(35,016)	3,715,550	4.35	16,150,867	(12,299,782)	1,171,252	(307,495)	21,098,741
2031	21,098,142	(21,080,804)	(29,218,196)	0	132,230	(541,268)	1,866,032	4.45	8,302,673	(21,324,562)	759,533	(533,114)	0
Total		(200,656,190)	(251,244,571)	0	510,913	(595,908)	61,144,441		227,365,197		25,697,222	(1,730,830)	

Roads - Hotel Development Charge Calculations

Assumptio	su	
Hotel - GFA Growth		1,484,734
Inflation		2%
Interest	Earned	Charged
Opening Balance	1.45% - 3.60%	2.85% - 5.00%
In-year Transactions	0.73% - 1.80%	1.43% - 2.50%
New Debt Term (Years)		10
New Debt interest	Fror	n 2.85% to 5.00%
Target Reserve Balance 2031		\$7,739
Discount Rate Applied to Post 2031 Debt Pay	ments	3.60%

\$2.10	
alculated Charge per Capita (inflated to 2018)	

	Development		Developr	nent Related Expe	enditures		Annual Gross	Development	Anticipated	In Year	Interest Reven	iue/(Expense)	
Year	Charge Reserve Fund Opening Balance	Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments	To mid-year 2031)	Charge (Inflated) per Sqft	Development Charge Revenues	Transactions Surplus/ (Deficit)	Opening Reserve Balances	In-Year	Development Charge Reserve
2017	0	(11,111)	(11,111)	0	0	0	106,037	2.05	217,260	206,150	0	1,495	207,644
2018	207,644	(11,111)	(11,373)	0	0	0	110,798	2.10	232,371	220,998	4,049	2,155	434,846
2019	434,846	(11,111)	(11,641)	0	0	0	110,798	2.15	237,853	226,212	10,219	2,658	673,935
2020	673,935	(11,111)	(11,916)	0	0	0	111,000	2.20	243,907	231,991	17,522	3,016	926,465
2021	926,465	(11,111)	(12,197)	0	0	0	102,354	2.25	230,215	218,018	26,404	3,107	1,173,994
2022	1,173,994	(283,061)	(318,061)	0	0	0	93,714	2.30	215,753	(102,308)	36,394	(2,302)	1,105,778
2023	1,105,778	(283,061)	(325,564)	0	0	0	93,714	2.36	220,843	(104,721)	37,044	(2,487)	1,035,614
2024	1,035,614	(283,061)	(333,244)	0	0	0	93,714	2.41	226,053	(107,192)	34,693	(2,546)	960,569
2025	960,569	(283,061)	(341,106)	0	0	0	93,517	2.47	230,900	(110,206)	32,179	(2,617)	879,926
2026	879,926	(283,061)	(349,153)	0	0	0	98,863	2.53	249,857	(99,295)	29,478	(2,358)	807,750
2027	807,749	(325,524)	(411,002)	0	0	0	104,405	2.59	270,089	(140,913)	29,079	(3,523)	692,392
2028	692,391	(325,524)	(420,698)	0	1,904	(24)	104,405	2.65	276,461	(142,357)	24,926	(3,559)	571,401
2029	571,387	(325,524)	(430,622)	0	1,949	(279)	104,405	2.71	282,982	(145,971)	20,570	(3,649)	442,337
2030	442,324	(325,524)	(440,781)	0	1,995	(541)	104,607	2.77	290,218	(149,109)	15,924	(3,728)	305,411
2031	305,399	(325,524)	(451,179)	0	2,042	(8,358)	52,404	2.84	148,819	(308,677)	10,994	(7,717)	0
Total		(3,098,476)	(3,879,648)	0	7,889	(9,202)	1,484,734		3,573,582		329,475	(22,056)	

5.0 Implementation of Rate Changes

The 2018 Development Charge Bylaw amendment and rates comes into effect on July 1, 2018. This date has been chosen to coincide with the annual indexing of rates. Having the 'in-effect' date coincide with the indexing date should improve administrative efficiencies.

The Roads development charge rates calculated as part of this amendment had an inflationary factor of 2.4 per cent applied as all costs are in 2017 dollars. These rate changes would not be indexed on July 1, 2018. The inflationary factor is based on the 10 year average of the Quarterly Construction Price Index of Non-Residential Building Construction (NRBC) provided by Statistics Canada. The NRBC index is based on the aggregate of the construction price indices for the commercial, industrial and institutional structures¹.

In accordance with Section 5.1 of the Region's 2017 Development Charge Bylaw, rates imposed by the 2017 Bylaw will be indexed on July 1st, 2018. This includes the portion of the rates pertaining to roads services.

¹ Note: Statistics Canada, Price indexes of non-residential building construction, by class of structure (Table 327-0043).

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6.0 Development Charge Bylaw and Policy Review

This section of the background study outlines the changes to the development charge policies and bylaw made under the amending bylaw:

- Policies reviewed and unchanged
- Areas of the Bylaw that have been reviewed and clarified
- Areas of the Bylaw that have been reviewed and changed

6.1 Policies reviewed and unchanged

6.1.1 Region-wide versus area-specific development charges

Under Section 10 of the *Act*, municipalities are required to consider area-specific development charges in their background study. As part of the 2017 Development Charge Background Study and Bylaw staff considered the potential for implementing area-specific charges. It was determined that the Region should continue with its existing practice of region-wide rates for the 2017 Bylaw (with the exception of wastewater rates for the Village of Nobleton). Chief among the considerations was the fact that the changes to the Growth Plan could affect the spatial distribution of the growth forecast, which is an essential input in determining the benefiting population and employment growth that is needed when creating an area-specific development charge. These growth forecasts will be determined through the Municipal Comprehensive Review process currently underway.

It was determined that the consideration for area-specific charges as identified in the 2017 Development Charge Background Study, including the analysis and rationale, remain applicable to the 2018 Development Charge Background Study.

6.2 Areas of the Bylaw that have been reviewed and clarified

The following are proposed clarifications to the development charge bylaw:

6.2.1 Treatment of vehicle storage areas and service bays within retail motor vehicle establishments

Vehicle storage areas

Aside from car dealerships, other retail motor vehicle establishments may also have requirements to store vehicles for sale, lease or servicing. These include but not limited to vehicle brokerages, long-term leasing facilities, service repair shop open to the public etc. Similar to car dealerships, the Region's development charge bylaws have always treated these types of establishments as retail.

Under the 2018 Bylaw amendment, these establishments will continue to be treated as retail, including, but not limited to, areas within the structure that are used for vehicle storage.

The rationale for not changing the treatment of these storage areas is:

- Consistent with treatment of merchandise storage in other retail -changing the treatment of storage in the same structure could give rise to an appeal from other retailers
- Recognition that these areas not just being used for storage and have additional retail uses (e.g., detailing, showroom, servicing, etc.)
- Consistency with the practice of neighboring municipalities' treatment of retail storage

Service bays

A decision by the Board in *Shanahan Ltd. v. Region of York (2013)* concluded that the use of service bays to perform warranty work, "is a direct function of the retail sale of a new vehicle and is not a separate and distinct use of [sic] function from the retail activity of selling such goods as new or used cars and trucks to the general public" and as such service department areas (bays) fall "squarely within the definition of retail".

Staff propose to provide greater clarity in the bylaw, indicating that these areas would be levied the retail rate.

6.3 Areas of the Bylaw that have been reviewed and changed

6.3.1 Standalone structured parking used to store motor vehicles

Under the 2017 Development Charge Bylaw, parking structures including standalone parking structures used to store motor vehicles would be levied the retail rate. Staff are proposing to change this treatment to the Industrial, Office, Institutional rate which would be consistent with other warehousing functions.

6.3.2 Retail motor vehicle establishments with significant vehicle storage area

There may be instances where a proposed car dealership (or other types of retail motor vehicle establishments) includes significant storage areas. 'Significant' is defined such that the gross floor area of the vehicle storage area (less any eligible employment/customer parking gross floor area) must be greater than two times the gross floor area of the dealership not used for vehicle storage area.

While these are not expected to be common, staff propose to amend the Bylaw so that a blended rate of retail and industrial/office/institutional could be applied.

In these instances, the retail rate shall be applied to two times the difference between the gross floor area of the entire retail vehicle establishment and the gross floor area of the vehicle storage area. The gross floor area above and beyond that may be levied the industrial/office/institutional rate.

6.3.3 Structured parking accessory to shopping malls and hotels

Although in practice this has never happened, the Region's 2017 Development Charge Bylaw could be interpreted such that the retail rate could be levied on structured parking accessory to retail establishments, such as shopping malls, and hotels.

The rationale for clearly exempting this type of structured parking in the Region's bylaw includes:

- Brings treatment of shopping mall accessory parking in line with all other accessory use parking structures
- Development charges are levied on the primary structure

Staff are proposing the development charge bylaw be amended such that structured parking that is accessory to shopping malls or hotels be exempt from development charges.

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7.0 Asset Management Plan

7.1 Background

Under the Province of Ontario's Development Charges Act, municipalities proposing to enact a Development Charges Bylaw are required to submit an Asset Management Plan (AMP) as part of the Development Charges Background Study. A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charge bylaw are financially sustainable over their full lifecycle. This document has been prepared based on the *Development Charges Act, 1997* and *Ontario Regulation 82/98* and includes the analysis pertaining to assets that are proposed to be funded, in whole or in part, by Development Charges (DC).

The proposed draft 2018 Development Charge Bylaw amendment adheres to the Regional Council direction to add the 56 projects from "Part B" of Contingency Schedule G to the Bylaw. The Region will continue to collect development charges for services other than roads under the 2017 Development Charge Bylaw.

While the 2018 Development Charge Bylaw Amendment does not make any changes to services other than roads, to provide a full view of the asset management needs of all assets funded by the Regional development charges (under Development Charge Bylaw 2017-35 and the proposed amending bylaw), the full range of services are included in this analysis (Section 7.3.2 – Table 7.11):

- Wastewater
- Water
- Roads
- Transit
- Toronto York Spadina Extension
- Police
- Waste diversion
- Public works
- Paramedic services
- Public health
- Social housing
- Court services

The impact of including Contingent List B Projects is disclosed in Section 7.5.4.

7.1.1 Growth to 2031

In 2014 York Region initiated the Municipal Comprehensive Review (MCR) process to update the Region's Official Plan, and address growth to 2041. In conjunction with the MCR, the Region has completed an update of the Transportation and Water & Wastewater Master Plans in 2016. Through these Master Plans, infrastructure required

to meet growth demands were identified.

This background study uses a population and employment forecast to 2031 and infrastructure master plans as the basis for determining growth related infrastructure needs. The 2031 mid-year population forecast of 1,545,700 (excluding institutional population) is based on anticipated levels of housing growth in York Region, taking into consideration demographic trends, the timing of servicing infrastructure, market demand and provincial intensification policy target. The employment forecast for mid-2031 is 780,000. Both the population and employment forecast is on the trajectory to meeting the provincially mandated growth target for 2041, as envisaged by the Growth Plan Amendment II.

7.1.2 Development Charges Act Requirements

The *Development Charges Act* requires an analysis be prepared, as shown in Figure 7.1, to support the proposed infrastructure in a development charge bylaw. Additionally, a summary of current state of infrastructure, planned level of service and potential asset management strategies must be prepared for proposed development charge funded transit infrastructure.

Figure 7.1: Asset Management Plan Requirements



7.2 Transit Infrastructure

7.2.1 Requirements under the Development Charges Act and Regulation

Section 8(3) of Ontario Regulation 82/98 under the *Development Charges Act*, 1997 identifies what must be included in an asset management plan for transit services. Specifically the plan must include:

- A section setting out the state of local infrastructure
- A section that sets out the proposed level of service
- An asset management strategy, including considerations for life cycle costs
- A financial strategy

This section of the asset management plan addresses the first three requirements. The financial strategy will be set out in Section 7.5.3 of this document.

7.2.2 State of Infrastructure

7.2.2.1 Asset Type and Historical Cost

York Region currently owns approximately \$796 million dollars' worth of transit infrastructure, including bus fleet, loops and terminals, transit stops, technology and equipment.

Asset Type	2015 Inventory	2015 Historical Cost (\$M)	
Bus Fleet	528	285	
Building loops and terminals	36	276	
Transit stops	5,078	376	
Technology (IT)	Various	56	
Equipment	Various	79	
τοτμ	\L	796	

Table 7.1: Transit Asset Type and Historical Cost

(Source: 2015 State of Infrastructure Report Card)

Note: Only Transit Fleet (Conventional, BRT (Viva), and Mobility Plus) and Facilities (Garages, Terminals, Transit loops, and Transit Stops) have been included in the current Transit Asset Management Plan.

7.2.3 Growth Planning Level of Service

The Development Charges Act requires that planned level of service be defined if development charges are levied for Transit infrastructure. For the purpose of the development charge background study, the planned level of transit is defined as the Region's 10-year capital plan. Through its approval of the program, Council has indicated that it intends to ensure that the increase in need for transit service will meet the transit network defined in the 2016 Transportation Master Plan and YRT/Viva's service guidelines within the YRT/Viva 2016-2020 Strategic Plan as adopted by Regional Council. Service guidelines define how new services are designed, and how existing transit routes are evaluated for service adjustments. They are applied in tandem with route performance measures.

The development of levels of service starts with mapping York Region's strategic objectives and the Transportation Services vision and mission. Based on these directions focusing on safety, reliability and efficiency, a mapping of levels of service at the customer, technical and operational levels were developed. Tables 7.2 and 7.3 provide the levels of service as indicated in Transit AMP.

	Performance			Grade		
Service	Metric	1 (Lowest)	2	3	4	5 (Highest)
Fleet Reliability	Distance between failures (km)	<10,000	10,000- 12,000	>12,000- 14,000	>14,000- 16,000	>16,000
Capacity	Demand to capacity ratio by route	<50%	50-59%	60-69%	70-90%	>90%
Operating Efficiencies (Net Cost per Passenger)	Vehicle and overhead cost per passenger (as multiples of the average fare)	>5x	>4x – less and equal 5x	>3x – less and equal 4x	>2x – less and equal 3x	<=2x
Operating Reliabilities (On-time Performance)	Early/late trip starts	<91%	91-<92%	92-<93%	93-<94%	>=94%
Fleet Cleanliness	Cleanliness score based on sample inspected	<93%	93- <95%	95- <97%	97 - <99%	>=99%

Table 7.2: Fleet Levels of Service Categories

York Region's strategy evaluates asset performance by looking beyond the physical infrastructure condition and incorporating other factors impacting service quality and satisfaction. These levels of service are defined by current and future Regional needs, and can be defined at three levels: corporate, customer, and technical and operational. Indicators have been established to support assessment and reporting. These levels of service have been measured at the technical and operational level and linked to the Region's strategic objectives and the Transportation Services mission.

Convice	Performance			Grade		
Service	Metric	1 (Lowest)	2	3	4	5 (Highest)
Condition	Assessment results for Garages	Architectural components are well maintained/ functional and all other components are either Poor or higher	Architectural components are well maintained/ functional and all other components are either Fair or higher except one component in Poor condition	Architectural components are well maintained/ functional and all other components are either Fair or higher	Architectural components are well maintained/ functional and all other components are either Good or Very Good except one component in Fair condition	Architectural components are well maintained/ functional and all other components are either Good or Very Good
Capacity	Capacity as a percentage of fleet size ratio for each garage	>85%	70% - 85%	60% - <70%	50% - <60%	<50%
Service Coverage	Location	<50%	50-69%	70-84%	85-89%	>=90%

Table 7.3: Facilities Levels of Service Categories

Note that the level of service in this asset management plan refers to the metric that is used to identify infrastructure needs due to growth. This metric also underpins the Region's growth-related capital program, which is designed to meet these targets. This metric is not the same as metrics used to determine long-term lifecycle needs.

Growth planning level of service for transit infrastructure is planned based on the average annual increase in ridership based on projections from the Regional Transportation Demand Forecasting Mode (EMME) and the network of transportation improvements identified in Transportation Master Plan Updates in terms of modal splits and forecast trips in the peak hour and peak direction. Improvements as identified in the 2016 Transportation Master Plan Update have been used in this AMP.

7.2.3.1 Current Level of Performance Relative to the Targets

The current Transit asset management plan focuses on the following levels of service categories (Table 7.4 and Table 7.5) that are linked to York Region's strategic objectives and the Department's mission.

Service Category	Performance Metric	Level of Service Summary (Grade 5 = Highest)
Fleet Reliability	Distance between failures	Grade 5 - Average for conventional and Viva bus routes was greater than 16,000 km
Capacity	Demand to capacity ratio	Number of Routes by Grade: Grade 5 – 24 routes Grade 4 – 16 routes Grade 3 – 9 routes Grade 2 – 11 routes Grade 1 – 14 routes Values based on 2015
Operating Efficiencies (Net Cost per Passenger)	Vehicle and overhead cost per passenger	Number of Routes by Grade: Grade 5 – 37 routes Grade 4 – 16 routes Grade 3 – 7 routes Grade 2 – 12 routes Grade 1 – 27 routes
Operating Reliabilities (On- time Performance)	Early/late trip start time	Grade 5 – The percentage of on-time trip starts for conventional and Viva bus routes was greater than 94%
Cleanliness	Vehicle condition (vandalism/ paint)	 Grade 5 – Viva and Mobility Plus buses achieved a cleanliness score above 99% Grade 4 – Conventional buses achieved a 97% score

Table 7.4: Fleet Levels of Service Categories (Based on 2015 Data)

Service Category	Performance Metric	Level of Service Summary (Grade 5 = Best)
Facility Condition	Condition inspection for garages	 Grade 5 and 4 – The majority of inspected garages had all or most components in Good condition Grade 3 – One inspected garage had more than one component in Fair condition
Garage Capacity	Fleet size as a percentage of garage capacity	Grade 1, 2, and 3 – In 2015, two of the transit garages had a capacity to fleet ratio of 85% or higher, while one garage was at 70% and another at 62% capacity
Service Coverage	Location of transit stops relative to population	Grade 5 – 90.4% of urban residents are within 500m of a transit stop

7.2.4 Transit Asset Management Strategy

7.2.4.1 Estimated Useful Life

Table 7.6 shows the average useful life for Transit assets. Mobility Plus vehicles vary by type with Eldorado vehicles having a useful life of 12 years and other vehicles estimated to have a useful life of only seven years.

Table 7.6: Useful Life Estimates (source: 2015 State of Infrastructure Report Card)

Asset Type	Useful Life (years)
Bus fleet (60' and 30')	12
Bus fleet (40')	18
Garages, terminals, and transit loops	50
Transit stops (shelters and platforms)	15

7.2.4.2 Fleet Age

The following figure provides the age profile for the YRT/Viva conventional fleet. York Region own and operates conventional buses, Viva buses and the mobility plus program. Table 7.7 shows the replacement cost profile by age of asset and type of fleet.



Figure 7.2: Age Profile for All Transit Buses by Replacement Cost (2015 Data)



 Table 7.7: Replacement cost profile by type of fleet



7.2.4.3 Fleet remedial schedule and costs

Table 7.8 provides the planned fleet remedial schedule.

Table 7.8: Fleet Capital Refresh, Rehabilitation, and Replacement Schedule (Source Transit AMP)

Vehicle Type	30 ft. (years)	40 ft. (years)	60 ft. (years)	Mobility Plus (years)
Total Life	12	18	12	7 - 12
Capital Refresh	None	None	6	None
Mid-Life (Rehabilitation)	None	10	None	None

Table 7.9 shows the estimated cost of remedial activities for Transit fleet.

Table 7.9:	Cost Associated with Remedial Action
	(Source Transit AMP)

Action Type		Cost	
Capital Refresh		\$70k	
Midlife Rehabilitation		\$210k	
	Conventional	\$600k	
Replacement/ Growth	Viva	\$700k to \$1,200k	
	Mobility Plus	\$260k	
Note: Facilities costs are calculated using the inspection report performed by third part engineers and based on replacement cost of separate components within the building.			

7.2.4.4 Average Sustainment Requirements

Figures 7.3 and 7.4 provide the estimated Transit average sustainment needs (excluding maintenance) for fleet and facilities for 2016 to 2031 is (\$30.2M + \$4.1M) = \$34.3M



Figure 7.3: Anticipated Fleet Sustainment Needs



Figure 7.4: Anticipated Facilities Sustainment Needs

Based on Transit AMP, the average annual growth needs for fleet and facilities for 2016 to 2031 is (\$12 + \$19.5) = \$31.5M as indicated in Figures 7.5 and 7.6 below.

Figure 7.5: Anticipated Fleet Growth Needs





Figure 7.6: Anticipated Facilities Growth Needs

Based on Transit AMP, the average sustainment and growth needs for fleet and facilities for 2016 to 2031 is \$65.9M as indicated in Figure 7.7 below.

Figure 7.7: Integrated Needs for Fleet and Facilities



7.2.4.5 Transit Asset Management Strategy

For transit vehicles, maintenance is managed through third party maintenance contracts. These performance-based contracts help incentivize the contractors to maintain appropriate levels of service. The service contract defines the criteria the third party has to follow which outline preventative maintenance, routine maintenance, and proactive maintenance requirements. These allow the Region to better benchmark and evaluate its current state.

Rehabilitation, defined as remedial actions increasing the life of the asset, is generally considered as capital expenditures. Remedial actions can increase the asset life by increasing its useful life as a whole or by installing new components to stretch out the useful life of the asset.

The purpose of replacement is to acquire an asset to substitute a current asset because the asset is at its end of life. This may slightly increase capacity and condition because of technological reasons. However the main purpose is to replace the asset due to age.

For transit fleet, the capital budget also includes capital refresh as part of sustainment in addition to rehabilitation and replacement. Although capital refresh may not extend the life of the asset beyond its design life it is part of capital expenses.

For transit fleet, York Region proactively performs midlife overhauls. Buses purchased by York Region Transit (YRT / Viva) have a design life of 12 years as specified by the original equipment manufacturer. The midlife overhaul extends the life of a normal vehicle of 12 years to 18 years as required by Regional Council. Additionally, a major overhaul of the mechanical systems is conducted, including engine, transmission, radiator, charge air cooler and drive axle assessment, brake relining, suspension replacement, and auxiliary heater and air conditioning refresh.

7.3 Estimated Lifecycle Costs

7.3.1 Lifecycle Cost Projection Methodology

Asset lifecycles have been projected based on two methods depending on whether sufficient condition information is available. Typically, meaningful condition assessment information is not available until determinate signs of deterioration are observable. The two methods are summarized below in Table 7.10.

Assets	Projection Method	
Newly constructed assets and assets planned but not yet designed or constructed	Method A Expected Service Life for Asset-Type Estimated Replacement Cost	
Existing assets with condition assessment information	Method B Detailed Condition Assessment and Deterioration Projection results	

Table 7.10: Lifecycle Cost Projection Methodology

Lifecycle costs for the majority of assets included in this plan have been projected based on Method A in Table 7.10 which assumes that assets will be replaced at the end of expected service life. Generally, the service life for the asset types included in this plan is presented in Figure 7.8.



Figures 7.8: Expected Service Life

7.3.2 Lifecycle Cost Summary

This section summarizes the long-term investment needs to sustain the DC-funded infrastructure required to enable growth to 2031. Table 7.11 summarizes the total lifecycle costs over a 100-year period. Detailed discussion regarding life cycle costs of transit assets can be found in Section 7.4.4.5 of this asset management plan.

Note that the gross project costs and the 100-year lifecycle needs estimate for the roads service area includes the roads projects that were funded through the 2017 Development Charge Bylaw as well as the 56 "Contingent Schedule B" projects being added to the bylaw through this proposed amendment.

Service Area	Gross Project Costs (Emplacement)	100-Year Lifecycle Needs (Excluding Emplacement)	
Rate-Funded:			
Water*	603	1,207	
Wastewater*	1,793	6,675	
Sub-Total – Rate	2,395	7,883	
Tax Levy-Funded			
Roads*	4,284	7,206	
Transit	382	1,921	
Toronto-York Spadina Extension**	282	-	
Police*	227	1,098	
Waste Diversion	10	56	
Public Works*	152	311	
Paramedic Services	52	123	
Public Health	17	156	
Social Housing	185	294	
Courts	22	40	
Sub-Total: Tax Levy	5,613	11,204	
GRAND TOTAL	8,009	19,087	

Table 7.11: Lifecycle Cost Summary of Growth Related Assets (\$ Millions)

* 2017-2031 planning period for new growth projects. For all other services, a 2017-2026 planning period was used

**Lifecycle costs will be fully funded by the City of Toronto

7.4 Potential Asset Management Strategies

In general, assets included in this plan have yet to undergo environmental assessments and detailed design. This section identifies potential asset management strategies that may apply and will be considered in future lifecycle planning. Transit specific asset management strategies are discussed in Section 7.2.4.5 of this asset management plan.

7.4.1 Asset Condition Monitoring

Increased need for condition monitoring and assessment across all infrastructure assets have been identified in York Region's Corporate State of Infrastructure Report and asset management plans. The most critical infrastructure assets receive the most asset management activity as York Region's relatively young assets continue to age. Continuous improvement in the areas of climate change impacts are ongoing as part of asset management activity.

Condition monitoring and assessments will support the refinement of asset management decision making from methods such as age-based planning to risk/condition/performance-based planning which may allow for the greatest service life to be realized, reducing lifecycle costs.

7.4.2 Asset Lifecycle Rehabilitation & Replacement Analysis

In order to realize designed service lives, asset rehabilitation may be required for some assets. In most cases, lifecycle cost projections have included rehabilitation typical for each asset type, however, as more information is known about an asset, this broad projection can be tailored to consider specific factors affecting each asset for example, changing regulations or construction quality may apply to specific assets differently, impacting the lifecycle cost.

For major assets where rehabilitation or replacement is expected in the next 10 years, detailed condition assessments and monitoring is undertaken to verify asset deterioration and program short-term budget priorities as part of the annual budget process.

7.5 Financial Strategy

A detailed analysis was undertaken to evaluate the financial sustainability of the full life cycle costs of assets that are proposed to be funded under the development charges by-law as per Subsection 10(3) of the *Development Charges Act, 1997* (the Act). Financial sustainability is defined, based on the Region's Fiscal Strategy, as:

- 1. Balancing the current and long-term needs of the Region by:
 - managing the capital plan, which sets priorities among infrastructure projects;
 - reducing reliance on debt; and
 - saving for the future by building up reserves
- 2. Generating stable and adequate financing to maintain Regional infrastructure and operational capacity to provide core services
 - Stable and adequate financing will rely on revenue sources available or confirmed at the time, without relying on additional support from higher levels of government
- 3. Aiming for equitable outcomes by ensuring benefiting users pay for the services they are provided (i.e., growth pays for growth)

In order to fully assess the financial impact of the projects in the Region's proposed 2018 Development Charge Bylaw amendment, it is necessary to consider all of the financial requirements that the Region will likely face in the future.

This analysis incorporates the full operating and capital requirements related to both existing and future assets as well as service areas without capital plans (e.g., Office of the Regional Chair, etc.). Consistent with the Region's Fiscal Strategy, the analysis assumes that capital reserves will be built up adequately to avoid the use of future user rate or tax levy debt for any foreseen asset lifecycle needs, including growth related capital. It also takes intergenerational equity into account by attempting to spread the cost of capital equitably across the tax/user rate base over time.

Asset management and lifecycle assumptions were derived from departmental asset management plans that are currently being developed. These plans will be finalized in 2018 in lock-step with asset management regulations being finalized by the province. To facilitate analysis of assets yet to be emplaced, weighted average useful lives have been used to estimate their lifecycle needs. It is acknowledged that these assets might be further componentized into smaller asset elements as they come on line but since they are similar to assets currently in use, the weighted useful life is deemed to be a reasonable proxy.

Water and wastewater infrastructure lifecycle costs are funded through water and

wastewater rates while all other infrastructure is funded primarily through the tax levy. As such, the Region's analysis looks at services funded through water and wastewater user rates separately from all tax-supported services.

7.5.1 Rate Funded (Water and Wastewater)

In 2015, York Region's Council approved six years of water and wastewater rate increases with the goal of reaching full cost recovery by 2021. Given the capital project plan at the time, the approved rates were thought to be sufficient to ensure that the full cost of water and wastewater services would not need to be subsidized by funds raised through the tax levy.

The approved rate increases also ensure that asset management activities can be afforded when they are required to minimize lifecycle costs and that there will be adequate reserve balances to avoid any future user rate debt. A description of the work that supported Council's 2015 rate approvals can be found in the Water and Wastewater Financial Sustainability Plan (the Plan) on the York Region website.

Tables 7.12 and 7.13 summarize the capital funding and additional (incremental) operating revenues and expenses related to the growth-related infrastructure identified in the 2017 DC Background Study. Operating expenditures include provisions for the emplacement of infrastructure and contributions to the replacement of new and existing assets to reflect their impact on billings.

Table 7.12: Capital Funding Sources for Rate Supported Growth Projects 2017-2031 (Cost of emplacement)

Funding Sources (\$000s)	Total	2017-2021	2022-2026	2027-2031
User Rate Funding (Reserves)	15,455	15,455	-	-
Development Charges	2,304,507	521,012	865,494	918,001
Other Funding	75,262	21,030	18,644	35,588
Total	2,395,224	557,497	884,138	953,589

Operating Impact of Growth (\$000's)	Total	2017-2021	2022-2026	2027-2031
Salaries and Benefits	30,351	9,795	9,107	11,449
Program Specific Expenses	39,803	12,132	15,765	11,907
Financing Costs	197,378	10,177	90,448	96,753
Contribution to Replacement of New Assets	102,575	72,476	10,933	19,166
Other Expenses*	14,064	2,361	5,164	6,538
Gross Expenditures	384,171	106,941	131,418	145,813
User Rates	(181,486)	(98,582)	(39,456)	(43,448)
Fees and Charges	(1,225)	(228)	(437)	(559)
Development Charges	(171,688)	(6,177)	(81,140)	(84,371)
Total Revenue	(354,399)	(104,987)	(121,033)	(128,379)
Potential Billing Revenue Requirements	29,773	1,954	10,385	17,434

Table 7.13: Incremental Growth-Related operating Revenues and Expenses 2017-2031 – Rate Funded

*Other Expenses include General Expenses; Professional Contracted Services; Occupancy & R&M Costs; Minor Capital; and Allocations and Capital Recoveries

Overall, the additional costs for water and wastewater services due to growth are paid for through revenues generated by growth. Over the 15-year period from 2017-2031, it is anticipated that growth will increase expenditures by \$384 million and increase revenue by \$354 million, resulting in a net impact of \$30 million on the existing user base over 15 years. The water and wastewater projects in the DC Background Study are consistent with those identified in the Plan and based on the anticipated revenues generated by the rates approved by Council, are deemed to be financially sustainable.

7.5.2 Tax Levy Funded

A similar methodology to that which was used in the water and wastewater analysis was also applied to services funded by property taxes.

Tables 7.14 and 7.15 summarize the capital funding and additional (incremental) operating revenues and expenses related to growth projects on the main list of the 2017 DC Background Study. Similar to the user rate analysis, the incremental operating requirements calculated here include operating costs resulting from the emplacement of infrastructure and contributions to the replacement of new and existing assets.

Table 7.14: Capital Funding Sources for Tax Levy Supported Growth Projects on the Main List of the 2017 DC Background Study 2017-2031(cost of emplacement)

Funding Sources (\$000s)	Total	2017-2021	2022-2026	2027-2031
Tax Levy Funding (Reserves)	900,912	399,765	257,859	243,288
Development Charges	2,643,653	1,261,830	858,592	523,232
Other Funding	593,938	320,954	173,766	99,218
Total	4,138,503	1,982,548	1,290,217	865,737

As shown in Table 7.15, it is anticipated that growth will increase operating expenditures by \$722 million and increase operating and assessment growth revenue by \$421 million, resulting in a net impact of \$301 million to be recovered from the existing tax base over the 15-year forecast period. This funding requirement is considered to be financially sustainable as it is expected that it can be absorbed by the tax base over the forecast period through tax levy increases.
Table 7.15: Incremental Growth-Rel	lated Operat	ing Revenues	and Exp	enses for
the Main List of the 2017 DC Backg	ground Stud	y 2017-2031 –	Tax Levy	/ Funded

Operating Impact of Growth (\$000s)	Total	2017- 2021	2022- 2026	2027- 2031
Salaries and Benefits	291,925	78,289	94,653	118,983
General Expenses	53,993	14,928	17,331	21,734
Program Specific Expenses	176,077	42,589	59,798	73,690
Financing Costs	(11,337)	(2,821)	(3,310)	(5,206)
Professional Contracted Services	26,374	5,645	9,270	11,459
Occupancy & R&M Costs	55,090	12,379	18,762	23,948
Contributions to Operating Reserves	8,754	(4,134)	5,694	7,194
Contribution to Asset Emplacement	96,834	27,502	33,755	35,577
Contribution to Replacement of New Assets	62,131	17,646	21,658	22,827
Allocations and Capital Recoveries	(37,653)	(12,032)	(11,253)	(14,367)
Other Expenses*	3	(328)	149	183
Gross Expenditures	722,190	179,663	246,507	296,020
Grant Subsidies	(117,803)	(27,034)	(40,499)	(50,270)
User Rates	(32,751)	(10,798)	(9,893)	(12,060)
Contribution from Reserves	(3,628)	6,006	(4,276)	(5,358)
Development Charges	8,252	(4,884)	5,270	7,866
Other Revenues**	(30,301)	(5,768)	(10,963)	(13,569)
Total Revenue	(176,231)	(42,478)	(60,362)	(73,391)
Net Budget Before Assessment Growth	545,959	137,185	186,145	222,629
Assessment Growth Revenue	(245,196)	(81,259)	(81,671)	(82,266)
Potential Tax Levy Requirements	300,763	55,926	104,474	140,363

*Other Expenses include Chair & Council Expenses, Minor Capital and Departmental Recoveries **Other Revenues include User Rate Recoveries (Water/Wastewater); Third Party Recoveries; Fees and Charges; and Court Revenues Disbursement

The results of this analysis reflect the best information available at this time and are based on a number of critical assumptions, which carry an inherent degree of

uncertainty. However, detailed analysis will continue through the annual budget process to confirm actual levels of spending, mitigate tax rate impacts and employ other funding mechanisms where possible and subject to the Fiscal Strategy. For example, revising service levels, asset management and/or financing strategies could also contribute to alleviating the funding need.

7.5.3 Transit Services

The preceding analysis includes Transit related growth costs. However, Regulation 82/98 (as amended) of the *Development Charges Act* prescribes specific requirements for Transit services. One of the requirements is a detailed financial strategy that:

- Shows the yearly expenditure forecasts that are proposed to achieve the proposed level of service, categorized by,
 - A. non-infrastructure solutions,
 - B. maintenance activities,
 - C. renewal and rehabilitation activities,
 - D. replacement activities,
 - E. disposal activities, and
 - F. expansion activities,
- Provides actual expenditures in respect of the categories set out above from the previous two years, if available, for comparison purposes,
- Gives a breakdown of yearly revenues by source,
- Discusses key assumptions and alternative scenarios where appropriate, and
- Identifies any funding shortfall relative to financial requirements that cannot be eliminated by revising service levels, asset management or financing strategies, and discusses the impact of the shortfall and how the impact will be managed.

Tables 7.16 and 7.17 summarize the capital funding and additional (incremental) operating revenues and expenses specifically related to growth in Transit services.

Table 7.16: Capital Funding Sources for Growth Related Transit Projects 2017-2031 (cost of emplacement)

Funding Sources (\$000s)	Total	2017-2021	2022-2026	2027-2031
Tax Levy Funding (Reserves)	64,934	45,027	19,908	-
Development Charges	153,613	110,020	43,593	-
Other Funding	163,420	109,815	53,604	-
Total	381,967	264,862	117,105	-

Table 7.17: Incremental Growth-Related Operating Revenues and Expenses 2017-2031 – Transit Services

Operating Impact of Growth (\$000s)	Total	2017- 2021	2022- 2026	2027- 2031
Maintenance/Non-Infrastructure Solutions				
Salaries and Benefits	14,244	3,989	4,272	5,983
General Expenses	17,397	814	7,380	9,203
Program Specific Expenses	95,375	29,911	29,502	35,963
Financing Costs	2,785	(1,445)	1,741	2,489
Professional Contracted Services	(563)	(563)	0	0
Occupancy & R&M Costs	23,794	4,552	8,649	10,593
Minor Capital	7	7	0	0
Allocations and Capital Recoveries	(365)	44	(169)	(240)
Renewal/Rehabilitation & Replacement/Disposal Activities Contribution to Replacement of New Assets	10,793	7,265	1,570	1,958
Expansion Activities	5 050	0.004	000	4 005
Contribution to Asset Emplacement	5,652	3,804	822	1,025
Gross Expenditures	169,119	48,378	53,767	66,975
User Rates	(32,677)	(10,741)	(9,885)	(12,050)
Third Party Recoveries	(2)	0	(1)	(1)
Contribution from Reserves	(4,198)	(301)	(1,734)	(2,163)
Development Charges	108	19	44	44
Total Revenue	(36,768)	(11,023)	(11,576)	(14,169)

Operating Impact of Growth	Total	2017-	2022-	2027-
(\$000s)		2021	2026	2031
Potential Tax Levy Requirements	132,351	37,355	42,191	52,805

As shown in Table 7.17, growth in Transit services is projected to create an additional \$169 million in expenses for the Region, of which only \$37 million (22%) will be recuperated through new user rates (transit fares) and other funding sources. The remainder will have to be collected through higher property taxes on existing residents. As noted in the aggregate analysis discussed in Section 7.5.2 above, this funding requirement is considered to be financially sustainable as it is expected that it can be absorbed by the tax base over the forecast period through tax levy increases. Alternatively, revising service levels, asset management and/or financing strategies could contribute to alleviating the funding need. These alternatives will be examined in more detail through the annual budget process.

7.5.4 Amendment Schedule ("Part B" of Contingency Schedule G to the 2017 Development Charge Bylaw)

The 2018 DC Bylaw amendment would add the 56 projects from "Part B" of Contingency Schedule G to the 2017 Development Charge Bylaw. The gross capital cost of these projects is \$1.47 billion, with \$1.34 billion to come from Development Charges revenue and the remaining \$137 million to come from the tax levy.

Funding Sources (\$000s)	Main 2017 DC List with Contingency List B Projects*	Main DC List	Variance
Tax Levy Funding (Reserves)	1,037,791	900,912	136,879
Development Charges	3,981,614	2,643,653	1,337,961
Other Funding	593,938	593,938	-
Total	5,613,343	4,138,503	1,474,840

Table 7.18: Comparison of Capital Funding Sources for Tax Levy Supported Growth Projects 2017-2031(cost of emplacement)

*Only includes those assets for which the Region is currently responsible

In the absence of additional revenue, these projects would increase the tax levy requirements over the 2017-2031 period by approximately \$65 million compared to the projects in the main list in the 2017 DC Background Study to fund the capital and operating costs related to these projects. Table 7.19 below compares the incremental growth-related costs of the DC project list with and without the projects in Contingency List B. (This analysis only includes those assets for which the Region is currently responsible).

The tax levy requirements summarized in Table 7.18 above and Table 7.19 below are considered financially sustainable because they can be absorbed by the tax base over the forecast period through tax levy increases. Including non-growth tax levy requirements, the tax levy increase related to the main project list is estimated to be in the range of 3.5 to 4.0 per cent per year. Adding the projects from Contingency List B would increase this estimate by approximately 30 basis points, to a range of 3.8 per cent to 4.3 per cent per year.

However, in the current term, it has been Council's objective to keep annual tax levy increases at 3 per cent or less. Although additional analysis through the annual budget process will aim to mitigate the tax rate impacts noted above, current estimates suggest that meeting Council's tax levy target while undertaking all of the projects included in the 2017 Development Charge Bylaw, as amended by the proposed draft 2018 Bylaw, will require additional revenues above and beyond what can be generated through a three per cent annual tax levy increase. A total of approximately \$110 million per year in additional revenue would be required. This additional revenue need is approximately \$30 million higher than the additional revenue needed to fund the projects included in the 2017 Development Charge Bylaw.

These estimates have a degree of uncertainty as they are based on a number of critical assumptions about future service levels, cost pressures, and length of time to build reserves to fund future asset management requirements. They are based on the best information available at this time and will continue to be reviewed and analyzed through the annual budget process.

Operating Impact of Growth (\$000s)	Main 2017 DC List with Contingency List B Projects*	2017 Main DC List	Variance	
Salaries and Benefits	307,187	291,925	15,262	
General Expenses	58,236	53,993	4,243	
Program Specific Expenses	176,078	176,077	1	
Financing Costs	(11,329)	(11,337)	8	
Professional Contracted Services	26,416	26,374	42	
Occupancy & R&M Costs	55,516	55,090	426	
Contributions to Operating Reserves	8,369	8,754	(385)	
Contribution to Asset Emplacement	124,067	96,834	27,233	
Contribution to Replacement of New Assets	85,856	62,131	23,725	

Table 7.19: Comparison of Incremental Growth-related Operating Revenues and Expenses 2017-2031 – Tax Levy Funded

Operating Impact of Growth (\$000s)	Main 2017 DC List with Contingency List B Projects*	2017 Main DC List	Variance
Allocations and Capital Recoveries	(43,596)	(37,653)	(5,943)
Other Expenses**	5	3	2
Gross Expenditures	786,805	722,190	64,615
Grant Subsidies	(117,803)	(117,803)	-
User Rates	(32,751)	(32,751)	-
Contribution from Reserves	(3,628)	(3,628)	-
Development Charges	8,252	8,252	-
Other Revenues***	(30,301)	(30,301)	-
Total Revenue	(176,231)	(176,231)	-
Net Budget Before Assessment Growth	610,574	545,959	64,615
Assessment Growth Revenue	(245,196)	(245,196)	-
Potential Tax Levy Requirements	365,378	300,763	64,615

*Only includes those assets for which the Region is currently responsible **Other Expenses include Chair & Council Expenses, Minor Capital and Departmental Recoveries ***Other Revenues include User Rate Recoveries (Water/Wastewater); Third Party Recoveries; Fees and Charges; and Court Revenues Disbursement

7.6 Conclusion

York Region has undertaken asset management planning analysis to ensure that assets required to enable growth to 2031 are financially sustainable.

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Appendix A

Interjurisdictional Scan of Development Charges

This Appendix is split into two parts:

This first part provides an interjurisdictional scan of development charge rates in neighboring municipalities (as of January 24th, 2018). It compares, across municipalities:

- Residential development charge rates (single family detached, large apartments and small apartments)
- Non-residential development charge rates (retail, office and industrial)

York Region rates are as proposed under the 2018 Development Charge Bylaw amendment.

Figure A.1 provides a comparison of total development charge rates for all Greater Toronto Area municipalities per single detached dwelling as of January 24th, 2018.

Figure A.2 provides a comparison of total development charge rates for all Greater Toronto Area municipalities per large apartments as of January 24th, 2018.

Figure A.3 provides a comparison of total development charge rates for all Greater Toronto Area municipalities per small apartments as of January 24th, 2018.

Figure A.4 provides a comparison of total development charge rates for all Greater Toronto Area municipalities per square foot for retail developments as of January 24th, 2018.

Figure A.5 provides a comparison of total development charge rates for all Greater Toronto Area municipalities per square foot for industrial developments as of January 24th, 2018.

Figure A.6 provides a comparison of total development charge rates for all Greater Toronto Area municipalities per square foot for office developments as of January 24th, 2018.

This second part provides an interjurisdictional scan of development charge rates in Barrie and Simcoe County (as of January 24th, 2018). It compares, across municipalities:

Residential development charge rates (single family detached, large apartments and small apartments)

Non-residential development charge rates (retail, office and industrial)

York Region rates are as proposed under the 2018 Development Charge Bylaw Amendment.

Figure A.7 provides a comparison of total development charge rates for Barrie and all Simcoe County municipalities per single detached dwelling as of January 24th, 2018.

Figure A.8 provides a comparison of total development charge rates for Barrie and all Simcoe County municipalities per large apartments as of January 24th, 2018.

Figure A.9 provides a comparison of total development charge rates for Barrie and all Simcoe County per small apartments as of January 24th, 2018.

Figure A.10 provides a comparison of total development charge rates for Barrie and all Simcoe County municipalities per square foot for retail developments as of January 24th, 2018.

Figure A.11 provides a comparison of total development charge rates for Barrie and all Simcoe County per square foot for industrial developments as of January 24th, 2018.

Figure A.12 provides a comparison of total development charge rates for Barrie and all Simcoe County municipalities per square foot for office developments as of January 24th, 2018.



Per Single Detached Dwelling For Greater Toronto Area Municipalities with Proposed York Region **Residential Development Charges**



Source: Hemson Consulting based on municipal data *Area-specific development charges may apply Note: All Rates as of Jan 24, 2018

Upper Tier Lower Tier Education

Brock

88

Figure A.2

Per Large Apartment For Greater Toronto Area Municipalities with Proposed York Region Rates **Residential Development Charges**





Source: Hemson Consulting based on municipal data *Area-specific development charges may apply Note: All Rates as of Jan 24, 2018

Upper Tier Lower Tier Education

Figure A.3

Per Small Apartment For Greater Toronto Area Municipalities with Proposed York Region Rates **Residential Development Charges**





Per Gross Floor Area of Retail Floor Area For Greater Toronto Area Municipalities with Proposed York **Non-Residential Development Charges**





Note: All Rates as of Jan 24, 2018

Figure A.5

Per Gross Floor Area of Industrial Floor Area for Greater Toronto Area Municipalities with Proposed **Non-Residential Development Charges**





Lower Tier

*Area-specific development charges may apply Note: All Rates as of Jan 24, 2018



Per Gross Floor Area of Office Floor Area for Greater Toronto Area Municipalities with Proposed York **Non-Residential Development Charges**



93

Source: Hemson Consulting based on municipal data *Area-specific development charges may apply Note: All Rates as of Jan 24, 2018

Upper Tier Lower Tier Education





\$ per unit



* Area-specific development charges may apply Note: All Rates as of Jan 24, 2018





Figure A.9

Proposed York Region Rates Versus Simcoe County and Barrie **Residential Development Charges Per Small Apartment**

875'77\$

\$74'872

\$ per unit \$50,000



* Area-specific development charges may apply Note: All Rates as of Jan 24, 2018















\$ per square foot

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Appendix B 2018 Development Charge Bylaw Report(s) and Council

Direction

The Regional Municipality of York

Committee of the Whole Finance and Administration February 8, 2018

Report of the Commissioner of Finance

Draft 2018 Development Charge Background Study and Proposed Draft Bylaw Amendment

1. Recommendations

It is recommended that:

- 1. Council receive the draft 2018 Development Charge Background Study and proposed draft bylaw amendment (the "Bylaw") (Attachment 1).
- 2. Council endorse the proposed changes and clarifications to the treatment of structured parking and car dealerships as contained in this report, the 2018 Development Charge Background Study and proposed draft bylaw amendment (Attachment 1).
- 3. Council delegate to:
 - a. the Commissioner of Finance the authority to schedule and give notice for the public meeting required by the *Development Charges Act, 1997* (the "Act") to be held on March 22, 2018 and any subsequent public meetings, and
 - b. the Committee of the Whole the authority to hold the March 22, 2018 public meeting.
- 4. The draft Bylaw be brought forward for consideration for approval by Regional Council at its May 17, 2018 meeting.
- 5. The Regional Clerk circulate this report to the local municipalities and to the Building Industry and Land Development Association York Chapter (BILD).

2. Purpose

This report supports the tabling of the Regional Municipality of York's proposed 2018 Development Charge Background Study and amending Bylaw. It also highlights changes to the current development charge rates and bylaw, including the treatment of structured parking.

3. Background

Council directed staff to bring back a potential amendment adding "Part B" road projects to the development charge bylaw

When Council approved the 2017 Development Charge Bylaw on May 25, 2017, it also directed staff to bring back an amendment by March 31, 2018 that would add all of the roads projects in "Part B" of Contingency Schedule G of the 2017 Development Charge Bylaw into the rate calculation.

A contingency schedule is a list of proposed capital projects, with associated development charge rate increases, that would become part of the bylaw, should certain conditions be met (trigger event). The projects on "Part B" of Contingency Schedule G were subject to five financial triggers being met:

- 1. The province extend the power to raise revenues from new sources to the Region
- 2. Council approve the implementation of those new revenue sources
- 3. Council approve the specific project(s) as part of its 10-year capital plan
- 4. Council approve the allocation of new revenue sources to the project(s)
- 5. No additional debt would be required as a result of funding the project(s)

The 56 projects on "Part B" of Contingency Schedule G were identified as part of the 2016 Transportation Master Plan. Their inclusion was based on consultations with local municipalities and the Region's roads prioritization model. The five-part precondition to trigger the associated rate increases was chosen to ensure that the Region would be able to fund the additional projects in a fiscally prudent way.

The treatment of structured parking will also be affected by the proposed bylaw amendment

As part of the consultation process for the 2017 Development Charge Bylaw, some stakeholders expressed concern with respect to the treatment of structured parking. Staff have reviewed the treatment of all structured parking and are proposing some changes as part of this amendment. The scope of the review included:

- Accessory-use structured parking, including those servicing malls, hotels, and offices
- Structured parking used by car dealerships (stand-alone, below-grade or above-grade)

The 2018 Development Charge Bylaw and Background Study will be made available on February 15, 2018

To amend a development charge bylaw, a new background study must be prepared which underpins the rates in the amending bylaw. The *Act* requires that this background study be made available to the public for a minimum of 60 days prior to the passing of the bylaw, and at least two weeks prior to a statutorily required public meeting. Both the draft amending bylaw and the background study will be available on the Region's website on February 15, 2018.

A public meeting to receive feedback on the proposed Bylaw amendment is anticipated to precede the meeting of the Committee of the Whole on March 22, 2018. Feedback from the public meeting will be considered as part of the final 2018 Bylaw amendment that will be brought to Council for consideration on May 17, 2018, with a coming-into-force date of July 1, 2018. The coming-into-force date was chosen to coincide with the annual indexing of rates. Table 1 describes the statutory requirements, Council engagements, and the applicable dates.

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Key Dates in Regional Bylaw Amendment Process					
Deliverable	Date	Time elapsed			
2018 Background Study and draft Bylaw amendment publicly released with a report (includes recommendation authorizing public notice)	February 15, 2018	7 days			
Notice of public meeting published in all Metroland newspapers	February 22, 2018] 28 01			
Public meeting immediately prior to Committee of the Whole Week 2	March 22, 2018	days days*			
2018 Development Charge Bylaw amendment report to Committee of the Whole Week 2	May 10, 2018	56 days			
2018 Development Charge Bylaw amendment to Council for anticipated approval	May 17, 2018	JJ			
2018 Development Charge Bylaw amendment and rates come into effect	July 1, 2018				

*Note: The *Development Charges Act, 1997* requires that a background study be available to the public at least 60 days prior to passing the Bylaw.

Stakeholders were consulted during the development of this background study

Beginning in December 2017, staff consulted representatives from local municipalities and the Building Industry and Land Development Association – York Chapter (BILD). Staff met with representatives from the local municipalities on two occasions and the BILD working group on two occasions. Topics discussed include:

- Scope of the amendment
- Preliminary impact on rates
- Treatment of structured parking in the amended bylaw

The requirement under the *Act* to consider area-specific rates has already been met

Under section 10 of the *Act*, municipalities are required to consider area-specific development charges in their background study. As part of the 2017

Development Charge Background Study and Bylaw staff considered the potential for implementing area-specific charges. It was determined that the Region should continue with its existing practice of region-wide rates for the 2017 Bylaw (with the exception of wastewater rates for the Village of Nobleton). Chief among the considerations was the fact that the changes to the Growth Plan could affect the spatial distribution of the growth forecast, which is an essential input in determining the benefiting population and employment growth that is needed when creating an area-specific development charge. These growth forecasts will be developed through the Municipal Comprehensive Review process currently underway.

It was determined through consultation with Legal Services and Hemson Consulting Ltd. (the consultants retained by the Region to advise on development charge matters) that the consideration of area-specific charges as identified in the 2017 Development Charge Background Study, including the analysis and rationale, remains applicable to the 2018 Development Charge Background Study.

4. Analysis and Implications

A development charge bylaw must balance competing requirements

Any development charge bylaw has to balance the competing challenges and requirements of the Growth Plan and the *Act* (Figure 1).



Figure 1 Balancing competing requirements

A substantial investment in new infrastructure will be required in order to achieve the growth target mandated by the provincial Growth Plan. Development charges are a tool to recover the cost of growth-related infrastructure. However, development charges do not cover the full cost of growth, as the *Act* limits and delays cost recovery through statutory deductions (i.e., benefit to existing deductions, ten per cent statutory deductions, post-period benefit deductions), exemptions and ineligible services. Also, changes to the *Act* in 2015 added a requirement for municipalities to demonstrate that all infrastructure assets funded under a development charge bylaw are financially sustainable.

The 2017 Development Charge Bylaw balanced these requirements while ensuring sufficient roads infrastructure would be in place to achieve growth to 2031. The 2018 Bylaw amendment builds on the roads infrastructure program.

Ultimately, development charges cannot generate sufficient revenue to fund the needed growth-related infrastructure in the Region. Therefore, new revenue sources are required to meet growth objectives in a financially sustainable way.

The proposed draft 2018 Bylaw amendment will not affect the development charge rates for other services

The proposed draft 2018 Development Charge Bylaw amendment adheres to the Council direction to add the 56 roads projects from "Part B" of Contingency Schedule G to the 2017 Bylaw. The change to the development charge rates as a result of the proposed amendment only pertains to the 56 roads projects being

added¹. The Region will continue to collect development charges for all other services based on what was included in the 2017 Development Charge Bylaw.

In addition, other key assumptions and inputs will remain the same as they were in the 2017 Development Charge Background Study. These include:

- Residential and non-residential growth forecasts, including the forecast horizon (2017 to 2031)
- Development charge calculation methodologies
- Debt and reserve balances

Any change made to the 2017 Development Charge Bylaw through an amendment could be subject to appeal. By limiting the scope of the proposed 2018 Bylaw amendment, the basis of potential appeals will be narrowed.

The 2018 Bylaw amendment includes an additional \$1.49 billion of gross project costs for roads growth infrastructure

Compared to the 2017 Background Study main project list, including Contingency List B will add \$1.49 billion in gross project costs and \$1.35 billion in development-charge-eligible costs to the rate calculation (Table 2). The difference will be a future tax levy pressure.

Table 2 Summary of Project Costs					
Gross Project Costs	ts 2017 Development 2018 E Charge Background Background Study Study (\$ Millions) (\$ Millions) (\$				
Roads Services	2,798.7	4,284.2	1,485.5		
Roads Development Charge Eligible Costs (2017-2031)	1,947.5	3,295.0	1,347.6		

*Note: Numbers shown here are 2017 costs and may not sum due to rounding

¹ Note: In addition the rates also reflect a technical adjustment to project 233 in the 2017 Development Charge Background Study. The adjustment is discussed on page 8 of this report.

While the cost of the additional roads projects was presented as part of the 2017 Background Study, a few technical adjustments are now being proposed.

First, the cost for the Transportation Demand Management Project (project number 233 in the 2017 Background Study) was incorrectly calculated and presented. The correct gross cost estimate should have been \$34.3 million, \$10.7 million higher than the amount included in the 2017 Background Study.

Second, 16 projects in "Part B" of Contingency Schedule G included environment assessment costs that had already been accounted for as part of the Roads Main Project List. These costs (\$13.5 million in gross project costs) have now been excluded from the rate calculation.

Overall, adding the 56 projects to the rate calculation will result in a residential development charge rate for a single family dwelling before indexing of \$57,525, representing a \$9,195 (19 per cent) increase above the current rates.

Table 3 shows a breakdown of these changes to the development charge rate for a single family dwelling before indexing.

industration of changes to Single Failing Dweiling Rate				
Change	Gross Cost Increase (Decrease)	Impact on Rate		
	(\$ Millions)	(\$)		
Addition of 56 roads projects to the Bylaw	1,488.3	9,209		
Adjustment to the environmental assessment costs for 16 projects added	(13.5)	(83)		
Adjustment to the Transportation Demand Management Project	10.7	69		
Total	1485.5	9,195		

Table 3Illustration of Changes to Single Family Dwelling Rate

*Note: Numbers may not sum due to rounding

The rate changes subject to this amendment will include an inflationary factor of 2.4 per cent to adjust the costs from 2017 to 2018 dollars. The inflationary factor is based on the annual average of the Statistics Canada's Quarterly Construction Price Index for the past ten years. This is the same factor used for all other services currently in the 2017 Development Charge Background Study.

An amended asset management plan has been prepared in accordance with the *Act*

The *Act* requires municipalities to prepare an asset management plan as part of their Background Study that will demonstrate that all assets funded by the bylaw are financially sustainable over their lifecycle. The asset management plan can be found in Chapter 7 of the draft 2018 Development Charge Background Study (*Attachment 1*).

Asset management is an integrated, lifecycle approach that brings together physical and financial aspects of existing and planned infrastructure systems. The goal is to minimize costs over time while providing the desired level of service with an appropriate level of risk.

An asset management plan covering the main project list was included in the 2017 Development Charge Background Study. It accounted for the full operating and capital requirements related to both existing and future assets, enabling an estimate of the impact of growth on both user rates and the tax levy.

The 56 road projects to be added to the rate calculation create additional lifecycle needs and tax levy impact

The proposed draft 2018 Development Charge Bylaw Amendment is scoped to amend the roads program. However, in order to have a full understanding of the asset management needs of all assets funded by Regional development charges, the full range of services are discussed in Chapter 7 of the attached draft background study (*Attachment 1*).

Table 4 summarizes the total 100-year period lifecycle costs of the assets funded through the 2017 Bylaw as amended by the draft 2018 bylaw.

Table 4 Summary of Growth Projects and Lifecycle Needs						
\$ Millions	Main Pro	ject List	Continger	ncy List B	Total ¹	
Service Area	Gross Project Cost	100-Year Lifecycle Needs	Gross Project Cost	100-Year Lifecycle Needs	100-Year Lifecycle Needs	
Rate-Funded:						
Water ²	603	1,207	-	-	1,207	
Wastewater ²	1,793	6,675	-	-	6,675	
Sub-Total –Rate	2,395	7,883	-	-	7,883	
Tax Levy-Funded						
Roads ²	2,810	4,755	1,474	2,450	7,206	
Transit	382	1,921	-	-	1,921	
Toronto-York Spadina Extension ³	282	-	-	-	-	
Police ²	227	1,098	-	-	1,098	
Waste Diversion	10	56	-	-	56	
Public Works ²	152	311	-	-	311	
Paramedic Services	52	123	-	-	123	
Public Health	17	156	-	-	156	
Social Housing	185	294	-	-	294	
Courts	22	40	-	-	40	
Sub-Total –Tax Levy	4,139	8,754	-	2,450	11,204	
Grand Total	6,534	16,637	1,474	2,450	19,087	

1. Totals may not add due to rounding

2. 2017-2031 planning period for new growth projects. For all other services, a 2017-2026 planning period was used

3. Lifecycle costs will be fully funded by the City of Toronto

Table 5 summarizes the user rate impact of water and wastewater growth projects. Table 5 is unchanged from the 2017 Development Charge Background Study.

Table 5 Summary of Rate Supported Growth Projects (2017-2031)							
Description (\$ Millions)	Total	2017-2021	2022-2026	2027-2031			
Gross Project Costs	2,395	557	884	954			
User Rate Funding (Reserves)	15	15	0	0			
% of Project cost to be recovered from User Rates	0.7%	2.8%	0.0%	0.0%			
Potential Growth-Related Billing Revenue Requirements	30	2	10	17			

User rate impacts have been fully accounted for through water and wastewater rate increases approved by Council in 2015 and the related projects are deemed to be financially sustainable.

Tables 6 and 7 summarize the operating impacts of tax-levy-related projects included in the 2017 Bylaw, as amended by the draft 2018 Development Charge Bylaw amendment. The analysis differentiates between the projects already captured by the 2017 Development Charge Bylaw and rates, and those that are added as part of this proposed bylaw amendment.

Table 6
Summary of Tax Levy Supported Growth Projects –
Main Project List, 2017 Bylaw (2017-2031)

Description (\$ Millions)	Total	2017-2021	2022-2026	2027-2031			
Gross Project Costs	4,139	1,983	1,290	866			
Tax Levy Funding (Reserves)	901	400	258	243			
% of Project cost to be recovered from Tax Levy	21.8%	20.2%	20.0%	28.1%			
Potential Growth-Related Tax Levy Requirements	301	56	104	140			
Contingency Schedule G, "Part B" Projects, 2017 Bylaw (2017-2031)							
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Description (\$ Millions)	Total	2017-2021	2022-2026	2027-2031			
Gross Project Costs	1,475	34	668	773			
Tax Levy Funding (Reserves)	137	13	106	18			
% of Project cost to be recovered from Tax Levy	9.3%	38.4%	15.9%	2.3%			
Potential Growth-Related Tax Levy Requirements	65	12	23	30			

Summary of Tax Levy Supported Growth Projects –
Contingency Schedule G, "Part B" Projects, 2017 Bylaw (2017-2031

Table 7

The tax levy requirements summarized in Tables 6 and 7 above are considered financially sustainable because they can be absorbed by the tax base over the forecast period through tax levy increases. Including non-growth tax levy requirements, the tax levy increase related to the main project list is estimated to be in the range of 3.5 to 4.0 per cent per year. Adding the projects from Contingency List B would increase this estimate by approximately 30 basis points, to a range of 3.8 per cent to 4.3 per cent per year.

However, in the current term, it has been Council's objective to keep annual tax levy increases at three per cent or less. Although additional analysis through the annual budget process will aim to mitigate the tax rate impacts noted above, current estimates suggest that meeting Council's tax levy target while undertaking all of the projects included in the 2017 Development Charge Bylaw as amended by the proposed draft 2018 Bylaw will require additional revenues above and beyond what can be generated through a three per cent annual tax levy increase. A total of approximately \$110 million per year in additional revenue would be required. This additional revenue need is approximately \$30 million higher than the additional revenue needed to fund the projects included in the 2017 Development Charge Bylaw.

These estimates have a degree of uncertainty as they are based on a number of critical assumptions about future service levels, cost pressures, and length of time to build reserves to fund future asset management requirements. They are based on the best information available at this time and will continue to be reviewed and analyzed through the annual budget process.

Appeals of the 2017 Bylaw and the 2018 amendment may be combined

There were six appeals of the 2017 Development Charge Bylaw. They relate to parking structures, road projects and the treatment of funeral homes on cemetery grounds. The first prehearing of the six appeals is not expected to be held until the middle of March, at the earliest. The timing of the 2018 amendment is such that appellants of the amendment may seek to combine their appeals with any they have filed under the 2017 Bylaw. Staff have begun to engage the appellants to scope their appeals.

If an appeal of the Region's bylaw amendment were successful, resulting in a reduced roads rate, the Region would be required to refund the difference between the development charges paid under the amended bylaw and the rate determined as a result of the appeal.

Proposed Changes to the Treatment of Structured Parking

Surface parking and structured parking are treated differently under the *Development Charges Act*, 1997

The *Development Charges Act, 1997* permits the collection of development charges for structured parking. Section 2(2) of the *Act* lists the types of development for which development charges can be levied.

Structured parking requires a building permit for buildings or structures, issued under the *Building Code Act, 1992;* this is one of the triggers for levying development charges under Section 2(2) of the *Act.*

Surface parking does not trigger any of the events listed under Section 2(2) of the *Act*. Therefore no development charges can be levied.

Structured parking can be categorized into five typologies based on use

Structured parking in the Region primarily exhibits five typologies based on use. Table 8 below summarizes those typologies.

Typology based on use*	Notes
Non-residential	
Accessory-use parking (e.g., for shopping malls, offices, places of worship, hotels, etc.)	For employees, visitors, and patronsAccessible to the general public
Vehicle storage in retail motor vehicle establishments	Not accessible to general public
Vehicle storage in non-retail motor vehicle establishments	Not accessible to general public
Structured parking to generate revenue from short-term rental parking	 Standalone paid parking structure Accessible to the general public for a fee
Residential	
Accessory parking (e.g., condominiums and rental properties)	 Used by residents and not accessible to the general public

Table 8Summary of structured parking typology

*Note: All can be above or below grade, attached to a structure, within a structure or a standalone structure

The Region's 2017 Development Charge Bylaw already exempts most structured parking

Most of structured parking that has been built in the Region has been for an accessory use. The Region does not levy a development charge on this type of structure.

Consistent with its historic approach, the Region's 2017 Development Charge Bylaw exempts all below grade or above grade accessory use structured parking, whether residential or non-residential.

Since 2012, development charges have been levied on structured parking when it is used by retail motor vehicle establishments, including car dealerships and motor vehicle repair shops, to store motor vehicles for sale, rental or servicing. These structures can be within the car dealership (or repair shop) or built as a standalone structure. In both instances the Bylaw levies the retail rate on the gross floor area of the structure.

While the Region's Bylaw could permit a development charge for structured parking accessory to shopping malls, hotels or standalone paid parking, no developments have ever come forward that would trigger a charge.

The treatment of vehicle storage within a car dealership has been the subject of development charge complaints in recent years

There were three complaints dealing with the treatment of parking structures under the Region's 2012 Development Charge Bylaw. Council dismissed the complaints. However they were subsequently appealed to the Ontario Municipal Board (the "Board").

Only one of these complaints has been dealt with by the Board. In that complaint, the Board ruled that a portion of the below-grade parking structure was exempt from development charges, based on zoning bylaw requirements. The complainant did not dispute the levying of the retail rate on the remaining area. The other two complaints have yet to be heard at the Board.

There were also two appeals of the Region's 2017 Development Charge Bylaw relating to automotive dealerships and parking structures

The Region also received two appeals of its 2017 Development Charge Bylaw regarding the treatment of structured parking used for the storage of motor vehicles prior to sale or servicing: one from a consortium of car dealerships, and one from Weins Canada.

The appellants have taken the position that structured parking for storing vehicles prior to sale or rent should not be charged the retail rate.

Structured parking requires Regional infrastructure services

Structured parking requires infrastructure services. Both customers and delivery vehicles use the Region's road network to get to the structure. In addition, they also require water servicing capacity to comply with fire prevention codes.

While the initial use for structured parking in retail motor vehicle establishments may be for vehicle storage, these areas often evolve over time to other functions such as service bays, detailing, and showrooms. These functions all require greater use of infrastructure services.

Market forces, as opposed to development charges, will be the catalyst for a more compact form of development

The Region has consistently levied the retail rate on car dealerships. Notwithstanding this, since 2012 there have been, on average, five new car dealerships built every year, averaging about 30,000 square feet (some as large as 90,000 square feet).

Furthermore, between 2005 and 2016, five new car dealerships were built with structured parking, and four of those were within the last five years. This move toward interior storage is likely due to the availability and cost of land and the business model of the car manufacturer, including the need to better secure and maintain their vehicles. Although the storing of vehicles inside dealerships has been led by higher-end dealerships, brands of all classes are expected to follow as land becomes increasingly scarce and more expensive.

Staff propose to levy the Industrial, Office, Institutional rate on standalone structured parking used to store motor vehicles

Under the 2017 Development Charge Bylaw, standalone structured parking used to store motor vehicles would be levied the retail rate. Staff are proposing to change this treatment to the Industrial, Office, Institutional rate, which would be consistent with other warehousing functions.

As compared to the treatment under the 2017 Bylaw, there would be some negative impact on collections, although staff do not believe the impact to be significant.

Finally, any parking spaces within these structures used for employee and customer parking would still be exempt from development charges. Staff will evaluate this on a case-by-case basis.

Staff propose to continue levying the retail rate on vehicle storage areas in car dealerships

Staff are not proposing to change the treatment of vehicle storage areas in car dealerships. The rationale for not changing the treatment of these areas in car dealerships is:

• Recognition that these areas are not just being used for storage and have additional retail uses (e.g., detailing, showroom, servicing, etc.). In some cases, areas originally used for storage may be changed to other uses after building permit issuance

- Consistency with the treatment of merchandise storage in other retail changing the treatment of storage in car dealerships could give rise to an appeal from other retailers
- Consistency with what neighboring municipalities do

As is the case for standalone structured parking used to store motor vehicles, any parking spaces used for employee and customer parking could be exempt from development charges.

The Board has held that service bays within car dealerships are a retail function

One of the arguments of the appellants to the 2017 Development Charge Bylaw is that service bays within car dealerships should be levied the Industrial/Office/Institutional rate, as this is not a directly retail function.

A decision by the Board in *Shanahan Ltd. v. Region of York (2013)* concluded that the use of service bays to perform warranty work, "is a direct function of the retail sale of a new vehicle and is not a separate and distinct use of [sic] function from the retail activity of selling such goods as new or used cars and trucks to the general public" and as such service department areas (bays) fall "squarely within the definition of retail".

The 2018 Bylaw will clarify that all retail motor vehicle establishments with vehicle storage for sale, lease or servicing/repair purposes should be treated as retail

Aside from car dealerships, other retail motor vehicle establishments may also have requirements to store vehicles for sale, lease or servicing. These include vehicle brokerages, long-term leasing facilities, service repair shops open to the public and other similar uses. Similar to car dealerships, the Region's development charge bylaws have always treated these types of establishments as retail.

Under the 2018 Bylaw amendment, these establishments will continue to be treated as retail, including, but not limited to, areas within the structure that are used for vehicle storage.

Staff propose that the bylaw permit a blended rate for motor vehicle establishments with significant vehicle storage area

There may be instances where a proposed car dealership (or other types of retail motor vehicle establishments) includes significant storage areas. While these are not expected to be common, staff propose to amend the Bylaw so that a blended rate of retail and industrial/office/institutional could be applied.

In these instances, the retail rate would be capped at two times the gross floor area of the retail motor vehicle establishment. The gross floor area above and beyond that of the retail motor vehicle establishment would be levied the industrial/office/institutional rate.

The proposed treatment of structured parking used to store motor vehicles is in line with neighbouring municipalities

Staff have reviewed the bylaws of all local municipalities, as well as neighbouring upper-tier and single-tier municipalities. The proposed changes and clarification to the treatment of structured parking and the clarifications to the treatment of car dealerships are reasonably consistent with other municipalities (see Table 9 for further detail).

structured parking used to store motor vehicles					
Municipality	Car dealerships	Standalone structured parking used to store motor vehicles			
York Region – 2018 Development Charge Bylaw Amendment	Retail	Industrial/Office/Institutional			
City of Markham	Retail	Industrial/Office/Institutional			
Town of Richmond Hill	Retail	Non-retail			
All other local municipalities	Non-residential	Non-residential			
City of Toronto*	Non-industrial	Industrial			
Durham Region	Commercial	Industrial			
Peel Region	Non-industrial	Industrial			
Simcoe County	Non-residential	Non-residential			
Halton Region	Retail	Exempt			

Table 9

Interjurisdictional summary of treatment of car dealerships and standalone structured parking used to store motor vehicles

*Note: Development charges are only levied only on ground floor.

Staff recommend clarifying the treatment for structured parking accessory to shopping malls and hotels

Although in practice this has not happened, under the 2017 Development Charge Bylaw, the Region could levy the retail rate on structured parking accessory to retail establishments, such as malls and hotels. There is a strong rationale for exempting this type of structured parking in the Region's bylaw:

- Brings treatment of shopping mall accessory parking in line with all other accessory use parking structures
- Development charges are levied on the primary structure

Staff are therefore proposing that the bylaw be amended to clarify that structured parking accessory to shopping malls or hotels be exempt from development charges.

5. Financial Considerations

The draft 2018 residential roads development charge rate is 65 per cent higher than the current rate

The residential class will see the highest increase in the roads development charge rate (by 65 per cent) compared to the current road rate (see Table 10).

Summary of residential development charge rates*								
Rate Class	Current Development Charges (Nov 8, 2017) (\$)		Chang	e (\$)	Change			
	Roads	Total	Roads**	Total	Roads	Total		
Single & Semi- detached	14,206	48,330	9,195	57,525	65%	19%		
Multiple Unit Dwelling	11,435	38,899	7,402	46,301	65%	19%		
Apartments (>= 700 Sqft)	8,311	28,273	5,379	33,652	65%	19%		
Apartments (< 700 Sqft)	6,072	20,636	3,930	24,566	65%	19%		

Table 10
Summary of residential development charge rates*

*Note: Does not include Nobleton wastewater rates.

**Note: All rate changes subject to this amendment have had an inflationary factor of 2.4 per cent applied.

The proposed non-residential roads development charge rates are similarly higher than current rates

Table 11 compares the roads and total development charge rates for the non-residential classes.

Summary of residential development charge rates*								
Rate Class	Current Development Charges (Nov 8, 2017) (\$)		Change (\$)		Change			
	Roads	Total	Roads**	Total	Roads	Total		
Retail (\$/sqft)	17.87	39.89	11.23	51.12	63%	28%		
Industrial/Office/ Institutional (\$/sqft)	5.26	17.87	3.29	21.19	62%	18%		
Hotel (\$/sqft)	3.69	7.93	2.10	10.03	57%	26%		

Table 11
Summary of residential development charge rates

*Note: Does not include Nobleton wastewater rates.

**Note: All rate changes subject to this amendment have had an inflationary factor of 2.4 per cent applied.

If the proposed rates are adopted, York Region will have the highest development charges among the 905 municipalities for all classes of development

Currently, York Region's residential and office development charge rates (Regional portion) are the second highest among the 905 upper tier municipalities (second to Peel). If the proposed Bylaw amendment and rates are adopted, York Region's residential and office development charge rates will exceed that of Peel's, making the rates the highest amongst the surrounding 905 Regions.

If the proposed rates are adopted, York Region's retail and industrial/office/ institutional rates will be the highest among the 905 municipalities.

Should Council adopt the proposed rates, the combined upper tier and local municipal development charge would range from \$68,298 in Georgina to \$92,536 in King.

Figure 2 below compares the ranges of development charge rates for the upper tier and lower tier municipalities in the 905 area for all classes. For each upper

tier municipality, the highest and lowest combined municipal development charge rates for a single family dwelling are presented.





Note: On January 9, 2018, the City of Toronto tabled their 2018 Development Charge Background Study and Bylaw. If the rates as tabled were passed, the development charge rate for a single-family detached would increase from \$41,251 to \$88,391.

Rates imposed by the 2017 Development Charge Bylaw will be subject to indexing on July 1, 2018

The rates under this amendment would not be indexed on July 1st, 2018 as an inflationary factor has already been applied.

Rates imposed by the 2017 Bylaw for all other services will be indexed on July 1st, 2018. This includes the portion of the rates pertaining to roads services on the main list of the 2017 Development Charge Background Study.

The Region's indexing, done annually on July 1, uses Statistics Canada's Quarterly Construction Price Index, which will be published by Statistics Canada in May 2018. Over the past ten years, the annual index has averaged 2.4 per cent.

6. Local Municipal Impact

Development charges fund growth-related infrastructure that benefits residents and businesses across the Region

Development charges fund vital growth-related infrastructure, which helps local municipalities support growth and development. The road projects being added to the development charge background study and proposed bylaw will benefit future residents and businesses in the entire Region.

The Region's development charge bylaw also influences the bylaws of local municipalities. Regional staff have engaged with local municipalities through the development of this proposed bylaw amendment.

Regional staff consulted local municipalities regarding proposed clarifications to the treatment of structured parking

Development charges for non-residential structured parking are paid at building permit stage and therefore collected by the local municipalities. In addition, some of the Region's local municipalities are currently updating their development charge bylaws.

Regional staff have consulted with local municipal staff on the proposed clarifications to the treatment for standalone structured parking used to store motor vehicles and structured parking accessory to shopping malls.

7. Conclusion

The draft 2018 Development Charge Background Study and amended draft Bylaw will be tabled on February 15, 2018. This report highlights changes to the proposed bylaw, including revisions to the treatment of structured parking.

A further report will be brought forward for consideration by Council on May 17, 2018, which will include updates to the proposed 2018 Bylaw following the consideration of public input and continued consultations with all stakeholders.

For more information on this report, please contact Edward Hankins, Director, Treasury Office, at 1-877-464-9675 ext. 71644.

The Senior Management Group has reviewed this report.

Recommended by:

Approved for Submission:

Bill Hughes Commissioner of Finance Bruce Macgregor Chief Administrative Officer

January 26, 2018

Attachments (1)

8038987

Accessible formats or communication supports are available upon request

Attachment 1 to Item F.2.1

"Draft 2018 Development Charge Background Study and Proposed Draft Bylaw Amendment"

Will be made available at the February 15, 2018 Regional Council meeting

Council Direction - Development Charge Bylaw Contingency Projects

Meeting Held on May 25, 2017 - Other Business

Development Charge Bylaw Contingency Projects

It was moved by Mayor Bevilacqua, seconded by Regional Councillor Armstrong that Council adopt the following recommendations:

WHEREAS the Provincial Growth Plan requires the Region of York to grow to 1,590,000 persons and 790,000 jobs by the year 2031;

WHEREAS the draft 2016 amendments to the Provincial Growth Plan contemplates requiring the Region of York to grow to 1,790,000 persons and 900,000 jobs per hectare by the year 2041;

AND WHEREAS Regional Council is required to adopt a Development Charge Bylaw on or before June 17, 2017 in order to continue collecting Regional development charges;

AND WHEREAS the infrastructure necessary to accommodate the population and employment numbers imposed upon the Region by the Provincial Growth Plan are prohibitive as a result of Region's current revenue collection constraints;

AND WHEREAS Regional Council is in receipt of resolutions from the Council of the City of Markham and the Council of the City of Vaughan which resolutions call for the inclusion of certain groups of additional projects in the 2017 Regional Development Charge Bylaw;

AND WHEREAS Regional Council is in receipt of a resolution from the Council of the Town of Richmond Hill which calls for the amendment of the timing and scope of certain specific projects;

AND WHEREAS the statutory time lines which require adoption of a new Development Charge Bylaw do not provide sufficient time to revise the draft 2017 bylaw to include or amend some or all of the projects referred to in the Markham, Vaughan and Richmond Hill Council resolutions;

NOW THEREFORE BE IT RESOLVED THAT:

1. Regional Council direct Regional staff to bring forward a report and draft 2017 Regional Development Charge Bylaw on or before March 31, 2018.

 Such amending bylaw have the effect of adding the Contingency "B" list of "Transportation Master Plan projects subject to a financial trigger" contained in the 2017 Regional Development Charge bylaw.

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Appendix C

Proposed Draft York Region Development Charges Bylaw Amendment (2018)

THE REGIONAL MUNICIPALITY OF YORK

BYLAW NO. 2018-•

A bylaw to amend Bylaw 2017-35, being a bylaw to impose development charges against lands to pay for increased capital costs required because of increased needs for services arising from development within The Regional Municipality of York

WHEREAS Section 2 of the Development Charges Act, S.O. 1997, ch. 27 (the "Act") authorizes the Council of the Regional Corporation to enact a bylaw to impose development charges required because of increased needs for services arising from development;

WHEREAS Section 19 of the Act provides for amendments to development charge bylaws;

AND WHEREAS the Council of The Regional Municipality of York requires certain amendments to Bylaw No. 2017-35;

AND WHEREAS a background study dated February 15, 2018 required by Section 10 of the Act was presented to Regional Council along with a draft of this bylaw as then proposed on May 17, 2018 and was completed within a one-year period prior to the enactment of this bylaw;

AND WHEREAS Regional Council directed that the background study and draft proposed bylaw be made available to the public and such documents were made available to the public 60 days prior to the passage of the bylaw and at least two weeks prior to the public meeting required pursuant to Section 12 of the Act;

AND WHEREAS notice of the public meeting was provided in accordance with the requirements of Section 12 of the Act and in accordance with the Regulations under the Act, and such public meeting was held on March 22, 2018;

AND WHEREAS any person who attended the public meeting was afforded an opportunity to make representations and the public generally were afforded an opportunity to make written submissions relating to the proposed bylaw;

AND WHEREAS Regional Council resolved on May 17, 2018 that it is the intention of Regional Council to ensure that the increase in need for services identified in connection with the enactment of the bylaw will be met;

AND WHEREAS Regional Council resolved on May 17, 2018 that no further public meeting be required and that this bylaw be brought forward for enactment;

NOW THEREFORE, the Council of The Regional Municipality of York hereby enacts as follows:

1. Section 1.1 of By-law No. 2017-35 is amended by replacing the definition of gross floor area with the following definition:

"gross floor area" means, in the case of a non-residential building or structure or the non-residential portion of a mixed-use building or structure, 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 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 the sum of the areas of each floor used, or designed or intended for use for the parking of motor vehicles unless the building or structure, or any part thereof, is a retail motor vehicle establishment or a standalone motor vehicle storage facility or a commercial public parking structure, and, for the purposes of this definition, notwithstanding any other section of this bylaw, the non-residential portion of a mixed-use building is deemed to include one-half of any area common to the residential and non-residential portions of such mixed-use building or structure, and gross floor area shall not include the surface area of swimming pools or the playing surfaces of indoor sport fields including hockey arenas, and basketball courts;

- 2. Section 1.1 of By-law No. 2017-35 is amended by deleting the definition of parking structure.
- 3. Section 1.1 of By-law No. 2017-35 is amended by adding the following definition:

"retail motor vehicle establishment" means a building or structure used or designed or intended to be used for the sale, rental or servicing of motor vehicles, or any other function associated with the sale, rental or servicing of motor vehicles including but not limited to detailing, leasing and brokerage of motor vehicles, and short or long-term storage of customer motor vehicles. For a retail motor vehicle establishment, gross floor area includes the sum of the areas of each floor used, or designed or intended for use for the parking or storage of motor vehicles, including customer and employee motor vehicles. An exemption or deferral may be granted to exclude the sum of the areas for customer and employee motor vehicles, and such exemption or deferral may be granted on terms and conditions to the satisfaction of the Region;

4. Section 1.1 of By-law No. 2017-35 is amended by adding the following definition:

"standalone motor vehicle storage facility" means a building or structure used or designed or intended for use for the storage or warehousing of motor vehicles that is separate from a retail motor vehicle establishment. For a standalone motor vehicle storage facility, gross floor area includes the sum of the areas of each floor used, or designed or intended for use for the parking or storage of motor vehicles, including customer and employee motor vehicles. An exemption or deferral may be granted to exclude the sum of the areas for customer and employee motor vehicles, and such exemption or deferral may be granted on terms and conditions to the satisfaction of the Region;

- 5. Section 3.12 of By-law No. 2017-35 is amended by adding the following subsection (d):
 - (d) Subsections 3.12 (a) and 3.12(b) do not apply to a retail motor vehicle establishment or a standalone motor vehicle storage facility. Where a retail motor vehicle establishment is one of multiple industrial/office/institutional uses and retail uses in a building or structure, the development charge payable shall be the retail charge. For a retail motor vehicle establishment, where the sum of the areas used, or designed or intended for use for the parking or storage of motor vehicles is more than two times greater than the remaining area, the retail rate shall be applied to two times the difference between the gross floor area of the entire retail motor vehicle establishment and the gross floor area of the area used for parking or storage, and any gross floor area above that shall be levied the industrial/office/institutional rate.
- 6. Schedule "B" of Bylaw No. 2017-35 is amended by adding to those rates, the increases set out Schedule "A" of this bylaw.
- 7. Schedule "F" of Bylaw No. 2017-35 is amended by adding to those rates, the increases set out in Schedule "B" of this bylaw.
- 8. Schedule "G" of Bylaw No. 2017-35 is amended by deleting Part B from the list of Contingent Residential and Non-Residential Development Charges.

This bylaw shall come into force on the 1st day of July, 2018

ENACTED AND PASSED on May 17, 2018

Regional Clerk

Regional Chair

Authorized by Clause • , Report • of the Committee of the Whole, adopted by Regional Council at its meeting on May 17, 2018

SCHEDULE "A"

Residential Development Charges Increase

July 1, 2018 to June 16, 2022						
Residential Development Charges Increase (\$ per Unit)						
Service	ServiceSingle & Semi- detachedMultiple Unit DwellingApartments (>= 700 sqft)		Apartments (< 700 Sqft)			
Roads	\$9,195	\$7,402	\$5,379	\$3,930		

SCHEDULE "B"

Non-Residential Development Charges Increase

July 1, 2018 to June 16, 2022							
Sorvice	Non-residential Development Charges Increase (\$ per Sgft)			Non-residential Development Charges Increase (\$ per Sgm)			
Service	Retail	Industrial/Office/ Institutional	Hotel	Retail	Industrial/Office/ Institutional	Hotel	
Roads	\$11.23	\$3.29	\$2.10	\$120.90	\$35.37	\$22.57	