Appendix 2

2015 DEVELOPMENT CHARGES AMENDMENT BACKGROUND STUDY: TRANSIT SERVICE SCARBOROUGH SUBWAY EXTENSION

City of Toronto

HEMSON Consulting Ltd.

April 7, 2015

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The following summarizes the findings of the proposed amendment to the City of Toronto Development Charges (DC) By-law, By-law No. 1347-2013, to allow for the recovery of the development-related capital costs of a Scarborough Subway Extension (SSE).

A. BACKGROUND AND OVERVIEW

- Council adopted recommendations in a report entitled "Scarborough Rapid Transit Options: Reporting on Council Terms and Conditions" at its meeting on October 8, 9, 10 and 11, 2013 and committed its support to the development and funding of a Scarborough Subway (extension of the Bloor-Danforth line), and directed City Staff to prepare a DC by-law to include the City's share of the capital costs.

- Hemson Consulting was retained by the City of Toronto to complete a new DC Background Study, specifically related to the SSE, in order to amend the DCs calculated under the recently adopted 2013 DC Background Study and associated DC By-law.

B. STUDY IS CONSISTENT WITH *DCA* LEGISLATION

- Under the *Development Charges Act, 1997 (DCA)*, amendments to existing DC by-laws are permitted, but require a municipality to:
  - Produce a new background study which complies with the requirements under section 5(1) of the *DCA* and provides an examination of the long term capital and operating costs for the required infrastructure; and
  - Requires that an amending by-law be passed by council.

C. PLANNING HORIZON AND BENEFITTING PERIODS

- The residential and non-residential development forecast contained in this amendment study is consistent with the forecast in the 2013 DC Background Study.
- The forecast projects City-wide development between 2013 and 2041, however DCs are calculated based on development occurring over the seven-year planning period, from mid-2015 (proposed effective date of the amendment) to mid-2022.

- Shares of population and employment growth to 2041 have been analysed to determine the post-period benefitting shares of the SSE project.
- In addition to the development forecast, a Subway ridership analysis is included in this amendment study, which projects TTC ridership based on per direction passenger trips per hour, during peak hours, to 2041.

D. DEVELOPMENT FORECAST AND PROJECTED RIDERSHIP

- The City is forecast to add approximately 69,320 new dwelling units over the planning period of mid-2015 to mid-2022. Approximately 58,770 units, 85%, of this growth will be in the form of apartments, 5,720 rows or other multiples, and 4,840 single- or semi-detached units.
- This increase in dwelling units translates to a population increase of approximately 148,420 persons in new units.
- The City's population is anticipated to increase by about 129,430 people over the period, reaching 2.89 million by mid-2022.
- Employment in new space in the City of Toronto is forecast to increase by 89,760 employees that will be accommodated in 3.77 million additional square metres of gross floor area of non-residential building space.

Growth Forecast	Total at Mid-Year 2012	Planning Period 2015 - 2022	
		Growth	Total at Mid-Year 2022
Residential			
Total Occupied Dwellings	1,063,572	69,323	1,179,684
Singles and Semis	348,117	4,838	356,687
Rows and Multiples	60,845	5,715	68,335
Apartments	654,610	58,770	754,662
Total Population			
Census	2,651,628	129,431	2,893,227
Population In New Dwellings		*148,416*	
Non-Residential			
Employment	1,526,879	60,150	1,621,564
Employment in New Space		*89,762*	
Non-Residential Building Space (sq.m.)		3,770,000	

- Total employment (net of the decline of employment in the existing base) will grow by 60,150 employees over the planning period.
- The ridership analysis estimates that, if the expanded subway line were currently available for use, approximately 5,500 single peak direction passenger trips would be taken each hour (PPHPD) during peak hours.
- The number of PPHPD trips is projected to increase to 14,000 in 2041.

E. TOTAL PROJECT COSTS AND FUNDING

- The total capital costs for the SSE totals $3,560.0 million.
- Section 5(2) of the *DCA* requires that the gross capital costs be reduced by grants, subsidies, and recoveries from other governments which total $2,650.0 million.
- After accounting for grants and subsidies, the City's share of project costs is $910.0 million. Included in this cost, is the Scarborough Rapid Transit (SRT) Life Extension, which is not considered to be development-related and is removed from the DC calculation. After this deduction, the City's share of the project costs totals $832.0 million.
- The City's timing of expenditures within the study planning period (from 2015 to 2022) is expressed in inflated dollars. Expenditures incurred beyond 2022 have been present valued to 2022 using a discount rate of 4%. As a result, $826.5 million is the capital cost consideration in the DC calculations.

F. CITY COSTS: TIMING, ALLOCATION OF BTE SHARES AND DEVELOPMENT

- The capital program for the SSE covers a planning horizon from mid-2015 to mid-2022.
- Of the net capital related costs carried forward into the DC calculation ($826.5 million), 39%, or $324.7 million, has been identified as a benefit to existing development and 61%, or $501.8 million, is identified to be related to new development.
    - The benefit to existing share has been calculated using the estimates of the current ridership of an existing subway system (2015) and the future ridership (2041). The current ridership equals 5,500 PPHPD during the peak hour, which represents the 39% share. Future ridership is anticipated to grow by 8,500

PPHPD trips, representing a 61% share ($501.8 million) related to new development.

- The 61% development-related share is further delineated to shares of the legislated 10% discount, eligible development shares (mid-2015-mid-2022), and post-period shares (2023-2041). The cost is summarized as follows:
  - Of the $501.8 million, 10%, or $50.2 million, must be reduced as per the *DCA* statutory requirements.
  - The remaining $451.6 million is allocated in-period (mid-2015 to 2022) and post-2022 based on shares of population and employment growth, resulting in the following allocations:

Mid-2015 to mid-2022	$130.1 million
Post-mid-2022	$321.5 million
Total	$451.6 million

  - As permitted under the *DCA*, the cost of financing these works is eligible for recovery and as such, debenture financing costs have been included in the calculation resulting in the following adjusted total:

Mid-2015 to mid-2022	$255.1 million
Post-mid-2022	$629.5 million
Total	$884.6 million

G. RESIDENTIAL AND NON-RESIDENTIAL ALLOCATION

- The 2015 to 2022 DC recoverable costs of $255.1 million have been allocated 62% to residential and 38% to non-residential development. This allocation is based upon future shares of population growth in new units (148,416) and employment growth in new space (60,150) over the planning period.
  - The 62% allocation to the residential sector totals $159.0 million and the share allocated to the non-residential equals $96.1 million.
  - After cash flow considerations, the residential calculated charge amounts to $897.47 per capita and the non-residential charge totals $20.55 per square metre of GFA.

H. CALCULATED DEVELOPMENT CHARGE RATES

- The following table summarizes the proposed residential and non-residential City-wide DCs.
- The City's 2013 calculated residential and non-residential charges will be revised to include the DC calculations for the SSE.
- The total amended residential charge is approximately 10% higher than the 2013 calculated residential charge (indexed) and the total amended non-residential charge is 11% greater than the 2013 calculated non-residential charge (indexed).

Service	2013 DC Background Study Calculated Charge [1]	Calculated Scarborough Subway Charge [2]	Total Amended Charge	% Change
Residential Charge Per Unit				
Singles & Semis	$35,095	$3,357	$38,452	10%
Multiples 2+ Bedrooms	$29,559	$2,827	$32,386	10%
Multiples 1 Bed and Bach.	$21,113	$2,019	$23,132	10%
Apartments 2+ Bedrooms	$21,582	$2,064	$23,646	10%
Apartments 1 Bed and Bach.	$15,014	$1,436	$16,450	10%
Dwelling Room	$9,384	$897	$10,281	10%
Non-Residential Charge Per Square Metre				
Adjusted Charge per Square Metre	$178.91	$20.55	$199.46	11%

1 Calculated 2013 rates have been indexed
2 Calculated SSE charge represents an additional rate applicable to the existing Transit DC

I. PUBLIC & STAKEHOLDER CONSULTATION

- To amend a DC background study, a municipality must go through the same public process associated with enacting a DC by-law. This amendment study process has included public consultation and stakeholder engagement, as required by the provisions of the *DCA*, and additional consultation beyond these requirements.
- The City has scheduled a Public Meeting for April 22, 2015 in accordance with the requirements of the *DCA*.
- Ongoing consultation with stakeholders has been a central component of the study process. Consultation meetings were held on March 6, March 9, and March 31 2015 with stakeholders. Invitees and contributors to this process included representatives from The Building Industry and Land Development Association (BILD), Commercial Real Estate Development Association (NAIOP), Toronto Real Estate Board (TREB), Toronto Region Board of

Trade, Real Property Association of Canada (REALpac) and the Toronto Industry Network (TIN).

J. IMPLEMENTATION

- The amendment study will not result in changes to any provisions or policies to the City's current DC By-law, By-law 1347-2013. The only change resulting from this study is the inclusion of the recovery of the development-related share of the SSE into the existing transit rate.

- The amended DC rates are proposed to become effective on August 1, 2015.

- The amended DC rates will be indexed in accordance with Statistics Canada Quarterly Capital Expenditure Price Statistics on February 1, 2016 and annually on February 1 of each year throughout the life of the By-law.

- DCs collected for the SSE project will be included in the existing transit DC reserve fund.

I INTRODUCTION AND BACKGROUND

The Council of the City of Toronto passed a Development Charges (DC) By-law, By-law 1347-2013 in October 2013, for the recovery of capital costs associated with meeting the increased needs arising from development. The effective date of the By-law was November 1, 2013. The recovery of DCs is on a City-wide basis and relates to a wide range of eligible City services:

- Spadina Subway Extension
- Transit
- Roads and Related
- Water
- Sanitary Sewer
- Storm Water Management
- Parks and Recreation
- Library
- Subsidized Housing
- Police
- Fire
- Emergency Medical Services
- Development-Related Studies
- Civic Improvements
- Child Care
- Health
- Pedestrian Infrastructure

The maximum duration of a DC by-law, as permitted under the *Development Charges Act, 1997 (DCA)*, is five years after the day it comes into force. Unless repealed early, the City's DC by-law will expire on October 31, 2018.

At its meeting of October 8,9,10 and 11, 2013 City Council considered and adopted item CC39.5[1] which reconfirmed Council's support for a Scarborough Subway thus extending the Bloor-Danforth line along the McCowan Road corridor to Sheppard Avenue East (referred to as the "McCowan Corridor Subway" in the Council item). Item CC39.5 provided details of the terms and conditions of Council's approval, including the following:

[1] *Council Item CC39.5 can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.CC39.5*

6. Commit to funding the City's share of the cost of construction of the McCowan Corridor Subway by:

   b. directing the Deputy City Manager and Chief Financial Officer to prepare a Development Charge By-law to include the City's share of capital costs in respect of the McCowan Corridor Subway for Council's consideration;

The City retained Hemson Consulting Ltd. to assist in examining the recovery of the City's share of the McCowan Corridor Subway costs, referred to in this report as the Scarborough Subway Extension (SSE), from DCs.

The recovery of the development-related cost of the SSE is included within the City's existing DC By-law 1347-2013, by way of an amendment. This DC Amendment Study complies with all of the requirements of the *DCA* and its related regulation (*Ontario Regulation 82/98*). The main objective of the study is to amend the Transit (Balance) (herein referred to as "Transit") category of service DC rate in By-law 1347-2013 to include recovery of the eligible share of the City's portion of the SSE.

The process of undertaking and revising the entire City of Toronto DC background study, or updating the 2013 Background Study to reflect other project changes, and produce a new by-law, or an expanded amendment, was considered. An amendment, limited to the SSE to the existing DC by-law was deemed to be most appropriate at this time. This amendment Background Study is not making any changes to historical service levels (a factor in the calculation of general service DC rates), the development forecast, or any of anticipated growth-related capital costs included in the 2013 DC Background Study.

The report also outlines and initiates the process for amending the City's existing DC by-law, including taking the background study and associated by-law amendment through the legislated public process. This DC Amendment Background Study is being undertaken under the prevailing *DCA* and does not incorporate the proposed legislative and/or regulatory changes introduced under Bill 73 of the Province of Ontario, which received first reading on March 5, 2015.

II BY-LAW AMENDMENT PROCESS & SCOPE

A. DEVELOPMENT CHARGES BY-LAW AMENDMENT PROCESS

The *DCA* allows a municipality to amend an existing DC by-law. Section 19 of the *DCA* 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 by-law, 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 *DCA* are summarized as follows:

s.10 - complete a DC background study (discussed in more detail in subsection C);

s.11 - DC by-law [amendment] must be passed within one year of the completion of the background study;

s.12 - hold at least one public meeting prior to passage of by-law [amendment] (background study and draft by-law must be available at least two weeks prior to the public meeting);

s.13 - municipality must give notice of passage of by-law [amendment] within 20 days of the by-law being passed. The notice must identify the last day for appealing the by-law;

s.14 - anyone may appeal the by-law [amendment] to the Ontario Municipal Board (OMB);

s.15 - outlines the duties of the Clerk if an appeal is received;

s.16 - outlines role and powers of OMB if an appeal is received;

s.17 - effective date of OMB repeals and amendments is the day the by-law [amendment] came into force; and

s.18 - outlines rules governing the giving of refunds under an OMB order.

In simple terms, to amend a DC by-law, a municipality must go through the same public process associated with enacting a DC by-law. 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 *DCA*.

A municipality also must hold a public meeting on the amendment having provided 20-day 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 *DCA* is important because it allows for an amendment to an existing by-law to be passed without exposing the unaltered portions of the by-law to appeal. When amending a DC by-law, only the section(s) of the by-law amended or added is subject to appeal and consideration by the OMB.

This document is the DC Amendment Background Study as required under s.10 of the *DCA*. The City has scheduled a Public Meeting for April 22, 2015 pursuant to s.12 of the *DCA*. It is proposed that the resulting additional transit DC rates for the recovery of a share of the SSE costs will be incorporated into the by-law and become effective on August 1, 2015.

B. SCOPE OF THE PROPOSED AMENDMENT

The sole purpose of the proposed amendment is to include as part of the Transit DC rates in By-law 1347-2013 recovery of the development-related share of the SSE. The project is being considered as part of the City's overall "transit" category of service under the existing DC By-law rather than introducing a new service, such as the City's treatment of the "Spadina Subway Extension". As such, the SSE project is utilizing the available Transit Service maximum permissible DC funding envelope quantified in the City's 2013 DC Background Study. This is more fully discussed in Section IV of this report.

The amendment is being undertaken on the basis of an effective date of August 1, 2015 and as such, the rates have also been calculated based on this date. The rates calculated in the City's 2013 DC Study were based on a DC recovery ten-year planning horizon of 2013-2022. This amendment, and the recovery of the SSE, is based on forecast development occurring over the period from mid-2015 (proposed

effective date of the amendment) to mid-2022. Development that has occurred from mid-2012 to mid-2015 has been treated as part of the "benefit to existing" (BTE) share of the SSE capital costs. The overall benefitting period of the SSE has been based on projected ridership and forecast development to 2041; however only the share of the SSE capital costs related to forecast development from mid-2015 to mid-2022 have been included in the DC calculations undertaken in this Background Study. The development forecast and projected SSE ridership is more fully discussed in Section III of this Background Study.

As noted above, it is proposed that the additional transit DC rates, for the SSE recovery, become effective on August 1, 2015. The August 1, 2015 date corresponds with the next DC rate phase-in, which is incorporated in DC By-law 1347-2013. The draft proposed amending By-law will introduce a new schedule, Schedule D, which will provide the DC rates for the SSE. For the purpose of the DC By-law, the rates will be part of the "Transit (Balance)" category of service.

It is only the transit portion, and the resulting total charges, that are being amended. The change in the transit charge results only from the addition of the SSE costs; no other transit project costs have been adjusted. Furthermore, the DC rates for all other services remain unchanged. Importantly, the proposed amendment will not alter any other provisions of By-law 1347-2013.

C. OTHER STATUTORY CONSIDERATIONS

Section 10(1) of the *DCA*, sets out the requirement for a municipality to complete a DC background study prior to the passage of a DC by-law or amendment. Subsection 10(2) identifies what is to be included in the DC background study. These legislative requirements are summarized as follows:

> 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 *DCA*) to which the development charge by-law [amendment] would relate;
>
> s.10(2)(c) - examine, for each service to which the development charge by-law [amendment] relates, the long term capital and operating costs for the capital infrastructure required.

These statutory requirements are addressed in sections III and IV of this DC Amendment Background Study.

D. CONCLUSIONS AND RECOMMENDATIONS

It is recommended that the City proceed to amend DC By-law 1347-2013 by adding a new schedule, Schedule D, setting out the DC rates for the SSE consistent with the calculations and findings of this report, and subject to any changes arising from the associated public process including City Council deliberations.

The City should proceed with the necessary process with amending a DC by-law:

1. Give public notice of intent to amend the DC By-law and the date of the public meeting at least 20 days before the public meeting.
2. Ensure that the DC Amendment Background Study and proposed amending by-law are available a minimum of two weeks in advance of the public meeting.
3. Hold the necessary public meeting and receive comments and submissions.
4. Respond to any comments or submissions.
5. Council to give consideration to amending by-law.
6. Provide notice of the passage of the amending by-law, no later than 40 days after the day the by-law is passed.

III DEVELOPMENT FORECAST AND RIDERSHIP PROFILE

A development forecast was prepared for the 2013 DC Background Study, which summarized anticipated City-wide residential and non-residential growth between 2013 and 2031. This amendment does not seek to alter the growth forecast contained in the original study, however changes to the applicable planning period, as well as a projection of future subway ridership has been included as part of this analysis.

This section provides the basis for the development forecasts used in calculating the amendment charges as well as a summary of the forecast results. A more detailed summary of the forecasts, including tables illustrating historical trends and forecast results is provided in Appendix A of 2013 DC Background Study[2]. Additional tables showing forecast development between mid-2012 and mid-2022, and mid-2015 to mid-2022 are included as Appendix A of this report.

A. APPLICABLE PLANNING HORIZON

The forecast contained within this amendment study is consistent with the forecast in the 2013 DC Background Study. The DCs calculated as part of the 2013 study process were evaluated on a ten-year planning forecast period, from mid-2012 to mid-2022. As this amendment is being undertaken in 2015, and the by-law is expected to become effective in August, the forecast period under review has been adjusted to mid-2015 to mid-2022, or seven years. The quantity and location of anticipated residential and non-residential development has remained unchanged from the 2013 DC Study, however, development that occurred from mid-2022 to mid-2015 is considered part of the existing population and employment base.

In addition to the development forecast, a subway ridership analysis has been undertaken, which projects future ridership based on the extended line, on the basis of per direction passenger trips per hour, during peak hours. This analysis has been used to determine the benefit-to-existing and development-related shares of the capital costs and is discussed later in this section. The development-related costs have been shared between in-period, or mid-2015 to mid-2022, and post-period,

[2] *The City of Toronto 2013 Development Charges Background Study is available for review at www.toronto.ca/devcharges*

post-mid-2022, based on shares of population and employment growth to 2041. These allocations will be discussed in more detail in Section IV of this report.

Due to the longer-term nature of the SSE project, the analysis forecasts ridership growth to 2041. The use of the 2041 planning horizon is consistent with the treatment of other transit and engineering service projects in the 2013 Background Study.

B. RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT FORECAST

Consistent with the 2013 DC Study, the forecast included in this amendment report anticipates both residential and non-residential development on a City-wide basis. This practice aligns with the provisions of the *DCA,* which require that DCs be determined with reference to "the amount, type and location of development for which development charges can be imposed…" (s.5.(1)1.). A City-wide approach is most appropriate for the calculation of DCs related to the SSE as it is consistent with the City's historical practice of calculating and levying DCs, and reflects the true City-wide benefits derived from the extension project.

Table 1 provides a summary of the residential and non-residential development forecast over the shorter planning period, from mid-2015 to mid-2022. To demonstrate consistency with the 2013 DC Study forecast, growth between mid-2012 and the first half of 2015 is shown, although it has been removed from the development forecast and considered part of the existing residential and employment base.

As shown in the 2013 Background Study, the City's population was forecast to increase by almost 241,600 people between mid-2012 and mid-2022. The increase in population between mid-2012 and mid-2015 of 112,170 has been netted off, and the population growth under review from the latter half of 2015 to mid-2022 is reduced to 129,430. Of the 247,070 additional people in new dwelling units identified in the 2013 Background Study, 148,420 are anticipated within the seven-year planning period of this Study.

The population in new dwellings will be accommodated within 69,320 new occupied units, 58,770, or 85% of which will be in the form of apartments, 5,720 rows or other multiple units, and 4,840 single- or semi-detached units.

Between mid-2012 and mid-2022, employment was projected to grow by 94,690 employees. Following the increase of approximately 34,540 employees in recent years, the shorter planning period under review will see an increase of almost 60,150. Employment growth in new space the forecast period totals 89,760. These new employees will be accommodated in the 3.77 million square metres of gross floor area of non-residential building space, which is anticipated to be constructed between mid-2015 and mid-2022.

Table 1
Summary of Residential and Non-Residential Development Forecast

Growth Forecast	Total at Mid-Year 2012	Growth 2012-2015	Planning Period 2015 - 2022	
			Growth	Total at Mid-Year 2022
Residential				
Total Occupied Dwellings	1,063,572	46,790	69,323	1,179,684
Singles and Semis	348,117	*3,733*	4,838	356,687
Rows and Multiples	60,845	*1,775*	5,715	68,335
Apartments	654,610	*41,282*	58,770	754,662
Total Population				
Census	2,651,628	112,168	129,431	2,893,227
Population In New Dwellings		*98,656*	*148,416*	
Non-Residential				
Employment	1,526,879	34,535	60,150	1,621,564
Employment in New Space		*34,048*	*89,762*	
Non-Residential Building Space (sq.m.)		1,430,000	3,770,000	

C. SUBWAY RIDERSHIP PROJECTIONS

The ridership analysis included in this amendment study process projects subway ridership growth between mid-2015 and 2041 and is based on information contained within City reports and information provided by City staff. Table 2 summarizes the forecast ridership increase in passengers per hour in the peak direction (PPHPD) during the peak hour as a result of the subway line extension.

The ridership analysis estimates that, if the expanded subway line were currently available for use, approximately 5,500 single peak direction passenger trips would be

taken each hour (during peak hours). This is an increase of 1,500 trips over the current ridership without the extended line. For the purposes of calculating DCs, this portion represents the benefit-to-existing share, or the share of the project that would have benefitted the City if the subway were available now. As shown, these 5,500 trips represent 39% of the 2041 projected ridership.

The number of passenger trips per hour in the peak direction is projected to increase to 14,000 PPHPD during the peak hour in 2041. The remaining share of 61% constitutes the development-related allocation of capital costs, some of which are eligible for recovery through DCs. These allocations are based on shares of population and employment growth as outlined in the development forecast, and are further discussed in Section IV.

As detailed in Table 2, the current SRT Ridership, 2015 forecast estimates, and incremental growth to 2031 are derived from information provided in City reports. In order to arrive at the 2041 estimate, an annual growth rate of 1.5% has been applied to the 2031 figure of 12,000 PPHPD during the peak hour. The ridership growth rate assumption is consistent with assumptions utilized by TTC planning staff.

Table 2
Scarborough Subway Ridership Analysis

<table>
<tr><th>Time Period</th><th>Ridership PPHPD [1]</th><th>Source</th><th colspan="2">Allocation</th></tr>
<tr><td>Current SRT Ridership</td><td>4,000</td><td rowspan="2">TTC Report, January 2013, page11 [2]</td><td rowspan="2">5,500 PPHPD Benefit-to-Existing Share</td><td rowspan="2">39%</td></tr>
<tr><td>2015 Estimate (with subway)</td><td>5,500</td></tr>
<tr><td>2031 Forecast</td><td>12,000</td><td>Middle of Range 9,500 to 14,000 Staff Report, October 2013, Table 5, page 21 (CC39.5)</td><td rowspan="2">8,500 PPHPD Development-Related Share (14,000-5,500)</td><td rowspan="2">61%</td></tr>
<tr><td>2041 Forecast</td><td>14,000</td><td>TTC assumption of 1.5%/year ridership increase</td></tr>
</table>

[1] Passengers per hour in the peak direction (PPHPD) during the peak hour

[2] Numbers have been extraced from graph provided in TTC Report of January 2013 page 11

IV SCARBOROUGH SUBWAY EXTENSION DC CALCULATION

A. COUNCIL HAS EXPRESSED INTENT TO UNDERTAKE THE PROJECT

This section of the study provides an overview of the calculation of the SSE DC rates. It includes a review of the transit historical service level, which was incorporated in the City's 2013 DC Background Study, as well as the development-related capital program, and long-term capital and operating impact analysis.

In accordance with section 2(1) of the *DCA:*

> "The council of a municipality may by by-law impose development charges against land to pay for increased capital costs required because of increased need for services arising from development of the area to which the by-law applies".

At the Council meeting of October 8, 9, 10 and 11, 2013 item CC39.5 was adopted to "reconfirm its support for the Scarborough Subway, extending the Bloor-Danforth line along the McCowan Road corridor to Sheppard Avenue East (the 'McCowan Corridor Subway')". In its decision, Council identified the need for the project to be financed through transfers from both the provincial and federal levels of government in order to assist the City in paying for the capital costs. Council also directed the Deputy City Manager & Chief Financial Officer to prepare a DC by-law to include the City's share of capital costs for Council's further consideration.

The SSE has been deemed to provide a City-wide benefit, and as such, the DC is proposed to be included in the City-wide Transit Services rate. Given the context of this amendment, the Transit historical service level calculation as provided in the 2013 DC Study has been used for the purposes of the SSE DC calculation.

This Background Study provides a detailed description of the methodology and overview of the calculations used to arrive at DCs in accordance with the requirements of section 5(1) of the *DCA*.

B. TRANSIT TEN-YEAR HISTORICAL SERVICE LEVEL

The *DCA* and *Ontario Regulation 82/98* require that the DCs be set at a level no higher than the average level of service provided in the municipality over the ten-year period immediately preceding the preparation of the background study, on a service-by-service basis.

In accordance with the section 5(1)4 of the *DCA* and section 4(1) and 4(1.1) of *Ontario Regulation 82/98*:

- The ten-year historic level of service for Transit Services has not exceeded the average level of service provided in the ten-year period immediately preceding the Background Study; and
- Both qualitative and quantitative measures have been used in the determination of the historical level and average level of service calculations.

As demonstrated in Appendix B, the transit historical service level calculation from the 2013 DC Background Study has been used to determine the maximum permissible funding envelope.

TABLE 3
CITY OF TORONTO
2013 DEVELOPMENT CHARGE STUDY

Transit Services - Appendix B.2 ($millions)		
2013 - 2022 Net Funding Envelope	$	2,391.5
DC Recovery 2013-2022	$	896.4
Remaining Net Funding Envelope for Scarborough Subway	**$**	**1,495.1**

As shown in Table 3, there is significant unused transit maximum permissible funding envelope from the 2013 DC Background Study to fund the development-related share of the SSE.

C. THE DEVELOPMENT-RELATED CAPITAL FORECAST

As detailed in Section III, section 5(1)1 of the *DCA* requires a forecast of anticipated development be determined and included in the background study. In order to calculate the increase in need for service, the growth forecast has captured development occurring from the planning horizon of mid-2015 to mid-2022.

The *DCA* requires the Council of a municipality to express its intent to provide future capital facilities at the level incorporated in the DC calculation. In particular, *Ontario Regulation 82/98*, section 3 states that:

> For the purposes of paragraph 3 of subsection 5 (1) of the Act, the council of a municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an official plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

As noted above, Council has expressed its intent to undertake the SSE project and fund eligible shares from DCs. Furthermore, as part of this Study and related amended by-law approval, Council should adopt the development-related capital forecast provided in this amendment for the purposes of the DC calculation. Although it is assumed that the future capital budgets will bring forward the development-related costs contained in the Background Study, it is acknowledged that the changes to the development-related forecast may occur through the City's normal capital budget process.

1. Total Estimated Project Cost and Funding

The total estimated project costs have been provided in nominal (inflated) dollars. As shown in Table 4, the capital cost of the SSE, including subway construction and

TABLE 4
CITY OF TORONTO
SCARBOROUGH SUBWAY EXPENDITURES AND FUNDING
IN NOMINAL (INFLATED) DOLLARS

Expenditures		**($millions)**
1. Subway Construction	$	3,305
2. SRT Life Extension	$	132
3. SRT Decommissioning and Demolition	$	123
Total	**$**	**3,560**
Funding		**($millions)**
1. Federal	$	660
2. Provincial	$	1,990
3. City	$	910
Total	**$**	**3,560**

Source: 2015 TTC Capital Budget Analyst Notes, pg. 34

Scarborough Rapid Transit (SRT) Life Extension and SRT Decommissioning and Demolition amounts to a total of $3,560.0 million.

The provincial funding identified in Table 4 is net of the estimated sunk costs. With regards to City funding, the City will fund its share through a combination of property taxes with increases of 0.5% and 0.5% approved in 2014 and 2015, respectively, and an additional planned increase of 0.6% in 2016 (for a total increase of 1.6% by 2016) in addition to funding collected from DCs.

The *DCA* requires that the identified capital costs must be adjusted and reduced by the amount of capital grants, subsidies and other contributions which are available to a municipality (see section 5(2)).

In accordance with this provision of the *DCA*, the City has reduced this amount from the total development-related cost used in the DC calculation. As such, the City's share of the total project cost in nominal dollars totals $910.0 million.

The capital forecast for this amendment relates only to the SSE project within the identified planning period of mid-2015 to mid-2022. This amount, in accordance with the provisions of the *DCA* and *Ontario Regulation 82/98*, will be used in the DC calculation to determine the City's net capital costs attributable to growth.

2. Timing of Expenditures and Financing

Table 5 displays the forecast timing of expenditures and funding by source. In accordance with the City's 2015-2024 capital budget and plan, the total gross annual expenditures and planned timing is identified. It should be noted that the difference between the planned and actual 2014 budget ($14.5 million less $1.43 million) has been carried forward into the 2015 annual expenditures equal to $13.1 million.

The City's share of the funding is also identified in relation to the proposed federal and provincial share. In total $3,560.0 million is required to be financed by the City, federal and provincial government. Federal and provincial funding will total $2,650.0 million, leaving the City's related share of capital costs of $910.0 million.

Included in the SSE total project cost is the SRT Life Extension which is considered to provide a benefit to existing residents, and as such, the cost is not eligible for DC funding and will be paid for using non-DC sources. The related SRT costs is anticipated be paid for through both City and Provincial funding.

The last section of Table 5 identifies the total gross annual expenditures net of the SRT Life Extension cost which totals $3,428.0 million.

Table 6 displays the expenditures and funding over the DC Amendment Study planning period of mid-2015 to mid-2022, as expressed in inflated dollars. Costs shown in the year 2022 are forecast to include both the costs incurred in 2022 and

those beyond that year which have been present valued to 2022 dollars using a discount rate of 4%. The timing of expenditures in Table 6 is used for the purpose of calculating the SSE rates. In total, $826.5 million, which represents the City's share of the development-related project costs, is carried forward to the DC calculation.

TABLE 5
CITY OF TORONTO
SHARE OF BUDGET TIMING AND SHARE OF EXPENDITURES

Description ($000s)	2014		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Post 2024	Total Project Cost
	Budget	Actual												
TOTAL GROSS ANNUAL EXPENDITURES AND PLAN														
SCARBOROUGH SUBWAY EXTENSION														
Scarborough Subway	14,500	1,430	20,704	101,118	167,550	252,162	741,903	697,403	605,395	451,992	207,773	31,000	13,500	**3,291,930**
SRT Life Extension			16,500	19,000	18,000	16,000	15,000	14,000	13,000	13,000	7,500			**132,000**
SRT Decommissioning & Demolition													123,000	**123,000**
1-Year Carry to 2015 (Scarborough Subway)			13,070											**13,070**
TOTAL GROSS ANNUAL EXPENDITURES AND PLAN	**14,500**	**1,430**	**50,274**	**120,118**	**185,550**	**268,162**	**756,903**	**711,403**	**618,395**	**464,992**	**215,273**	**31,000**	**136,500**	**3,560,000**
FUNDING														
City	14,500	1,430	50,274	120,118	47,464	47,596	172,616	160,977	137,186	97,945	31,549	7,929	34,916	**910,000**
Federal Funding					34,382	54,690	145,254	136,823	119,589	91,163	47,061	5,744	25,293	**660,000**
Provincial Funding					103,704	165,876	439,033	413,603	361,621	275,884	136,663	17,326	76,290	**1,990,000**
TOTAL FUNDING	**14,500**	**1,430**	**50,274**	**120,118**	**185,550**	**268,162**	**756,903**	**711,403**	**618,395**	**464,992**	**215,273**	**31,000**	**136,500**	**3,560,000**

Source: 2015 TTC Capital Budget, Analyst Notes, Page 34

TOTAL GROSS ANNUAL EXPENDITURES: NET OF SRT LIFE EXTENSION COST

Description ($000s)	2014		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Post 2024	Total Project Cost
	Budget	Actual												
TOTAL GROSS ANNUAL EXPENDITURES AND PLAN														
SCARBOROUGH SUBWAY EXTENSION														
Scarborough Subway	14,500	1,430	20,704	101,118	167,550	252,162	741,903	697,403	605,395	451,992	207,773	31,000	13,500	**3,291,930**
SRT Decommissioning & Demolition													123,000	**123,000**
1-Year Carry to 2015 (Scarborough Subway)			13,070											**13,070**
TOTAL GROSS ANNUAL EXPENDITURES AND PLAN	**14,500**	**1,430**	**33,774**	**101,118**	**167,550**	**252,162**	**741,903**	**697,403**	**605,395**	**451,992**	**207,773**	**31,000**	**136,500**	**3,428,000**
FUNDING														
City	14,500	1,430	33,774	101,118	32,418	36,320	170,120	158,757	134,485	92,803	27,941	7,929	34,916	**832,011**
Federal Funding					34,382	54,690	145,254	136,823	119,589	91,163	47,061	5,744	25,293	**660,000**
Provincial Funding					100,750	161,151	426,529	401,823	351,321	268,026	132,771	17,326	76,290	**1,935,988**
TOTAL FUNDING	**14,500**	**1,430**	**33,774**	**101,118**	**167,550**	**252,162**	**741,903**	**697,403**	**605,395**	**451,992**	**207,773**	**31,000**	**136,500**	**3,428,000**

TABLE 6
CITY OF TORONTO
GROSS COSTS AND FUNDING IN INFLATED DOLLARS ($)

Description ($000s)	2015	2016	2017	2018	2019	2020	2021	2022+ [1]	Total
Total Gross Annual Expenditures and Plan [2]									
Scarborough Subway	$35,204	$101,118	$167,550	$252,162	$741,903	$697,403	$605,395	$692,436	$3,293,171
SRT Decommissioning & Demolition								$109,347	$109,347
Total Gross Annual Expenditures and Plan	$35,204	$101,118	$167,550	$252,162	$741,903	$697,403	$605,395	$801,783	$3,402,518
Funding									
City Funding	$35,204	$101,118	$32,418	$36,320	$170,120	$158,757	$134,485	$158,041	$826,462
Federal Funding			$34,382	$54,690	$145,254	$136,823	$119,589	$164,211	$654,949
Provincial Funding			$100,750	$161,151	$426,529	$401,823	$351,321	$479,531	$1,921,106
Total Gross Annual Expenditures and Plan	$35,204	$101,118	$167,550	$252,162	$741,903	$697,403	$605,395	$801,782	$3,402,518

Note:
(1) Costs shown in 2022 column are costs forecast to incurred in 2022 plus costs to be incurred beyond 2022 which have be present valued to 2022 using a discount rate of 4%.
(2) Total Gross Annual Expenditures and Plan are net of the SRT Life Extension

D. CITY-WIDE VS. AREA SPECIFIC CHARGES

The City's 2013 DC Background Study, the basis of the City's current DC By-law No. 1347-2013, contains a discussion of the City's rationale for using City-wide DCs rather than area-specific development approaches for all or some services;

- The City's uniform, city-wide charge is summarized by the following central policy rationale:

> "Most municipalities in Ontario have established uniform, municipal-wide development charges. When area-specific charges are used, it is generally to underpin master servicing and front-end financing arrangements, particularly in the case of stormwater management, collector/minor arterial roads and/or water and sanitary feeders and related works sometimes identified in defined "greenfield" development circumstances.
>
> The use of area-specific charges in a mature urban area is uncommon for several reasons, i.e.:
>
> Continued growth in the central area, for example, triggers the need for transportation, water and sewer processing, recreation and other needs throughout the City;
>
> The calculation and updating of area-specific charges in portions of a large metropolitan area is difficult;
>
> The City requires the full development charge contribution from all development as part of funding the substantial capital works program needed to permit growth to occur, without eroding service levels." [3]

The DC recovery of the SSE eligible capital costs has been undertaken on a uniform City-wide basis:

- Consistent with the City's current and historic practice;
- Recovery of the SSE costs is proposed as an amendment to the By-law No.1347-2013 which is based on the City's 2013 DC Background Study. The 2013 Background Study calculations were made on a City-wide basis and therefore it is important that the amendment be consistent;

[3] *See pages 43-45 of the City of Toronto 2013 DC Background Study.*

- The SSE is considered part of the Transit category of service which provides for the recovery of all transit development-related costs, excluding the Spadina Subway Extension;
    - The Transit service in the 2013 DC Background Study was calculated on a uniform City-wide basis;
    - The Transit capital program includes other transit projects that have a specific geographic location, for example the Sheppard Subway and Queen's Quay LRT, which are all being recovered for on a uniform City-wide basis;
- The Spadina Subway Extension (separate from the Transit category) DC is also calculated on a uniform City-wide basis;
- The City also has concerns that implementing an area-specific approach to the recovery of the SSE capital-costs would have negative impacts on the rate of development along the transit corridor to which to the SSE area DC rate would apply which would be counter to the City's planning objectives.
    - This is of particular concern in the context of the balance of the City's transit infrastructure being funded on a uniform City-wide basis and the use of an area specific recovery for this one project.

E. CALCULATED DEVELOPMENT CHARGES

The proposed SSE DC has been calculated in accordance with the *DCA* and *Ontario Regulation 82/98*. This section of the Study will provide an overview of section 5(1) of the *DCA*, specifically in reference to paragraphs 2 to 8.

In addition to the anticipated amount, type and location of development, section 5(1)2 of the *DCA* require that:

> "The increase in the need for service attributable to the anticipated development must be estimated for each service to which the development charge by-law would relate."

The increase in need for service, as it relates to the SSE project, has been identified in the development-related forecast as previously referenced in the aforementioned sections.

Council must also express its intent to meet the increase in need for service as per section 5(1)3 of the *DCA*. It is the responsibility of council to identify the needs of new development and is required to make an initial commitment or indicate that it intends to provide the service before it imposes a development charge to recover costs. As the SSE was approved by City Council in October 2013, the intent to meet the increase in need for service has been fulfilled.

As part of the DC calculation, the ten-year historical service level establishes the limit on the amount of the development-related capital program which can be funded through DCs. Section 5(1)4 of the *DCA* states:

> "The estimate under paragraph 2 must not include an increase that would result in the level of service exceeding the average level of that service provided in the municipality over the 10-year period immediately preceding the background study under section 10"

As illustrated in Table 3, the total maximum permissible funding envelope after the required statutory reductions has sufficient funding to accommodate the identified capital costs of the SSE. As outlined in the 2013 Background Study, the service level measure used to calculate the maximum permissible funding envelope is on a population and employment basis.

Included in the maximum permissible funding envelope calculation is the reduction of any excess capacity available to meet the increase in need and provide services to future development. This requirement, as prescribed in section 5(1)5 of the *DCA*, is required for all services, however, the council of a municipality may "commit" the excess capacity and allow the costs to be paid for by new development. As the SSE relates to the maximum permissible funding envelope limit established in the 2013 DC Background Study, no excess capacity has been identified for this service, and therefore, is not netted off of the total funding envelope calculation.

The increase in need for service, identified through the establishment of the capital program, must also be reduced by the portion of the project that would benefit existing development. Specifically, section 5(1)6 of the *DCA* states:

> "The increase in the need for service must be reduced by the extent to which an increase in service to meet the increased need would benefit existing development."

As the proposed SSE has been deemed to provide a City-wide benefit, the amount of the capital program which will benefit existing development has been established in accordance with the *DCA* based on estimates of existing and projected future subway ridership. As detailed in Section III, the ridership forecast between mid-2015 and 2041 using PPHPD during the peak hour provides the basis for the calculation of the benefit to existing share.

Section 5(1)7 of the *DCA* stipulates the requirement to estimate the capital costs related to the increase in need for service. In addition to this estimate, any capital grants, subsidies and other contributions made to a municipality is required to be reduced from the gross cost of the capital costs, as prescribed by section 5(2) of the *DCA*.

Finally, one of the last requirements of the DC calculation, as identified in section 5(1)8 of the *DCA*, is the statutory 10% reduction. Certain services, such as transit, are subject to this provision.

The following illustrates how the requirements of section 5(1) of the *DCA* have been applied to the determination of the SSE DC rates.

1. Determination of Benefit to Existing (BTE) and Development-Related Share of the Net Capital Program

Table 7 provides a summary of the allocation of the City's share of the SSE capital costs. The total cost, including financing, amounts to $1,619.5 million and is allocated to; replacement and benefit to existing (BTE) shares ($636.7 million), the 10% legislated discount ($98.2 million), and the development-related share ($884.6 million).

The development-related share is further allocated into the benefitting planning period of mid-2015 to mid-2022 ($255.1 million) and development beyond mid-2022 ($629.5 million).

The determination of the BTE and the other allocations are discussed in the remainder of this section.

2. Inclusion of Debt Financing Costs

Debt financing is an eligible cost identified under section 5(3) of the *DCA* which states:

> The following are capital costs for the purpose of paragraph 7 of subsection (1) if they are incurred or proposed to be incurred by a municipality…

Section 5(3)7 of the *DCA* states that interest on money borrowed can be included in the capital costs. The inclusion of the provision of the sinking fund financing costs, as detailed in item 1.2 of Table 7, is an additional cost that the City will be required to incur in order to finance the SSE.

The provision for the sinking fund financing costs is calculated using a net discount sinking fund factor, based on a factor of 30 years at 4.2% and adjusted to present value using a discount rate of 2%.

The total net capital program is comprised of the sinking fund financing costs ($793.0 million) and the City's share of the Scarborough Subway ($826.5 million).

TABLE 7
CITY OF TORONTO
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Net Municipal Cost	Ineligible Costs		Total Development Related	Allocation to Period	
			Replacement & BTE Shares	10% Reduction		2015-2022	Post 2022
1 SCARBOROUGH SUBWAY - CAPITAL PROJECT PLAN							
(Costs in Inflated$)							
Forecast Expenditures							
1.1 City Share of Scarborough Subway	2014 - 2022+	$ 826,462,400	$ 324,681,700	$ 50,178,100	$ 451,602,600	$ 130,101,900	$ 321,500,700
1.2 Provision for Sinking Fund Financing Costs[1]		$ 793,000,000	$ 312,000,000	$ 48,000,000	$ 433,000,000	$ 125,000,000	$ 308,000,000
Subtotal		**$ 1,619,462,400**	**$ 636,681,700**	**$ 98,178,100**	**$ 884,602,600**	**$ 255,101,900**	**$ 629,500,700**
Share of City Costs			*39%*	*6%*	*55%*	*16%*	*39%*

Residential Development Charge Calculation		
Residential Share of mid-2015 - mid-2022 DC Eligible Costs	62.3%	$158,961,864
7-Year Growth in Population in New Units		148,416
Development Charge Per Capita after Cashflow		**$897.47**
Large Apartment	2.30	$2,064
Non-Residential Development Charge Calculation		
Non-Residential Share of mid-2015 - mid-2022 DC Eligible Costs	37.7%	$96,140,036
7-Year Growth in Square Metres		3,770,000
Development Charge Per Square Metre after Cashflow		**$20.55**

City of Toronto 2013 DC Study - Transit (Appendix B.2)	
2013 - 2022 Net Funding Envelope	$2,391,484,675
DC Recovery 2013-2022	$896,359,269
Remaining Net Funding Envelope	$1,495,125,406

Notes:

1) Financing costs have been present valued using a discount rate of 2%:

Sinking Fund Factor (30 year at 4.2%)	1.260
Adjustment for Rate Indexing (PV at 2%/yr 30 years)	0.761
Net discount Sinking Fund Factor	0.959

3. Benefit to Existing (BTE) Share

The ridership forecast, as detailed in Table 8, was used in the determination of the benefit to existing share and the development-related share of the capital program. The current ridership of the existing subway system, using PPHPD during the peak hour in mid-2015 amounts to 5,500 trips. The total number of transit trips anticipated to occur by 2041 assuming a 1.5% increase in ridership annually from 2031 is 14,000 PPHPD during the peak hour. The data to arrive at these figures is based on ridership information provided by City reports and City staff.

Using the current and estimated increase in ridership from mid-2015 to 2041 (5,500 PPHPD divided by 14,000 PPHPD) a 39% benefit to existing share was calculated. The increase in transit ridership (14,000 PPHPD – 5,500 PPHPD) results in a 61% share, which is deemed to be related to new development.

Table 8
Scarborough Subway Ridership Analysis

Time Period	Ridership PPHPD [1]	Source	Allocation	
Current SRT Ridership	4,000	TTC Report, January 2013, page11 [2]	5,500 PPHPD Benefit-to-Existing Share	39%
2015 Estimate (with subway)	5,500			
2031 Forecast	12,000	Middle of Range 9,500 to 14,000 Staff Report, October 2013, Table 5, page 21 (CC39.5)	8,500 PPHPD Development-Related Share (14,000-5,500)	61%
2041 Forecast	14,000	TTC assumption of 1.5%/year ridership increase		

[1] Passengers per hour in the peak direction (PPHPD) during the peak hour

[2] Numbers have been extraced from graph provided in TTC Report of January 2013 page 11

In total, 39% or $636.7 million of the net municipal cost is identified as the replacement and benefit to existing share.

4. Legislated 10 per cent Reduction

As shown in Table 7, transit requires a 10% discount be applied to the development-related share of the capital program.

In total, $98.8 million or 6% is reduced from the total net municipal cost.

5. Allocation of Development-Related Share to Benefitting Planning Period

As demonstrated in Table 7, the 61% development-related share is further delineated into shares of the legislated 10% discount, eligible development shares (mid-2015 to mid-2022), and post-period shares (mid-2022 to 2041).

The total development-related capital cost after deductions is $884.6 million which equals 55% of the total net municipal costs. This amount is allocated to in-period costs based on the anticipated share of population and employment growth occurring within the planning period from mid-2015 to mid-2022. This growth equals 29% or $255.1 million within the mid-2015 to mid-2022 period, whereas the remaining share of 71% or $629.5 million is deemed to provide a post-period benefit.

6. Allocation Between Residential and Non-Residential Development

The discounted development-related costs have been allocated 62% to residential and 38% to non-residential development. This allocation is based upon future shares of population growth in new units (148,416) and employment growth in new space (89,726) over a seven-year period.

It should be noted that the allocation of post-period shares between the residential and non-residential sectors will be determined in subsequent DC studies or updates.

7. Calculated Development Charge Rates

The last section of Table 7 displays a 62% allocation to the residential sector, or $159.0 million, and a 38% allocation to the non-residential sector, or $96.1 million.

A cash flow analysis is also undertaken to account for the timing of projects and receipt of DCs. Interest earnings or borrowing costs are accounted for in the calculation as allowed under the *DCA*. Based on the development forecast, the analysis calculates the DC rate that is required to finance the discounted development-related capital spending plan including provisions for any borrowing costs or interest earnings on the reserve funds. The cash flow analysis is designed so that the closing cash balance at the end of the planning period is as close to nil as possible.

In order to determine appropriate DC rates reflecting borrowing and earnings necessary to support the discounted development-related funding requirement, assumptions are used for the interest rate. As the development-related capital costs have already been expressed in inflated dollars, this rate is not reapplied to the cash flow analysis. An interest rate of 3.5% is used for positive opening balances and a rate of 5.5% is used for negative opening balances.

Pages 1 and 2 of Table 9 display the results of the cash flow analysis and provides the adjusted or final per capita residential and per square metre (of GFA) non-residential

DCs. After cash flow considerations, the residential calculated charge amounts to $897.47 per capita and the non-residential charge totals $20.55 per square metre of GFA.

CITY OF TORONTO
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
TRANSIT (BALANCE)
RESIDENTIAL DEVELOPMENT CHARGE
(in $000)

TRANSIT (BALANCE)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
OPENING CASH BALANCE	$0.0	$0.0	$0.0	$1,068.9	$9,897.3	$26,093.5	$42,634.1	$45,942.0	$49,936.0	$56,108.7	
2013 - 2022 RESIDENTIAL FUNDING REQUIREMENTS											
- Scarborough Subway: Inflated $	$0.0	$0.0	$3,453.3	$9,919.0	$3,180.0	$3,562.8	$16,687.6	$15,573.0	$13,192.1	$15,502.7	**$81,070.5**
- Scarborough Subway: Debenture Finance(1)	$0.0	$0.0	$145.0	$561.6	$695.2	$844.8	$1,545.7	$2,199.8	$2,753.8	$61,399.1	**$70,145.2**
- Transit (Balance):	$0.0	$0.0	$3,598.3	$10,480.6	$3,875.2	$4,407.6	$18,233.3	$17,772.8	$15,945.9	$76,901.8	**$151,215.7**
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units			5,180	20,887	20,833	20,754	20,606	20,303	20,080	19,773	**148,416**
REVENUE											
- DC Receipts: Inflated	$0.0	$0.0	$4,648.9	$19,120.4	$19,452.4	$19,766.2	$20,017.7	$20,117.8	$20,294.8	$20,384.2	**$143,802.4**
INTEREST											
- Interest on Opening Balance	$0.0	$0.0	$0.0	$37.4	$346.4	$913.3	$1,492.2	$1,608.0	$1,747.8	$1,963.8	**$8,108.8**
- Interest on In-year Transactions	$0.0	$0.0	$18.4	$151.2	$272.6	$268.8	$31.2	$41.0	$76.1	($1,554.2)	**($694.9)**
TOTAL REVENUE	$0.0	$0.0	$4,667.3	$19,309.0	$20,071.4	$20,948.2	$21,541.1	$21,766.8	$22,118.7	$20,793.8	**$151,216.3**
CLOSING CASH BALANCE	$0.0	$0.0	$1,068.9	$9,897.3	$26,093.5	$42,634.1	$45,942.0	$49,936.0	$56,108.7	$0.6	

2015 Adjusted Charge Per Capita	**$897.47**

1) Financing costs based on Sinking Fund debentures issued each year for DC funded costs:

Sinking Fund Factor (30 year at 4.2%)	1.260
Payments Beyond 2022 present valued back to 2022 at:	3.50%

Allocation of Capital Program	
Residential Sector	62.3%
Non-Residential Sector	37.7%
Rates for 2015	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

CITY OF TORONTO
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
TRANSIT (BALANCE)
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in $000)

TRANSIT (BALANCE)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
OPENING CASH BALANCE	$0.00	$0.00	$0.00	$613.74	$5,724.17	$15,309.17	$25,137.37	$27,041.45	$29,540.48	$33,501.01	
2013 - 2022 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Scarborough Subway: Inflated 2015$	$0.0	$0.0	$2,088.5	$5,999.0	$1,923.2	$2,154.7	$10,092.7	$9,418.6	$7,978.6	$9,376.1	**$49,031.4**
- Scarborough Subway: Debenture Finance(1)	$0.0	$0.0	$87.7	$339.7	$420.4	$510.9	$934.8	$1,330.4	$1,665.5	$37,134.2	**$42,423.8**
- Transit (Balance):	$0.0	$0.0	$2,176.2	$6,338.7	$2,343.6	$2,665.6	$11,027.5	$10,749.0	$9,644.1	$46,510.3	**$91,455.2**
NEW NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres			130,000	520,000	520,000	520,000	520,000	520,000	520,000	520,000	**3,770,000**
REVENUE											
- DC Receipts: Inflated	$0.0	$0.0	$2,779.4	$11,340.1	$11,566.9	$11,798.2	$12,034.2	$12,274.9	$12,520.4	$12,770.8	**$87,084.9**
INTEREST											
- Interest on Opening Balance	$0.0	$0.0	$0.0	$21.5	$200.3	$535.8	$879.8	$946.5	$1,033.9	$1,172.5	**$4,790.4**
- Interest on In-year Transactions	$0.0	$0.0	$10.6	$87.5	$161.4	$159.8	$17.6	$26.7	$50.3	($927.8)	**($413.9)**
TOTAL REVENUE	$0.0	$0.0	$2,790.0	$11,449.1	$11,928.7	$12,493.8	$12,931.6	$13,248.1	$13,604.7	$13,015.5	**$91,461.4**
CLOSING CASH BALANCE	$0.0	$0.0	$613.7	$5,724.2	$15,309.2	$25,137.4	$27,041.5	$29,540.5	$33,501.0	$6.2	

2015 Adjusted Charge Per Square Metre	**$20.55**

1) Financing costs have been present valued using a discount rate of 2%:

Sinking Fund Factor (30 year at 4.2%)	1.260

Allocation of Capital Program	
Residential Sector	62.3%
Non-Residential Sector	37.7%
Rates for 2015	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

8. Final Calculated DC Rates

The residential City-wide SSE DC is proposed to vary by dwelling unit type to reflect their different occupancy factors and their demand for services. The proposed residential and non-residential rates are shown in Table 10 and Table 11, respectively. As shown in Table 10, the proposed residential charge ranges from $1,436 for small apartments to $3,357 for single detached and semi-detached units. The proposed charge for large multiples is $2,827, $2,019 for small multiples, and $2,064 dollars for large apartments. The City also maintains a charge for a "dwelling room" which has been calculated at $897. Table 10 also shows the total charge per unit with the inclusion of the amended Scarborough Subway development charge (Scarborough Subway rate per unit + indexed 2013 calculated rate per unit).

Table 11, provides an overview of the final calculated DC rates for the SSE for the non-residential rate expressed as a charge per square metre of GFA. The non-residential charge is $20.55 per square metre. Table 11 also shows the total charge per square metre with the inclusion of the amended Scarborough Subway development charge (Scarborough Subway rate per square metre + indexed 2013 calculated charge per square metre).

TABLE 10
CITY OF TORONTO
CALCULATED CITY-WIDE DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Adjusted Charge Per Capita	Residential Charge By Unit Type (1)					
		Singles & Semis	Multiples 2+ Bedrooms	Multiples 1 Bed and Bach.	Apartments 2+ Bedrooms	Apartments 1 Bed and Bach.	Dwelling Room
Scarborough Subway Extension [1]	$897.47	$3,357	$2,827	$2,019	$2,064	$1,436	$897
2013 Calculated Charge Per Unit [2]	$9,383.68	$35,095	$29,559	$21,113	$21,582	$15,014	$9,384
TOTAL CHARGE PER UNIT	**$10,281.15**	**$38,452**	**$32,386**	**$23,132**	**$23,646**	**$16,450**	**$10,281**
(1) Based on Persons Per Unit Of:		3.74	3.15	2.25	2.30	1.60	1.00

1 Calculated SSE charge represents an additional rate applicable to the existing Transit DC

2 Calculated 2013 rates have been indexed

TABLE 11
CITY OF TORONTO
CALCULATED CITY-WIDE DEVELOPMENT CHARGES
NON-RESIDENTIAL DEVELOPMENT CHARGES

Service	Adjusted Charge per Square Metre
Scarborough Subway Extension [1]	$20.55
2013 Calculated Charge Per Square Metre [2]	$178.91
TOTAL CHARGE PER SQUARE METRE	**$199.46**

1 Calculated SSE charge represents an additional rate applicable to the existing Transit DC
2 Calculated 2013 rates have been indexed

F. LONG-TERM CAPITAL AND OPERATING COST IMPACTS

As required by section 10(2)(c) of the *DCA*, the long-term capital and operating costs for capital infrastructure must be examined. In its initial review of the capital and operating impacts, the City has indicated that the costs incurred to operate the SSE will be funded through fair box revenues and property taxes. The operating impacts will be determined as part of the TTC and City's annual budgeting process once the SSE is operational.

In total, $734.9 million will need to be funded from non-DC sources over the seven-year planning period. The shares which require non-DC funding consists of two components: the benefit to existing share of $636.7 million, and the 10% statutory reduction share of $98.2 million. Council has been made aware of these factors so that they understand the operating and capital costs that will not be covered by DCs as it adopts the development-related capital forecast set out in this Study.

V COMPARISON OF CALCULATED AND EXISTING DCS

Table 12 presents a comparison of the total proposed City-wide SSE DC for a large apartment unit and per square metre of non-residential GFA with the City's existing charges. Table 12 shows that the indexed 2013 calculated charge per large apartment unit of $21,582 will increase by $2,064 with the inclusion of the SSE charge. The total revised City-wide large apartment rate would therefore amount to $23,646, representing a total increase of 10%.

Table 12 also shows the change calculated for the non-residential charge. The indexed 2013 calculated charge per square metre of $178.91 would increase by $20.55, which would amount to a total proposed charge of $199.46. This represents an increase of approximately 11% over the existing rate of $178.91.

It should be noted that the calculated Scarborough Subway charge will be included in the total Transit Service charge. Schedules included in the Draft Amendment By-law (provided under separate cover) provide further details on the total City-wide rates and the inclusion of the amended City-wide SSE charge.

TABLE 12
CITY OF TORONTO
CALCULATED CITY-WIDE DEVELOPMENT CHARGES
COMPARISON OF CURRENT AND CALCULATED DEVELOPMENT CHARGES

Service	2013 DC Background Study Calculated Charge [1]	Calculated Scarborough Subway Charge [2]	Total	Difference in Charge (% Change)
Residential Charge per Large Apartment	$21,582	$2,064	$23,646	10%
Ground-Floor Non-Residential Charge per sq.m	$178.91	$20.55	$199.46	11%

1 Calculated 2013 rates have been indexed

2 Calculated SSE charge represents an additional rate applicable to the existing Transit DC

VI IMPLEMENTATION AND ADMINISTRATION

A. PROPOSED AMENDING BY-LAW

The proposed amending by-law will leave the City's current DC By-law 1347-2013 largely unchanged. The amendment study will not result in changes to any provisions or policies within the by-law. The only resulting change is the inclusion of the recovery of the development-related share of the SSE into the existing transit rate.

Only the transit share, as well as the overall total charge will change as a result of the addition of the SSE costs. As mentioned previously in this report, the proposed amending by-law will introduce a new schedule, Schedule D, which will provide the DC rates for the SSE. These charges will be part of the "Transit (Balance)" category of service.

The draft Amendment DC By-law is included under separate cover.

B. PROPOSED EFFECTIVE DATE OF NEW RATES

The amended DC rates are proposed to become effective on August 1, 2015. This date corresponds with the fourth rate phase-in already specified in By-law 1347-2013.

C. RATE INDEXING

The amended DC rates will be indexed in accordance with Statistics Canada Quarterly Capital Expenditure Price Statistics on February 1, 2016. This date corresponds with the implementation of the fully phased in DCs as calculated in the 2013 DC Background Study. As indicated in s.415-11(A) of By-law 1347-2013, the rates will be indexed annually on February 1st of each year throughout the life of the By-law.

D. DC BY-LAW RESERVES

The SSE project is being considered as part of the City's overall "transit" category of service under the existing DC By-law and as such, DCs collected for the project will

be included in the transit DC reserve fund. The amendment study and by-law will not direct the City to establish a separate reserve fund in the same way for the Spadina Subway Extension, which is treated as a distinct service category.

APPENDIX A

DEVELOPMENT FORECAST

APPENDIX A
TABLE 1

CITY OF TORONTO
RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT FORECAST 2013-2041

Year at Mid-Year	Census Population	Employment	Population + Employment
2012	2,651,628	1,526,879	4,178,508
2013	2,689,930	1,538,305	4,228,235
2014	2,731,064	1,549,817	4,280,881
2015	2,763,796	1,561,414	4,325,210
2016	2,788,570	1,573,099	4,361,669
2017	2,806,765	1,581,901	4,388,666
2018	2,823,304	1,590,753	4,414,057
2019	2,840,280	1,599,654	4,439,934
2020	2,857,616	1,608,604	4,466,220
2021	2,874,973	1,617,605	4,492,579
2022	2,893,227	1,621,564	4,514,791
2023	2,911,384	1,625,532	4,536,916
2024	2,929,251	1,629,510	4,558,761
2025	2,946,830	1,633,498	4,580,328
2026	2,963,936	1,637,495	4,601,431
2027	2,984,376	1,641,687	4,626,063
2028	3,004,228	1,645,890	4,650,118
2029	3,023,511	1,650,103	4,673,614
2030	3,042,240	1,654,328	4,696,567
2031	3,060,441	1,658,563	4,719,004
2041	3,266,954	1,716,319	4,983,273
2012-2022	241,599	94,685	336,284
2012-2015	112,168	34,535	146,703
2015-2022	129,431	60,150	189,581
2022-2041	373,727	94,755	468,482
2015-2041	503,158	154,904	658,062

APPENDIX A
TABLE 2

CITY OF TORONTO
10-YEAR RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT FORECAST 2013-2022

	Growth		
	2013-2015A	**2015B-2022**	**2013-2022**
Residential:			
Unit Forecast			
All Units	**46,790**	**69,323**	**116,112**
- Singles/Semis	3,733	4,838	8,570
- Row/Other Multiples	1,775	5,715	7,490
- Apartments	41,282	58,770	100,052
Large	18,577	26,447	45,023
Small	22,706	32,324	55,029
Population in New Units			
- Singles/Semis	13,962	18,092	32,054
- Row/Other Multiples	5,431	17,487	22,918
- Apartments	79,263	112,837	192,100
Total	**98,656**	**148,416**	**247,072**
Non-Residential			
Non-Residential GFA	1,430,000	3,770,000	5,200,000
Employment in New Space	34,048	89,762	123,810

APPENDIX B

TRANSIT HISTORIC INVENTORY

2013 DEVELOPMENT CHARGES BACKGROUND STUDY

APPENDIX B.2

APPENDIX B.2
TABLE 1

2013 DEVELOPMENT CHARGES BACKGROUND STUDY
CITY OF TORONTO
INVENTORY OF CAPITAL ASSETS
TORONTO TRANSIT COMMISSION

Running Structures for Transit Lines	# of Double Track Kilometres										UNIT COST
Description	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	($Mil/km)
Subway Lines - double track KM											
Subway at grade/bridge	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	$52.50
Subway in tunnel	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	$150.00
RT Lines - double track KM											
RT on bridge	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	$100.50
RT on surface	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	$59.10
Streetcar Lines - double track KM											
Streetcar in exclusive ROW (509,510 512 Qsy)	10.8	10.8	10.8	10.8	10.8	10.8	10.8	17.8	17.8	17.8	$48.00
Streetcar in tunnel (Bay St.)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	$165.00
Streetcar track in mixed traffic	74.5	74.5	74.5	74.5	74.5	74.5	74.5	67.5	67.5	67.5	$20.00
Total (# double track km)	**154.2**	**154.2**	**154.2**	**154.2**	**154.2**	**154.2**	**154.2**	**154.2**	**154.2**	**154.2**	
Total ($ millions)	**$10,533.6**	**$10,533.6**	**$10,533.6**	**$10,533.6**	**$10,533.6**	**$10,533.6**	**$10,533.6**	**$10,729.5**	**$10,729.5**	**$10,729.5**	

APPENDIX B.2
TABLE 1

2013 DEVELOPMENT CHARGES BACKGROUND STUDY
CITY OF TORONTO
INVENTORY OF CAPITAL ASSETS
TORONTO TRANSIT COMMISSION

Transit Stations	# of Stations										UNIT COST
Description	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	($Mil/station)
Subway Stations (interchange counted separately)											
Terminal (Below Grade)	5	5	5	5	5	5	5	5	5	5	$221.70
At Grade	9	9	9	9	9	9	9	9	9	9	$89.20
Line	51	51	51	51	51	51	51	51	51	51	$201.80
Interchange (build around existing line station)	3	3	3	3	3	3	3	3	3	3	$248.90
RT Stations											
Terminal - McCowan	1	1	1	1	1	1	1	1	1	1	$28.30
Elevated Special - Scarborough Centre	1	1	1	1	1	1	1	1	1	1	$61.20
Line - Elevated - Midland	1	1	1	1	1	1	1	1	1	1	$34.00
Line - At-grade - Elles. & Law E	2	2	2	2	2	2	2	2	2	2	$26.70
Line - Interchange - Kennedy	1	1	1	1	1	1	1	1	1	1	$48.20
LRT (Legacy) Stations											
Spadina at Bloor	1	1	1	1	1	1	1	1	1	1	$45.90
Union Station (Harbourfront streetcar)	1	1	1	1	1	1	1	1	1	1	$55.20
Queens Quay (Harbourfront streetcar)	1	1	1	1	1	1	1	1	1	1	$10.70
Total (#)	**77**	**77**	**77**	**77**	**77**	**77**	**77**	**77**	**77**	**77**	
Total ($ millions)	**$13,286.7**	**$13,286.7**	**$13,286.7**	**$13,286.7**	**$13,286.7**	**$13,286.7**	**$13,286.7**	**$13,286.7**	**$13,286.7**	**$13,286.7**	

APPENDIX B.2
TABLE 1

2013 DEVELOPMENT CHARGES BACKGROUND STUDY
CITY OF TORONTO
INVENTORY OF CAPITAL ASSETS
TORONTO TRANSIT COMMISSION

VEHICLES	**$ Value for Vehicles ($ Millions)**									
Type of Vehicle	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Street Cars	$838.35	$861.78	$889.15	$914.20	$939.20	$958.03	$973.67	$987.15	$1,003.99	$1,027.11
Subway Cars	$1,844.86	$1,900.22	$1,928.73	$1,967.30	$2,008.63	$2,017.06	$1,908.10	$1,915.76	$1,946.55	$2,091.32
ICTS Vehicles	$108.26	$110.43	$112.64	$114.89	$117.19	$119.53	$121.92	$124.36	$126.85	$129.38
SLRT Vehicles	$4.05	$4.13	$4.21	$4.30	$4.38	$5.16	$5.26	$5.08	$5.18	$4.81
Rail Service Subway Vehicles	$56.92	$57.58	$65.34	$68.33	$70.25	$73.45	$76.78	$84.95	$81.09	$80.81
Buses	$849.36	$808.60	$809.91	$867.94	$869.67	$900.00	$1,063.33	$1,213.55	$991.70	$1,177.82
Trucks	$18.73	$200.10	$18.69	$27.04	$30.92	$27.59	$28.98	$30.24	$30.64	$29.22
Tractors and Trailors	$2.29	$2.37	$2.92	$4.64	$5.43	$4.56	$4.81	$4.81	$4.67	$4.53
Total ($ Millions)	**$3,722.82**	**$3,945.21**	**$3,831.59**	**$3,968.62**	**$4,045.66**	**$4,105.38**	**$4,182.86**	**$4,365.90**	**$4,190.67**	**$4,545.00**

APPENDIX B.2
TABLE 1

2013 DEVELOPMENT CHARGES BACKGROUND STUDY
CITY OF TORONTO
INVENTORY OF CAPITAL ASSETS
TORONTO TRANSIT COMMISSION

RAIL YARDS	# of vehicles in fleet including maintenance spares.										UNIT COST
based on cost/vehicle assessment from TTC E&C	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	($/veh.)
Rapid Transit											
Wilson & Davisville Carhouse	357	357	357	357	357	357	357	357	357	357	$2.6
Greenwood Carhouse	297	297	297	297	297	297	297	297	297	297	$2.6
McCowan Carhouse	28	28	28	28	28	28	28	28	28	28	$3.1
Streetcars											
Roncesvalles Carhouse	124	124	124	124	124	124	124	124	124	124	$2.7
Russell Carhouse	124	124	124	124	124	124	124	124	124	124	$2.7
Total ($000)	**$2,464.4**	**$2,464.4**	**$2,464.4**	**$2,464.4**	**$2,464.4**	**$2,464.4**	**$2,464.4**	**$2,464.4**	**$2,464.4**	**$2,464.4**	

APPENDIX B.2
TABLE 1

2013 DEVELOPMENT CHARGES BACKGROUND STUDY
CITY OF TORONTO
INVENTORY OF CAPITAL ASSETS
TORONTO TRANSIT COMMISSION

BUILDINGS & STRUCTURES	$ Value for Buildings ($ Millions)									
Description	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Shelters	$0.46	$0.46	$0.48	$0.52	$0.55	$0.58	$0.63	$0.70	$0.70	$0.70
various buildings	$0.18	$1.79	$1.85	$1.99	$2.08	$2.22	$2.41	$2.70	$2.67	$2.68
buildings at loops	$0.82	$0.82	$0.85	$0.91	$0.95	$1.02	$1.11	$1.24	$1.23	$1.23
Gray Coach buildings	$24.62	$24.73	$25.61	$27.71	$29.00	$32.08	$47.39	$53.15	$52.53	$52.80
Hillcrest, Davisville buildings	$97.81	$98.51	$102.07	$109.82	$115.62	$123.60	$140.96	$158.57	$157.50	$159.22
Hillcrest buildings	$72.14	$72.61	$80.34	$92.62	$97.64	$104.94	$116.27	$130.54	$130.20	$136.87
subway carhouse buildings	$70.09	$70.47	$96.60	$107.80	$114.14	$122.70	$133.87	$154.79	$153.38	$156.69
H.C. Patten & Hillcrest Covered Storage Bldg	$7.93	$7.97	$11.27	$12.15	$12.70	$13.58	$14.76	$16.55	$16.34	$16.42
Danforth Garage & Office Building	$20.08	$20.17	$20.66	$11.92	$12.56	$17.62	$19.05	$21.34	$21.28	$21.47
bus garage buildings	$217.61	$252.15	$291.28	$328.50	$345.51	$374.22	$480.24	$547.82	$561.01	$574.31
CNE buildings and others	$1.61	$1.61	$1.67	$1.83	$1.92	$2.05	$2.23	$2.48	$2.45	$2.47
Total ($ Millions)	**$513.35**	**$551.30**	**$632.67**	**$695.77**	**$732.67**	**$794.61**	**$958.93**	**$1,089.89**	**$1,099.29**	**$1,124.87**

APPENDIX B.2
TABLE 1

2013 DEVELOPMENT CHARGES BACKGROUND STUDY
CITY OF TORONTO
INVENTORY OF CAPITAL ASSETS
TORONTO TRANSIT COMMISSION

CONTENTS	$ Value for Contents ($ Millions)									
Description	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Contents at Subway Stations	$83.77	$84.59	$87.45	$88.76	$89.90	$92.55	$99.11	$99.75	$102.70	$103.48
Contents at Other Buildings	$346.91	$368.82	$376.21	$384.38	$401.52	$417.32	$439.20	$452.93	$463.02	$488.33
Fare Handling Equipment	$8.29	$8.46	$8.63	$8.80	$8.97	$9.15	$9.34	$9.37	$9.56	$9.75
Total ($ Millions)	**$438.97**	**$461.86**	**$472.29**	**$481.93**	**$500.39**	**$519.02**	**$547.65**	**$562.05**	**$575.28**	**$601.56**

APPENDIX B.2
TABLE 1

CITY OF TORONTO
CALCULATION OF SERVICE LEVELS
TORONTO TRANSIT COMMISSION

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Historic Population	2,482,995	2,483,327	2,484,821	2,503,281	2,513,804	2,525,352	2,543,177	2,560,371	2,615,060	2,651,628
Historic Employment	1,448,421	1,455,093	1,461,796	1,468,531	1,477,814	1,487,156	1,496,557	1,506,017	1,515,538	1,526,879
Total Historic Population & Employment	3,931,416	3,938,420	3,946,617	3,971,812	3,991,618	4,012,508	4,039,734	4,066,388	4,130,598	4,178,507

INVENTORY SUMMARY ($ Millions)

Running Structures For Transit Lines	$10,533.6	$10,533.6	$10,533.6	$10,533.6	$10,533.6	$10,533.6	$10,533.6	$10,729.5	$10,729.5	$10,729.5
Transit Stations	$13,286.7	$13,286.7	$13,286.7	$13,286.7	$13,286.7	$13,286.7	$13,286.7	$13,286.7	$13,286.7	$13,286.7
Rail Yards	$2,464.4	$2,464.4	$2,464.4	$2,464.4	$2,464.4	$2,464.4	$2,464.4	$2,464.4	$2,464.4	$2,464.4
Vehicles	$3,722.8	$3,945.2	$3,831.6	$3,968.6	$4,045.7	$4,105.4	$4,182.9	$4,365.9	$4,190.7	$4,545.0
Buildings & Structures	$513.3	$551.3	$632.7	$695.8	$732.7	$794.6	$958.9	$1,089.9	$1,099.3	$1,124.9
Contents	$439.0	$461.9	$472.3	$481.9	$500.4	$519.0	$547.7	$562.0	$575.3	$601.6
Total ($000)	**$30,959.8**	**$31,243.0**	**$31,221.2**	**$31,431.0**	**$31,563.4**	**$31,703.7**	**$31,974.1**	**$32,498.4**	**$32,345.8**	**$32,752.0**

SERVICE LEVEL ($/capita & employment)

											Average Service Level
Running Structures For Transit Lines	$2,679.34	$2,674.57	$2,669.02	$2,652.09	$2,638.93	$2,625.19	$2,607.50	$2,638.57	$2,597.56	$2,567.77	$2,635.05
Transit Stations	$3,379.62	$3,373.61	$3,366.60	$3,345.25	$3,328.65	$3,311.32	$3,289.00	$3,267.45	$3,216.65	$3,179.77	$3,305.79
Rail Yards	$626.84	$625.72	$624.42	$620.46	$617.38	$614.17	$610.03	$606.03	$596.61	$589.77	$613.14
Vehicles	$946.94	$1,001.72	$970.85	$999.20	$1,013.54	$1,023.14	$1,035.43	$1,073.65	$1,014.54	$1,087.71	$1,016.67
Buildings & Structures	$130.58	$139.98	$160.31	$175.18	$183.55	$198.03	$237.37	$268.02	$266.13	$269.20	$202.84
Contents	$111.66	$117.27	$119.67	$121.34	$125.36	$129.35	$135.57	$138.22	$139.27	$143.97	$128.17
Total ($/capita & employment)	**$7,874.97**	**$7,932.88**	**$7,910.88**	**$7,913.51**	**$7,907.41**	**$7,901.21**	**$7,914.90**	**$7,991.95**	**$7,830.77**	**$7,838.20**	**$7,901.67**

CITY OF TORONTO
CALCULATION OF MAXIMUM ALLOWABLE
TORONTO TRANSIT COMMISSION

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2003 - 2012	$7,901.67
Net Population & Employment Growth 2013 - 2022	336,284
Maximum Allowable Funding Envelope	$2,657,205,194
Less: 10% Legislated Reduction	$265,720,519
Maximum Allowable Funding Envelope	**$2,391,484,675**

APPENDIX C

DRAFT AMENDMENT BY-LAW

(AVAILABLE UNDER SEPARATE COVER)