



2009

Development Charge Background Study



BRAMPTON
Flower City

2009 CITY OF BRAMPTON DEVELOPMENT CHARGE BACKGROUND STUDY

TABLE OF CONTENTS

COVERING REPORT

OVERVIEW

DC PROGRAMS

GENERAL GOVERNMENT SERVICES

Summary
Historical Service Level Analysis
DC Calculation
Growth Related Capital Program
Draft By-Law



RECREATION SERVICES

Summary
Historical Service Level Analysis
DC Calculation
Growth Related Capital Program
Draft By-Law



FIRE PROTECTION SERVICES

Summary
Historical Service Level Analysis
DC Calculation
Growth Related Capital Program
Draft By-Law



LIBRARY SERVICES

Summary
Historical Service Level Analysis
DC Calculation
Growth Related Capital Program
Draft By-Law

TRANSIT SERVICES

Summary
Historical Service Level Analysis
DC Calculation
Growth Related Capital Program
Draft By-Law

ROAD SERVICES

Summary
Historical Service Level Analysis
DC Calculation
Growth Related Capital Program
Draft By-Law

ROAD SUPPLEMENTARY ANALYSIS (Appendix F of Draft TTMP Update)

Flower City



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Date: May 28, 2009
File: F41-09
Subject: **Development Charge Background Study and Draft By-Laws**
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OVERVIEW

- The City's current Development Charge By-laws 218-2004, 219-2004, 220-2004, 221-2004, 222-2004, 223-2004 224-2004 and 111-2008 will expire on August 11, 2009.
- The *Development Charges Act, 1997* (DCA 1997) requires preparation of a detailed background study to support new development charge (DC) by-laws and rates.
- The DC rates identified in this report and the supporting Background Study have been developed in keeping with the requirements of the DC Act.
- As planned since initiation of the project, the background study and the draft rates presented here have been calculated on a "full cost" basis for provision of the infrastructure necessary to accommodate projected development.
- The proposed rates do include an increase from the City's DC rates currently in effect, due largely to increased occupancy of housing units and funding of deficits in the DC reserves (actual and forecast). There is no overall increase resulting from capital program costs.
- In recognition of the current economic climate and the direction to implement stimulus measures, staff will report back to Council with proposed transitional measures before approval of the final by-laws. Continuation of the existing discounted rate for Industrial and Office development for a period of one year is proposed in this report.
- Timing of the Roads and Recreation capital programs has been adjusted to limit the necessary DC reserve fund deficit financing to an affordable level. The programs will nevertheless require increased internal bridge financing, up to a maximum of \$300 million, to ensure provision of

- infrastructure in advance of development.**
- **Notice has been published that the public meeting required by the DC Act will take place on June 22, 2009 at 3:00pm at a Special Council Meeting.**
 - **Consultation with stakeholders has been ongoing throughout the development of the Background Study and will continue as required, up to approval of the By-laws.**

RECOMMENDATIONS:

1. THAT this report entitled **Development Charge Background Study and Draft By-Laws**, dated May 28, 2009, from Bonnie Eskelson Director, Financial Planning & Budgets and Lloyd Noronha, Manager, Development & Capital Financing, along with the Development Charge Background Study and the accompanying draft Development Charge by-laws, be received
2. THAT Council provide direction at the public meeting to be conducted at the Special Council Meeting on June 22, 2009 as to whether or not any additional public meetings are required.
3. THAT staff be directed to report back to Council regarding the results of the Public Meeting(s) and the appropriate development charge recommendations.
4. THAT staff be directed to report back to Council on the merits of transition measures to ease the impact of the new Development Charge rates on planned development.

SUMMARY OF KEY FINDINGS OF THE STUDY

The following is a brief summary of the results of the study. These issues will be examined in more detail in subsequent sections of the report.

1. The background study calculations produced the following development charge rates which are assumed to be applicable immediately on passage of the by-laws:

<u>Residential per unit</u>	
Single Family and Semi-Detached	\$26,553.27
Row Houses	\$21,906.45
Apartments >750 square feet	\$17,923.47
Apartments 750 square feet or less	\$9,957.48
<u>Non-residential per square metre</u>	
Non-Industrial/Non-Office	\$109.43
Industrial/Office	\$60.05

2. The specific development charges generated for each program to finance the net growth-related capital costs of the program are as follows:

Programs	Residential				Non-Residential	
	Single & Semi	Row	Large Apt.	Small Apt.	Non-Industrial, Non-Office	Industrial & Office
General Government	\$80.72	\$66.59	\$54.49	\$30.27	\$0.32	\$0.32
Library	\$681.20	\$561.99	\$459.81	\$255.45		
Fire Services	\$705.20	\$581.79	\$476.01	\$264.45	\$2.74	\$2.74
Parks and Recreation	\$7,921.92	\$6,535.58	\$5,347.30	\$2,970.72		
Public Works	\$550.80	\$454.41	\$371.79	\$206.55	\$2.14	\$2.14
Parking	\$325.20	\$268.29	\$219.51	\$121.95	\$1.26	\$1.26
Transit	\$1,434.24	\$1,183.25	\$968.11	\$537.84	\$5.56	\$5.56
Roads	\$14,853.99	\$12,254.55	\$10,026.45	\$5,570.25	\$97.41	\$48.03
Total per unit or Sqm.	\$26,553.27	\$21,906.45	\$17,923.47	\$9,957.48	\$109.43	\$60.05

3. The City's draft Transportation & Transit Master Plan (TTMP) outputs with respect to the most appropriate timing and delivery of the road and transit program, as well as the current Recreation Program from a Growth Management perspective, would require a level of financing that is not financially sustainable and that would expose the City to more financial risk than is recommended. For this reason, the modifications summarized in the next paragraph, and discussed in more detail in a later section of this report, are proposed.
4. The City's Ten-Year Capital Forecast for the period 2009 to 2018, as endorsed by Council on December 10, 2008, will require amendment to incorporate the following changes that have occurred subsequently and that are incorporated in the Background Study:
- Total road costing as identified in the draft Transit and Transportation Master Plan (TTMP), with project timing adjusted to spread expenditure evenly over the period from 2009 to 2031 (details of revised project timing to be provided under separate cover). Note that the program, for purposes of this calculation, includes cost of the BramWest Parkway, currently subject to review of jurisdiction.
 - Transit improvements as identified in the TTMP, primarily the advancement of two BRT corridors to 2016 from beyond the 10-year period.
 - Retiming and deferral of some Recreation Capital Programs as outlined in a subsequent section of this report.

5. Post Period Benefit of approximately \$157 million is forecast to result at the end of the 10-year period for non-roads programs. This represents capacity in new facilities and infrastructure, over and above currently eligible service levels, that will be available to serve new development occurring after 2018 and will be reflected by a deficit in the DC reserve funds at that time. Prior to passing the by-laws, Council will be required to confirm its intention that this future excess capacity shall be paid for by development charges or similar charges.

Most of the Post Period Benefit arises in the Public Works (Works Yards) program and in Recreation, at \$54 million and \$80 million respectively due to early construction of major facilities. Lesser amounts, less than \$10 million each, are seen in the Fire Service, Libraries and Transit programs.

6. Finalization of a recommendation on an expanded exemption for Places of Worship is deferred pending the outcome of the planning policy review, in particular, in relation to the definition of worship and auxiliary space.
7. Continuation of the existing discounted rate for Industrial and Office development is proposed for a period of one year, subject to annual review and extension thereafter by way of a by-law amendment.
8. Various definition and wording changes are proposed in the draft by-laws for clarity and ease of administration, and to better reflect the intent of the by-laws. These changes are described later in the report.

BACKGROUND

The City's first Development Charge (DC) By-law took effect in 1991 as provided for in the *Development Charges Act* (Ontario, 1989). It effectively replaced the old Lot Levy system as a mechanism for developers to contribute to the cost of capital infrastructure required to service growth in Ontario communities. The City's second DC By-law, adopted in 1999, was prepared under the terms of a revised *Development Charges Act* (Ontario, 1997). The Act limits the life of a by-law to five years and requires the preparation of a new DC background study as the basis for adoption of a new by-law no later than the end of that five-year period. The current by-law, adopted on August 11th, 2004, saw a few refinements, but for the most part used substantially the same methodology as that of the 1999 by-law. The Roads DC By-law was amended on April 23rd, 2008 to adjust for significant cost escalation beyond the indexing permitted by the DCA.

In addition to the legal requirement to replace the City's DC By-laws 218-2004 to 224-2004 and 111-2008 at this time, Members of Council are well aware of the

financial pressures resulting from the current economic climate that have an impact both on the development industry and on the City's financial outlook. The financial constraints resulting from the limitations the DCA 1997 places on the amounts and services for which the City can collect DCs, along with the pressure to maintain service levels in all areas, have been compounded by the shortfall in DC collections due to the current slowing of development. As a result, deficits in the City's DC reserve funds have surpassed the amounts predicted in recent capital forecasts.

Staff has completed the requisite Background Study, resulting in development charge rates that correspond to deficit capacities that are believed to be sustainable and that expose the City to acceptable financial risk. This report is intended to form an integral part of the Background Study. It serves as an Executive Summary of and context for the detailed study results, and highlights policy issues for consideration by Members of Council.

DC PROGRAM AFFORDABILITY

The Background Study capital program combines the City's 2009 ten-year capital forecast and the raw outputs of the draft TTMP update, resulting in a \$1.679 billion roads program to buildout in 2031 (municipal cost, net of developers' local portion) and \$1.084 billion over 10 years for all other services. The preferred timing of the Roads program was heavily front-ended, such that approximately 43% of the total lane kilometres were programmed to occur in the next 5 years of a 23-year program and more than 80% in the first 10 years. The non-roads programs showed significant post period oversizing (capacity exceeding DC-eligible service levels, to be financed from future DC receipts post 2018). These initial outputs suggested that deficits in the DC reserves would reach approximately \$880 million within five years time. With deficits of this magnitude and the associated financing cost incorporated in the DC rates, the rate increase would be as high as 32% for a Single Detached residential unit, for example, and would be comparable for other types of development.

While the DC rates are an important element of the DC Study, it is also apparent that the City is not in a position to internally finance \$880M until that amount can be recovered over the period to 2031. Notwithstanding that the reserve fund deficit and all associated financing costs are recoverable in future DC by-laws, the City's internal resources are estimated to be capable of accommodating a maximum DC deficit of not more than \$300 million. This is nevertheless approximately \$100 million more than the DC deficit the City is carrying today, and also at least \$100 million more than provided for in our existing funding strategy. This increase is proposed in recognition of two important City priorities: facilitating infrastructure development commensurate with development, and implementation of measures to stimulate and support development in difficult market conditions.

Consideration of additional financing measures can only be taken in the context of overall City capital funding strategy, to be reviewed following decisions on other key non-DC programs and as part of the 2010 capital budget and forecast exercise.

Accordingly, staff developed measures to ensure that an affordable program is presented to Council. To constrain the maximum deficit position to \$300 million, it has been necessary to revise the Capital Programs as follows:

1. The total cost of the Roads program is spread evenly over the next 23 years, providing an annual DC funding envelope of \$68.1 million. To put this in context, the approved 2009 budget includes \$65.8 million DC funding for roads. The specific project timing changes to align the program with the available funding are being developed at the time of writing of this report, and will be made available before the final new DC by-laws are brought forward for approval.
2. The \$45 million Works Yard project programmed for 2010 is retained in the forecast but shown as fully funded from non-DC sources. It has been recognized and reported since the initial development of this program that due to the existing low DC-eligible service level, the full program could never be fully funded from DCs. A major portion of the related deficit would still remain unfunded at buildout. Two additional Works Yards programmed for 2016 and 2018 are still shown as DC funded to ensure that DC collections for the program are maximized in this and future by-laws.
3. A portion of the BramEast Community Campus development, \$63M, is shown as deferred from 2011 to 2015. Sufficient funds have been moved forward to provide for the first phase of the facility development in the short term, as planned, in conjunction with the branch library.
4. 50% (\$23 million) of the envelope for Parkland Development, for 2010 – 2012 only, has been deferred beyond 2018. Chinguacousy Park enhancements for 2010 – 2013 have been reduced in recognition of the funding contribution expected from the federal and provincial infrastructure programs.

In spite of these changes, there remains a considerable amount of “post period oversizing” in non-roads programs, or capacity that exceeds eligible service levels, the cost of which will only be recovered through DCs after 2018.

ANALYSIS OF THE DC RATES

After the program adjustments described in the previous section, which also have the effect of mitigating the rate increases due to reduced financing costs, there remain two factors that have impacted the rates presented in the background

study. These are: 1) The existing December 31, 2008 deficits in the reserve funds, which accounts for the 2.9% increase in the per capita rate, and 2) Person per unit (PPU) changes in the growth forecast.

a) Population/household size

The per capita rate for residential development has increased by only 2.9% from the existing rates. However, the DC methodology calculates allowable per capita DC rates for residential development (or per square metre rates for non-residential development), and then determines the unit rates for each housing type based on forecast “persons per unit” (PPUs) for that type of unit. Census data and demographic analysis confirm that the average occupancy of new housing in Brampton has increased significantly. This results in increased PPUs forecast for all residential development types, with the sole exception of Row Houses. This exception arises because Row Houses were not previously treated as a separate category from Single detached homes and were subject to the same rate as Single units. The change in the new 2009 Background Study is designed to recognize the lower occupancy of these types of units and, implicitly, to facilitate the higher density development required by provincial growth plan targets. The following table shows the change in PPUs for each housing type based on actual unit sizes for recently constructed housing.

PPU COMPARISON, 2009 VS 2004			
	2004 Background Study	2009 Background Study	Change
Small apartments	1.3	1.5	+15%
Large apartments	2.5	2.7	+8%
Rows	3.4	3.3	- 3%
Single/Semi detached residential	3.4	4.0	+18%
Residential Rate per capita	\$6,453.33	\$6,638.32	+2.9%

As shown on the following table, the new construction household sizes for Brampton exceed those of other GTA municipalities for most types of housing.

PERSON PER UNIT BY UNIT TYPE (New Construction)

Municipality	Singles/ Semis	Rows	Large Apt	Small Apt
Brampton	4.0	3.3	2.6	2
Markham	3.8	3.0	2.3	1.4
Vaughan	3.7	3.1	2.2	2.2
Oakville	3.1	2.0	1.6	1.2
Mississauga	3.6	n/a	2.5	1.3

Comparison of the existing and new residential rates shows the relationship to the PPU changes:

COMPARISON OF RATES, PROPOSED VS EXISTING

	Existing rate	New rate	Change
Residential Development			
Small apartments, per unit	\$8,389.15	\$9,957.48	+19%
Large apartments, per unit	\$16,133.02	\$17,923.47	+11%
Rows, per unit	\$21,941.31	\$21,906.45	0%
Single/Semi detached residential, per unit	\$21,941.31	\$26,553.27	+21%
Non-Residential			
Industrial/Office, per sq.m.*	\$46.49	\$60.05	+29%
Non-Industrial/Non-Office, per sq.m.	\$91.53	\$109.43	+20%

**It is proposed that the Industrial and Office rate continue to be discounted to the rate currently in effect, for at least one year.*

The increase in the Industrial and Office rate shown in this table is misleading because the comparison is between the new calculated rate and the existing discounted rate. The policy section of this report addresses the proposed continuation of the discount to ensure the City remains competitive in attracting development of this nature.

While there has been a small adjustment in the allocation of program costs between residential and non-residential, the increase in non-residential rates is largely driven by a forecast increase in employment density per square meter, similar to the effect of increased PPUs on residential rates.

b) Comparison to DC Rates in Other GTA Municipalities

Most municipalities passed their last DC by-laws at approximately the same time as Brampton. As a result, most are now in the process of replacing those DC by-laws and approved new rates are not yet available, making meaningful comparison difficult. Several have released proposed new rates, showing wide variation in the magnitude of the increases. In many municipalities there is still a general trend towards significant increases. Information as is available is summarized in the table that follows. The magnitude of the growth pressures in Brampton and the speed at which infrastructure has historically been added is reflected in the City's position at the high end of the existing rates.

The table below demonstrates the average annual growth rate for some area GTA municipalities (2006-2016) showing Brampton having the highest average growth rate (3%) over the DC period and by far, the most significant additional growth.

		2006 Population	2016 Population Forecast	Average Annual Rate of Growth	Actual Growth
Brampton	Population	452,800	585,400	2.93%	132,600
	Employment	155,880	223,740	4.35%	67,860
Mississauga	Population	698,000	757,000	0.85%	59,000
	Employment	431,000	483,000	1.21%	52,000
Burlington	Population	164,415	179,300	0.90%	14,835
	Employment	n/a	n/a	n/a	n/a
Richmond Hill	Population	169,500	216,900	2.80%	47,400
	Employment	61,100	88,500	4.48%	27,400
Markham	Population	272,500	337,800	2.40%	65,300
	Employment	144,800	206,300	4.25%	61,500

Combined with the Region of Peel charge, the total is not out of line with the combined charges in several other municipalities. Comparison of combined upper- and lower-tier charges is more appropriate to allow for differences in distribution of responsibility and also to depict the actual burden on development in any given location. Several other lower-tier municipalities have not yet been able to provide proposed or final rates. When they do, increases may move the total charge in some of those areas closer to the rates that result from Brampton's background study. At this time, staff is aware of proposed or draft rate increases ranging as high as 60%.

Where proposed or actual new rates are not available, the totals shown in the New/Proposed portion of the following charts combine the old lower-tier rate with the new or proposed upper-tier rate.

Comparative Rates, GTA Municipalities

Development Charges – Single Family Residential Unit

	Old			New / Proposed		
	City	Region	Total	City	Region	Total
Brampton¹ / Peel²	\$21,941	\$17,653	\$39,594	\$26,553	\$17,653	\$44,206
Markham³ / York⁴	\$15,540	\$23,752	\$39,292	\$19,206	\$23,752	\$42,958
Mississauga⁵/Peel	\$11,850	\$17,653	\$29,503	\$19,011	\$17,653	\$36,664
Richmond Hill⁶ / York	\$10,784	\$23,752	\$34,536	\$12,853	\$23,752	\$36,605
Burlington⁷ / Halton⁸	\$8,702	\$25,824	\$34,526	\$7,538	\$25,824	\$33,362

Development Charges - Non-Residential Non-Industrial per sq. metre

	Old			New / Proposed		
	City	Region	Total	City	Region	Total
Richmond Hill⁶ / York⁴	\$30	\$249	\$279	\$83	\$249	\$332
Markham³ / York	\$23	\$249	\$272	\$27	\$249	\$276
Burlington⁷ / Halton⁸	\$33	\$132	\$165	\$85	\$132	\$217
Brampton¹ / Peel²	\$92	\$94	\$186	\$109	\$94	\$204
Mississauga⁵/Peel	\$52	\$94	\$146	\$59	\$94	\$154

Development Charges - Non-Residential Industrial per sq. metre

	Old			New / Proposed		
	City	Region	Total	City	Region	Total
Burlington⁷ / Halton⁸	\$33	\$116	\$148	\$36	\$116	\$151
Richmond Hill⁶ / York⁴	\$13	\$80	\$93	\$51	\$80	\$131
Brampton[*] / Peel²	\$46	\$66	\$112	\$60	\$66	\$126
Mississauga⁵/Peel	\$43	\$66	\$109	\$48	\$66	\$114
Markham³ / York	\$23	\$80	\$103	\$27	\$80	\$107

* Brampton: old rates to be maintained for a period of 1 year

- 1 2009 Development Charge Background Study
- 2 Development Charge rates effective February 1, 2009
- 3 2009 DC Background Study for Soft Services & 2008 DC Background Study for Hard Services excluding Area Specific Charges. Combined upper and lower tier maximum area specific reaches **\$70,018** for a single.
- 4 Development Charge rates effective November 8, 2008
- 5 2009 Development Charge Background Study
- 6 2009 Development Charge Background Study
- 7 2009 Development Charge Background Study (Non - HUSP Urban Rates)
- 8 Development Charge rates effective February 1, 2009

BACKGROUND STUDY FORMAT, METHODOLOGY AND PROGRAM HIGHLIGHTS

Section 1 of the Background Study binder details the methodology required by the DC Act, the City's approach for applying this methodology, the growth forecasts used to drive the calculations, and the resulting DC charges.

Sections 2 to 7 each present one of the 6 service components that are the subject of the 6 by-laws: General (including Works Buildings & Fleet, Parking Garages, Growth Studies & Other), Recreation, Fire, Library, Transit, and Roads. Each of these sections begins with a brief text summarizing the results, followed by the detailed data for:

- the inventory of existing capital assets and determination of the permissible service level,
- the assumptions, cash flow analysis and other calculations leading to the required DC rate,
- the growth capital program for each of the ten years, by project, showing the amounts to be funded from DCs and from other sources, and
- the draft by-law proposed for that service component.

Methodology changes to note include:

- The 2004 DC Background Study calculated rates based on the first 10 years only of the roads program, to maximize collections and reduce the amount of deficit financing required to a manageable level. The combination of eligible service levels and the timing of the capital program in the new Background Study eliminated the advantage in using this approach.
- Like several other municipalities, the City has used gross population growth to calculate the eligible funding envelope for services other than roads; this change has no impact on the roads service component. The concept is further explained in Section 1 of the Background Study.

Treatment of reserve deficit balances:

A total deficit of \$52.8 million in the City's DC reserve funds was reported as of December 31, 2008. To the extent that these deficits represent funds previously expended to emplace infrastructure needed to service anticipated growth in the 2009 to 2031 period, they are included in the proposed new DC rates. However, deficits that result from non-statutory discounts and exemptions are not recoverable from future DCs. The non-recoverable amounts arising from discounts and exemptions granted under the 2004 and previous by-laws are as follows:

1. Total cost of transition measures in the 2004 DC By-laws, \$18.8 million plus accumulated interest
2. Cost of discounted rate for Industrial and Office development, \$3.0 million
3. Partial exemption for Places of Worship, \$0.6 million
4. Accumulated interest on the above, \$0.9 million

These non-recoverable deficits of \$23.3 million, along with any additional discounts and exemptions granted under the 2009 and future by-laws, will require funding from another source, or eventual capital program reductions in the same amount.

Transportation, Transit and Roads

The City is presently completing an update of its Transportation and Transit Master Plan (TTMP), a comprehensive integrated analysis of the City's transportation needs into the future that identifies the transportation improvements required to serve the community. Within the study, initiatives are identified in a wide variety of transportation service components, including road improvements, conventional transit and higher order transit. The plan identifies the best combination of transportation improvements of the various types to provide service to the rapidly expanding community. Despite the fact that the City's TTMP provides the most aggressive road network and transit expansion program possible, continued deterioration in service levels will be experienced on a city wide basis until build out of the municipality.

For purposes of this development charge analysis, transportation services within the City of Brampton are divided into two components: Transit and Roads. This is necessary because of the requirements of the Development Charges Act, which includes Transit within the services that require a 10% discount while Roads are one of the few services not requiring the 10% discount. Separate DC analyses are therefore required despite the completely integrated planning of the TTMP.

Transit Program

The Transit DC analysis has been undertaken in a similar fashion to previous development charges studies, calculating service levels over the past 10 years in terms of eligible vehicles and facilities and converting them into an average service level of \$342 per capita (population and employment combined). This service level, which includes a 20% increase to allow for the congestion factor in the road network, is then used to calculate the maximum allowable transit growth-related capital program that can be charged to development charges.

The AcceleRide program subsidies from the Federal and Provincial Government are also considered in this study. As mandated by the DCA, all subsidies are

netted off the Growth Related Capital Costs before calculating rates. The fundamental principle of doing so is to ensure that DCs are not recovered for funds that have been granted by higher levels of government with the purpose of paying for growth related capital infrastructure.

Roads Program

For Roads development charge analysis, ITrans, the City's TTMP consultants, have identified the service level of the roads using a screenline analysis which shows the actual delivered roads service level in terms of vehicle capacity ratios. This is necessary to reflect the actual roads service level delivered to the community, as it is that service level that the City must respond to and plan the necessary capital improvements to provide. In the TTMP, an extensive program of road capacity improvements (road widening, new road links, intersection improvements etc.) is identified in order to provide transportation services to the growing community into the future.

As discussed earlier in this report, the timing of roads projects in the draft TTMP is not financially sustainable in terms of current financing policy, and for purposes of the DC study, the TTMP program has been smoothed out to spread the capital costs evenly over the next 23 years.

The Roads program in the draft TTMP, and as presented in the DC study, includes funding for the Bram West Parkway as an 8 lane super-arterial road, less the portion of the road already included in the Region of Peel's DC By-Law. Inclusion of the road in the City's draft DC By-Law is intended to protect funding for this road while ultimate jurisdiction for the road is being reviewed.

10 Year Versus 23 Year Analysis

Under the Development Charges Act, the analysis of future growth-related transit costs is limited to 10 years. Roads analysis is allowed over a longer time frame, at the municipality's discretion. In this study the Roads program is calculated over the 23-year period to build out of the City. This diverges from the methodology in the 2004 study, when the charge was calculated over a 10-year period. The major difference between these two methods is the year in which the reserve funds can expect to reach a zero balance (i.e. the revenues balance with the expenditures). In the 10 year scenario it would be assumed that the City would set the Roads DC rate high enough to cover its expenditures over the next 10 years. Considering the TTMP identified a program that was heavily front ended this would have produced a very high DC rate. A more reasonable approach is to assume that the City will recover all of the necessary revenues to cover the Roads capital program by 2031 (23 years). This may necessitate additional financing costs to bridge from year to year, however these costs are recoverable in the DC revenues of future by-laws. For this study, capital costs

are spread out evenly over 23 years and although revenues may fluctuate with growth, the City is forecast to reach “break even” in 2031.

Other Programs

- The Libraries By-Law provides for two new district libraries over the next 10 years, including the Bram East library approved in the 2009 budget. There is no provision for a new central library, as the eligible service level in this program is fully utilized for the two branches and ongoing collections and equipment growth.
- The Fire Services program includes two new stations as well as expansion of the Maintenance and Training facilities associated with the replacement of Stations 201 and 203. The Fire Services program also contains over sizing of \$9.5 million to service future growth post 2018.
- The Public Works program includes the planned Works Yards program based on the timing originally reflected in the 2009 10-year capital forecast, although it is clear that the cost of the program is beyond the DC-eligible funding envelope. Other funding is shown for the next project in the program, slated for 2010 approval, and a source will need to be determined when considering the City’s capital funding strategy.
- The Recreation programs, at a total 10 year cost of \$439 million, reflects the program as initially defined in the Master Plan process, and subsequently in the 2009 10-year capital forecast. As discussed previously in this report, deferral and/or reduction of some projects from the 2010 – 2013 period is proposed to accommodate funding limitations. Consistent with the capital forecast, 2 major facilities are included in the 10-year program.

POLICY ISSUES

A number of policy issues are highlighted and explained in this section, for consideration by Members of Council:

1. Transition provisions
2. Industrial / Office Discount
3. Exemption for Places of Worship
4. Treatment of temporary structures
5. Other Development Charge Credits, Exemptions and Waivers
6. Administrative issues

1. Transition Provisions

The City’s 1991 and 1999 DC By-laws included no phase-in provisions and provided only for some degree of recognition of pre-existing servicing

agreements or site plan applications. No transition was provided for residential development.

In 2004, while the original intent was to provide no transition provisions, measures were ultimately put in place to maintain the then current rate under the previous By-law until the end of the month of approval, followed by phase in to the new rates over a period of four months. These measures resulted in a major surge in demand for building permit issuance that distorted results for two years, and cost the City nearly \$19 million in lost revenue. As these were non-statutory discounts, the loss in revenue is not recoverable in future by-laws and will ultimately need to be recovered through the tax base, another non-DC funding source or capital program reductions.

No transition or phasing in for any components of the new DC rates has been proposed in the draft By-laws. The DC regime has been in effect now for 18 years and the development industry is well aware of the legislated sunset provisions in the City's by-laws. The limits on DC collections in the DCA, the rapid rate of growth that has taken place in the City and resulting pressure for massive amounts of infrastructure, have all combined to produce a major cash flow deficiency in the City's DC reserves and pressure on non-DC capital funding sources. The negative balances in the reserves are exacerbated by the revenue losses from past transition measures and discounts, losses that cannot be recovered from future DCs. Any transition measures in the new 2009 by-laws would add to this permanent financial pressure.

In addition, the Non-Residential Construction Index from Statistics Canada, which is used to index the DC rates, has recently begun to decline. If this decline persists through 2009, the DC rates proposed through this study would decrease in 2010 along with the cost of construction.

Nevertheless, staff recognizes that the development industry is facing serious constraints due to current market conditions and reduced credit availability. The result has been a precipitous decline in DC revenues beginning in 2008. As work continues with industry representatives over the coming weeks in reviewing the draft DC by-laws, staff will give full consideration to the advisability of DC based stimulus measures alongside other efforts underway concurrently to facilitate development, and will report back to Council.

2. Industrial / Office Discounts

Over the period of the 2004 DC By-Laws, the City has provided a discounted Development Charge rate to industrial and office development to remain competitive with neighbouring municipalities in attracting employment generating operations and development to Brampton. The discounted rate was originally intended to expire after three years, but was extended in 2007 for the remaining

life of the By-laws. The amount of this discount was initially approximately 11%, but increased to about 33% following approval of the Roads Costing by-law amendment in early 2008.

The discounts must be evaluated based on the benefits both to the industrial firms and to the citizens of Brampton. Staff has given consideration to exclusion of warehouse and distribution operations from the discount, as they tend to be relatively less employment intensive but demanding of infrastructure. During the 5 years of the current by-laws, approximately 21% of the discounts granted were provided to warehousing operations and 79% to other types of industrial developments. Office development has been minimal.

After due consideration of current economic conditions, staff recommends that the discount be extended for an initial period of one year in its present form, at the rate currently in effect under the existing By-laws, subject to indexing as applied to all rates. This provision will be subject to review annually with formal approval required for each annual extension.

The City has provided approximately \$3.0 million in discounts to industrial and office development over the past 5 years. Like the transition measures described in the previous section, this loss of revenue cannot be recuperated in future DC by-laws. It will eventually need to be replaced by funds from another source or the capital program reduced accordingly. Based on the current industrial and office forecast data used for the DC rate calculations, if the City were to discount the proposed industrial rate (\$60.05/sqm) to its current rate (\$46.49/sqm) for a period of five years, the revenue foregone at the end of 2013 would be approximately \$12.7 million (in 2009 \$s) or approximately \$2.5 million per year.

3. Exemption for Places of Worship

As directed by Council on June 4, 2008 (CW215-2008), staff continues to examine the issue of exemptions for Places of Worship. The 2004 and previous DC by-laws exempt from DCs those portions of a Place of Worship building that are used solely for worship. This definition has caused some difficulty in the administration of the by-law, as "portions used for worship only" can be difficult to interpret and quantify. It should be noted, however, that the City's current treatment is identical to that of the Region of Peel. As presented to Council on previous occasions, comparison to other municipalities is inconclusive because practices vary widely. While the City and the Region provide for partial exemption, some municipalities such as the Region of Halton provide full exemption, while others such as the City of Mississauga provide no exemption.

The intention is to offer for consideration by Council a mechanism to increase the degree of exemption from DCs for Places of Worship by expanding the definition of worship area, while excluding from the exemption certain potentially

“commercial” activities such as banquet halls, private schools and major day care facilities, and housing developments. The definition of exempt areas needs to be unambiguous and to the extent possible, not subject to interpretation or judgment. To accomplish this, it is planned that the exemption will be based on the terminology and definitions in the City’s proposed new planning policy on Places of Worship, and can be applied with reference to approved site plans.

Because the new planning policy remains under review, the draft by-laws do not yet incorporate the potential changes. It is expected that further certainty will be achieved in the coming weeks, such that the final by-laws submitted for approval can include a workable solution.

4. Treatment of temporary structures

The 2004 DC By-laws provide an exemption from DCs for temporary buildings or structures, defined as those that are erected for periods not exceeding 8 months. A temporary structure must be removed within 8 months or it will be considered permanent in nature and therefore subject to DCs. As directed by Council on May 14, 2008 (CW107-2008), staff examined the possibility of providing relief to covered sports facilities intended for seasonal use without requiring the facility to be dismantled within the 8 months permitted temporary use. This direction arose in response to one specific case (Wild Water Kingdom, seasonal use soccer dome) for which payment of DCs has been deferred pending approval of the new DC By-law. Staff has found almost no municipalities that provide such an exemption through their DC by-laws. One exception is the City of Hamilton where covered sports fields and related seating are exempt from DCs. In a handful of other municipalities such as Niagara the exemption is also available, however it is accomplished through agreements or standard administrative practices outside of the official by-law, and may require provision of securities to guarantee use is seasonal only, not year round. It appears that in some instances these types of facilities may be developed in partnership with a municipality and therefore qualify as municipal capital facilities, exempt from DCs.

As a private commercial operation, the Wild Water Kingdom facility does not contribute to the City’s public recreation program and therefore staff do not recommend a change in the By-laws to provide an exemption for seasonal use of structures that do not meet the existing definition of a temporary structure. No change in this respect is included in the draft By-Laws.

5. Other Development Charge Exemptions, Credits and Waivers

There are various circumstances under which DCs are not payable to the City despite the fact that development is taking place on the lands. Such circumstances generally fall into one of the following categories:

- a) Exemptions mandated by the *Development Charges Act, 1997* and Ontario Regulation 82/98;
- b) Exemptions granted by City Council;
- c) Exemptions related to redevelopment;
- d) Credits for DCs related to capital contributions made prior to October 28, 1991;
- e) Credits for the provision of services in lieu of payment of DCs.

a) Exemptions From DCs Mandated By The Legislation: Expansion of Existing Buildings

Section 4 of the DCA provides for exemptions from DCs related to certain expansions of existing industrial buildings. Subsection 2(3)b of the Act and section 2 of the Regulation restrict the City from collecting DCs when existing residential dwelling units are being enlarged, or when up to two additional dwelling units are being created in a single detached dwelling, or when one additional dwelling is being created in a semi-detached, row house or other residential building, subject to specific limitations as set out in the legislation.

All of the applicable legislative exemptions are reflected in the City's proposed DC by-laws as they were in the City's previous DC by-laws. No substantive changes in this regard are being proposed in the draft DC by-laws.

b) Exemptions From Development Charges Granted By City Council:

i) Exempt Institutions

The draft DC by-laws provide exemption from DCs for the same categories of institutions as were set out in the City's 2004 DC by-law. The exempt institutions in section 20 of the draft by-laws include:

- land, buildings or structures used as hospitals governed by the *Public Hospitals Act*;
- lands, buildings or structures owned by and used by the City, the Region and their local Boards, provided that lands developed for residential uses are not exempt (accordingly, lands developed by Peel Children's Aid Society and Peel Non-Profit Housing Corporation are subject to the City's DCs);
- lands, buildings or structures owned by the boards of education and used only for school purposes;
- lands, buildings or structures owned and used by a college or university;

- land, buildings or structures owned by a church or religious organization used only as a place of worship; and
- land, buildings or structures used for the purpose of a temporary residential sales office.

Other than the potential expansion of the exemption for Places of Worship discussed in a previous section of the report, no changes are proposed.

ii) Exempt Land Uses

Lands used for agricultural uses are exempt from payment of DCs. As well, temporary buildings or structures in place for a continuous period of less than eight months are also exempt under section 22 of the proposed DC by-laws. No changes are proposed.

iii) Central Area Development Charge Incentive Program

In July of 2000, City Council established the Development Incentive Grant Program (DCIP) in order to encourage the development of residential units in the Brampton Downtown and Queen Street Corridor secondary plan areas. The City's general tax base is responsible for bearing the costs associated with the credits granted by Council under the program. The cost of the grants is paid over 25 years, as tax revenue is earned from the additional property assessment. The program currently permits a maximum funding envelope of \$1.56 million per year, with no specific unit cap on the program. To date, grants have been allocated for 1,746 units under the program.

This program is not reflected in the proposed DC by-laws as it is a separate incentive program, funded primarily through the general tax base. Although each grant is paid over a 25 year period, outstanding amounts are reported as payables to the DC reserve funds, such that they do not contribute to the deficit in the funds.

It should also be noted that staff are pursuing proposed amendments to the CIP program that would potentially provide DC exemptions for minor conversions of residential structures for service commercial purposes that meet the City's planning objectives for Main Street North and Queen Street West. This will be the subject of a separate report

c) Exemptions From Development Charges Related To Redevelopment

Section 23 in each of the proposed by-laws deal with the redevelopment of lands. Where there is a conversion of space, or where a building has been demolished, the owner is given credit towards the DCs otherwise payable. The credit is given for a portion of the previous building, in accordance with the formula set out in the proposed by-laws. If the building had been accidentally destroyed by fire after October 27, 1991 (being the day before the City's first DC by-law came into

effect) then it is deemed, for purposes of calculating the DCs owing under for those lands, to have been demolished under a demolition permit issued on the date of the fire.

Staff has encountered situations in which developers have requested the application of a Demolition credit to their DC payable before the actual demolition has occurred and a demolition certificate is provided. In many cases the demolition of the structures on a property may be completed simultaneously with the redevelopment of said lands. Under the City's current by-laws, a developer wishing to obtain a building permit before the demolition has taken place would be required to pay the full amount of the DC payable with no credit for the demolition. It is not always economically feasible for a developer to complete the demolition and building process separately and as such staff have included a change in the wording of the by-laws to provide more flexibility in timing requirements for the application of demolition credits. The re-wording was designed to achieve the following:

- 1) Allow demolition credits to be applied before the occurrence of the actual demolition (based on issuance of a demolition permit); and
- 2) Provide limitations and recourse should the demolition not be completed within a specified period of time.

d) DC Credits For Capital Contributions Made Prior To October 28, 1991

In the 2004 DC by-laws, the City continued to recognize section 14 credits that were legally recognized, in writing, by the City, pursuant to the City's first DC by-law. In order to ensure that the underlying principle of the development charges legislation was not compromised (namely, that the capital costs associated with growth, for eligible services, continued to be borne primarily by the developers), the City included the costs of the recognized section 14 credits in the "Growth Studies and Other" component of its proposed DC by-law dealing with General Government Services.

In the draft 2009 DC By-Laws these provisions remain consistent with the 2004 by-laws, however the section 14 credits are recognized in the "Roads" component of the program.

e) Credits For Services Provided In Lieu Of Paying Development Charges

- i) Section 13 Credits under the Old DCA

Under section 13 of the Old DCA, the City had the authority to permit the provision of services in lieu of the payment of all or any portion of a DC otherwise owing. There are no section 13 credits owing to landowners under the Old DCA.

ii) Section 38 Agreements under the New DCA

Section 17 of the proposed by-laws authorizes the City to enter into agreements with owners for the provision of services in full or partial satisfaction of the DCs otherwise owing. This provision contemplates agreements being entered into between the City and the owner pursuant to section 38 of the Act. This provision was also contained in the City's 2004 by-law.

6. Administrative Issues

Several changes to the draft by-laws have been made that are collectively addressed as administrative issues:

- a) Combination of Indoor and Outdoor Recreation programs
- b) Differentiated rates for Row homes
- c) New definition of Small Apartments
- d) Non-Apartment Residential Mechanical Rooms

a) Combination of Indoor and Outdoor Recreation programs

Prior to the 2004 DC review, the City had a single DC By-Law covering all eligible service components. In 2004, 7 different by-laws were established, each covering a different service. The intent behind this change was to provide for more flexibility to re-open a single by-law in response to changing circumstances. The utility of this approach was demonstrated by the amendment of the Roads by-law in 2008 to reflect new cost data. The 2004 by-laws included separate by-laws for Indoor Recreation and Outdoor Recreation. In the draft 2009 by-laws these are combined in a single Recreation DC By-Law. The intent behind this change is to provide greater flexibility in responding to evolving trends in recreation usage.

b) Differentiated rates for Row homes

In the 2004 by-laws there was no differentiation between Single, Semi-Detached or Row Houses. This meant that Developers would pay the same rate regardless of the variation in average occupancy of the different housing types. Recognizing the inherent inequity of this past practice, in keeping with the practice of many other municipalities and in response to requests from the development industry, staff has introduced a separate charge for Row Houses. The technical modeling of the DC calculation is essentially based on a break even analysis, whereby the DC rates are set using growth forecasts and the related number and type of units to attract the exact revenue needed to cover the total capital program costs. Per capita rates are calculated and then applied to the different housing types based on average PPU's for each type of unit. This means that the differentiated rate for Row homes has no financial impact, the lower rate for Row Houses being offset by a slightly higher rate for Single and Semi-detached units.

c) Definition of Small Apartments

In the current By-Laws, the definitions applicable to apartment units do not allow for recognition of small residential units outside of an apartment building (except for Senior's housing) as eligible for the DC rates for apartments. During the 2004 by-law period, at least one development that included small units in stacked townhouses, was required to pay the full Single Detached home rate for all units because the small units did not meet the criteria for the Small Apartment rate. Staff propose that the definition of a small apartment be expanded to include comparable small units that exist outside of apartment buildings. This recognizes the trend towards increased variety of housing types and the intensification required to accommodate provincial growth targets. One approach to this, used by the Region of Peel, is to define a "small residential unit" as opposed to a "small apartment". This provides the necessary flexibility in the By-Laws to apply the small residential unit rate outside of an actual apartment building. The draft by-laws have been prepared utilizing the same definition as that of the Region of Peel, which will facilitate joint administration of DC collections.

d) Non-Apartment Residential Mechanical Structures

In a recent case, curb-side pick-up of garbage/recycling is not permitted in a proposed development of stacked townhouses. The developer has proposed a centrally located enclosed garbage/recycling structure. In most developments of this type the garbage/recycling area is simply fenced in and therefore is not subject to DCs. The developer purports that an enclosed structure is beneficial to the community as it obscures unsightly garbage and odours. If this same type of garbage/recycling facility were installed in an apartment building it would not be subject to DCs as these developments are charged on a per unit basis. Similarly, if it were a part of a non-residential structure, it would be exempt as mechanical space. Under the existing by-laws, this structure would be considered non-residential as it is not a part of an apartment building, nor is it a mechanical function within the structure that it services (i.e. it is mechanical, but it services surrounding buildings and is therefore not exempt). To respect the spirit of the DC By-Laws, staff has included a change in the wording of the draft by-laws to provide exemption for those portions of structures that are mechanical in nature, that would normally be exempt in apartment buildings, and that directly service a group of residential structures within a single site plan.

Policies and Practices Unchanged from the 2004 By-Laws:

1. The study presupposes that City development charges will be collected on all development (residential, commercial, office, industrial and institutional) within the boundaries of the City of Brampton.

2. The draft by-laws provide that the apartment rate for apartments larger than 750 sq. ft. be applied to single family, semi-detached, and multiple dwellings in a planned seniors retirement community.
3. Development Charge collection and administration policies will be as consistent as practicable with those of the Regional Municipality of Peel in order to simplify by-law administration and aid understanding for those required to pay the charges.
4. The rules regarding application of the by-law(s) and exemptions within the by-law(s) will be codified.
5. The by-law will permit the payment of a development charge in cash or through services-in-lieu agreements, at the sole discretion of the City, provided that the City shall be under no obligation to enter into services-in-lieu agreements.
6. Interest on any refunds of development charges will be calculated at the Bank of Canada rate on the date of by-law enactment as prescribed in the O.Reg. 82/98 s.11(2);

STATUTORILY REQUIRED DECISIONS IN SUPPORT OF THE BY-LAWS:

1. Prior to passing the by-laws, Council will be required to confirm its intention to ensure that the increase in the need for services attributable to the anticipated development identified in the Background Study will be met.
2. Prior to passing the by-laws, Council will also be required to confirm its intention that the future excess capacity identified in the Background Study shall be paid for by development charges or similar charges.
3. Prior to passing the by-laws, Council will be required to confirm that no further public meetings will be required.

CONCLUSION AND PROCESS FORWARD

This report and the accompanying Background Study summarize the growth-related capital requirements and the resulting development charge rates in keeping with the methodology prescribed by the DC Act. These charges represent funding that is critically needed if the City is going to be able to provide the capital facilities required to service growth.

Initial findings of the study pointed to an unaffordable amount of deficit. A \$300 million limit on internal financing of DC deficits is recommended as an

acceptable level of financial risk, subject to further review in the context of an overall capital funding strategy. Adjustments in the timing of capital programs are incorporated in the study to align the programs with financial capacity. As a result, the increase in the full cost DC rates is less than in past DC by-law reviews and mainly limited to the effect of increased average occupancy in residential development.

The process forward towards approval of the new by-laws will include:

1. A non-statutory meeting for the general public, to provide an overview of development charges in relation to growth in the City, scheduled for June 11, 2009 at 7:30pm.
2. The Public Meeting required by the DC Act to be held on June 22, 2009 at 3:00pm,, for which notice has been published,
3. Presentation of final recommendations, subsequent to the Statutory Public Meeting.
4. Final approval of the new By-Laws is proposed for August 5, 2009. The current by-laws will expire on August 11, 2009.

Consultation with stakeholders will continue throughout this period.

(Original Signed By)

Bonnie Eskelson
Director, Financial Planning
& Budgets

(Original Signed By)

Mo Lewis
Commissioner of Finance &
City Treasurer

I INTRODUCTION

The City of Brampton Development Charge Background Study is presented as a step in the process of determining and approving new development charge by-laws in compliance with the Development Charges Act, 1997(DCA).

The DCA and Ontario Regulation 82/98 (O. Reg.82/98) require that a development charge background study be prepared in which development charges are determined with reference to:

- A forecast of the amount, type and location of housing units, population and non-residential development anticipated in the City;
- The average capital service levels provided in the City over the 10 year period immediately preceding the preparation of the background study;
- Review of capital works in progress and anticipated future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred or to be incurred by the City or its local boards to provide for the expected development, including the determination of the growth and non-growth related components of the capital projects;
- An examination of the long term capital and operating costs for the capital infrastructure required for each service to which the development charge by-law(s) would relate.

The study presents the results of the review, which determines the growth-related net capital costs attributed to development that is forecast to occur in the community. These growth-related net capital costs are then apportioned among various types of development (residential; non-industrial/non-office; industrial/office) in a manner that reflects the increase in the need for each service attributable to each type of development. The study arrives, therefore, at the development charges for various types of development.

Hemson Consulting Ltd. was engaged to provide overall policy advice, peer review, benchmarking and other support throughout the preparation of the DC background study. Watson and Associates Economists Ltd. also provided valuable DC input and advice on the Roads and Transit Service components of the study. ITrans Consulting provided technical data for the Roads and Transit components.

II THE METHODOLOGY INCORPORATES A CITY-WIDE APPROACH TO ALIGN GROWTH-RELATED COSTS AND BENEFITS TO FUTURE GROWTH

Several key steps are required in calculating any development charge. However, specific circumstances arise in each municipality, which must be reflected in the calculation. In this study the approach to the development charges is focused on Brampton's future development and provides for alignment of growth-related costs with the development that necessitates them. This study incorporates a City-wide approach for all services which the City provides.

A. CITY-WIDE DEVELOPMENT CHARGES

The City provides a wide range of services in the community and has an extensive inventory of facilities, land, infrastructure, vehicles and equipment. The DCA provides municipalities with flexibility to define the services that will be included in the development charge by-laws, within the limits imposed by the provisions of the Act and Regulations. The DCA also requires that the by-law(s) designate the area within which the by-law(s) shall be imposed. The development charges may apply to all lands in the municipality or to other designated development areas as specified in the by-laws.

Services Based on a City-Wide Approach

For the services that the City provides, a range of capital facilities, land, equipment and infrastructure is available throughout the City: arenas, community centres, pools, libraries, fire stations, arterial roads, buses, parks and so on. All City residents have access to all municipal facilities. As new development occurs, new facilities will need to be added so that overall service levels in the City do not decline. A widely accepted method for sharing the growth-related capital costs for City services is to apportion them over all new growth anticipated within the urban boundary in the City.

The following services are included in the City-wide development charge calculations:

- General Government:
 - Public Works Building and Fleet
 - Parking Facilities
 - Growth Studies and Other
- Recreation;
- Fire;
- Brampton Public Library Board;
- Transit;
- Roads (including associated structures, sidewalks, streetlights, signals, landscaping and intersections, etc.)

These services form a reasonable basis on which to plan and administer the development charges. The analysis of each of these services examines the individual capital facilities and equipment associated with that service. For example, Fire includes Fire vehicles, bunker gear, opticom devices, equipment, stations and associated land requirements as allowed under the DCA.

The resulting development charge for these services will be imposed against all development anywhere in the City.

B. KEY STEPS IN DETERMINING DEVELOPMENT CHARGES FOR FUTURE GROWTH-RELATED PROJECTS

Several steps are required in the calculation of development charges for future growth-related projects. These are summarized in “Flow Chart 1” at the back of this section and detailed on the preceding pages.

1. Growth Forecast

The first step in the methodology requires a development forecast to be prepared for the study period from 2009 to buildout in 2031, for Roads, and 2009 to 2018 for all other services. The forecast of the future residential and non-residential development used in this study was prepared by the City’s Planning Department in conjunction with Hemson Consulting Ltd. as of March 2009.

In calculating the development charge, the growth-related net capital costs resulting from residential growth are spread over the total additional population

growth resulting from the addition of new housing units. This represents the population over which residential development charges will be collected.

In order to assign Development Charges to Dwelling Units by Type, the following average occupancies have been calculated based on census data:

Dwelling Type	Occupancy per unit
Singles/Semis	4.0
Rows	3.3
Large Apartments	2.7
Small Apartments	1.5

The non-residential portion of the forecast estimates employment and related building space to be developed over the next 10 year and 23 year period to buildout. The forecast provides estimates for four categories of employment; retail and service commercial, major office, industrial and mixed commercial-industrial, and institutional. Factors for floor space per worker by category were provided by Hemson Consulting Ltd. and are used to convert the employment forecast into gross floor area for the purposes of the development charges study.

2. Service Categories and Historic Service Levels

The Development Charges Act, 1997 provides that the increase in the need for service attributable to anticipated development

“... 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 preparation of the background study...”(s.5.(1) 4).

Historic 10-year average service levels thus form the basis for development charges. A review of the City’s capital service levels for buildings, land, vehicles, and so on has therefore been prepared as a reference for the calculation so that the portion of future capital projects that may be included in the development charge can be determined. The historic service levels used in this study have been calculated based on the period 1999-2008.

For roads and related infrastructure, historic service levels as well as the City’s engineering standards and subdivision servicing practices form the basis for calculation of the charge.

3. Steps to Determine the Growth-Related Capital Forecast and to Analyze Net Capital Costs to be Included in the Development Charges

Step (i): Net Capital Forecast Determination

A capital forecast has been prepared by the City's departments and Boards as part of the present study for each development charge service. The forecast identifies growth-related projects and their net capital costs, after allowing for capital grants, subsidies or other contributions as required by the Act (DCA,s.5.(2)). The capital forecast provides the cornerstone upon which development charges are based. The DCA requires that the increase in the need for service attributable to the anticipated development may include an increase

“... only if the council of the municipality has indicated that it intends to ensure that such an increase in need will be met.”(s.5.(1)3.)

In conjunction with the DCA, s.5 (1) 4, referenced above, these sections of the Act have the effect of requiring that the development charge be calculated on the basis of the historic 10-year average service levels or the service levels embodied in future plans of the City, whichever results in a lower allowable growth-related capital forecast. The growth-related capital forecast prepared for this study ensures that development charges are only imposed to pay for projects that are intended to be purchased or built in order to accommodate future anticipated development. It is not sufficient in this calculation of development charges merely to have had the service in the past. There must also be a demonstrated commitment to continue to provide facilities or infrastructure in the future. In this regard, Ontario Regulation 82/98,s.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.”

Step (ii): Total Growth-Related Net Capital Costs Determination

The City's 2009 ten-year capital forecast and the raw outputs of the City's draft Transportation & Transit Master Plan (TTMP) update, forecast a \$1.679 billion roads program (net of Developer Contributions for local portions of roads) to buildout in 2031 and Capital spending of \$932.7 million (including subsidies/grants) over 10 years for all other services.

Not all of these costs are to be recovered from new development by way of development charges. For some projects in the growth-related capital forecast, a portion of the project represents replacement costs, which confers benefits to existing residents. An example of this may be seen in a recreational facility expansion, whereby the portion that of the project is an expansion may be deemed growth and therefore receive DC funding, while the retrofit of the existing portion is funded through other sources and is seen as a benefit to existing residents.

As required by the DCA s5(1)6., these non-growth portions of projects and their associated net costs are the funding responsibility of the City from non-development charge sources. The amount of City financing for such non-growth shares of projects is also included in the preparation of the growth-related capital forecast and identified within the growth capital project list for each service.

There is also a requirement in the DCA to reduce the applicable development charge by the amount of any previously built/acquired “uncommitted excess capacity” that is available for a service. Uncommitted excess capacity is currently existing capacity over and above the historical 10-year average service level. It has been determined, through a service level calculation for each service component that there was no uncommitted excess capacity to be recognized in the DC calculation.

Step (iii): Total Growth-Related Net Capital Costs After Discounts Determination

In calculating development charges, the “Total Growth-Related Net Capital Forecast” costs must be reduced by 10% except for water, wastewater, storm drainage, services related to highways, electrical power and fire protection (DCA,s.5.(1)8.), yielding a discounted growth-related net capital cost. The 10% discount is applied to all services not named as exceptions (e.g. recreation, libraries, transit) and must be financed from non-development charge sources.

Step (iv): Calculate Present Value Of the Net Capital Costs

Once all deductions have been made from the Growth-Related Net Capital Forecast, a present value calculation is performed. This is done to compare the Growth-Related Net Capital Forecast against the historical service levels that are calculated in current dollars.

In order to ensure that the City is collecting only the amount of development charges supported by the historical service standard, amounts in excess of the allowable growth capital funding envelope are identified as a “Post Period Benefit” beyond the DC forecast period. These amounts are not included in the proposed development charge. These costs will be collected in future DC by-laws except in cases where there has been an increase in the level of service provided that exceeds historical levels. For example, it has been identified that future development charges will not fully fund the proposed transit growth capital program as the proposed program represents a significant increase in the level of transit service forecasted to be provided.

Step (v): Attribution to Types of Development

The next step in the determination of development charges is the allocation of the growth-related net capital costs between the residential and the non-residential sectors. This is done by using different apportionments for different services in accordance with the demands which the two sectors would be expected to place on the various services and the different benefits derived from these services.

The apportionment is based on the expected demand for, and use of, the service by each sector. This is generally based on shares of population and employment growth.

Finally, the residential component of the development charge is applied to different housing types on the basis of average occupancy factors shown in section B, subsection 1 above. The non-residential component is applied on the basis of forecasted gross building space in square metres.

Step (vi): Final Adjustment

The final determination of the development charge results from adjustments made to the growth-related net capital costs for each service and sector resulting from the application of any unallocated growth-related reserve fund balances that are available to finance the growth-related capital costs in the capital forecast. A cashflow analysis is also undertaken to account for the timing of projects and receipt of development charges. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the DCA.

All positive development charge reserve fund balances for eligible services are deemed to be used for prior growth. This essentially means that the forecasted cost of the Growth Related Capital Program for each service must be reduced by the amount of the positive balance found within the reserve fund associated with that service.

The reserve fund balances are adjusted to exclude non-statutory discounts that have been granted during the previous by-law period. For this DC study, these include discounts given to Places of Worship, Industrial and Office Developments as well as transition measures put in place for the implementation of the 2004 DC by-law. These discounts must be funded through non-DC sources and therefore cannot be considered as DC recoverable. The interest costs incurred by granting these discounts are also removed from the reserve balances so that only those deficits or surpluses in the reserve balances that are attributable to recoverable growth funding are included.

The table below identifies the adjusted reserve balances.

Program	Balance at December 31st, 2008
General Government	\$1,448,800
Library	\$8,261,261
Fire	(\$11,921,828)
Recreation	\$3,432,193
Public Works	(\$1,854,022)
Parking Lots	\$1,960,567
Transit	(\$7,436,849)
Roads	(\$21,886,959)

C. PORTIONS OF PAST PROJECTS THAT WERE OVERSIZED TO ACCOMMODATE FUTURE DEVELOPMENT ARE INCLUDED IN THE CALCULATION

In addition to identifying new facilities to be acquired in the next 10 year period or longer there are also growth-related facilities constructed/acquired in the past which were oversized to accommodate future development (i.e. Fire Stations). The oversized component may be included as an eligible cost in the calculation of the development charge under Ontario Regulation 82/98.

The proportionate net capital cost (including the required 10% reductions) of such facilities that are available to service growth occurring in the 2009-2018 period is identified in the analysis and forms a component of the development charge calculation.

These portions are taken into consideration in the form of negative development charge reserve fund balances for eligible services. The cash flow analyses for those services with negative balances begin with opening balances in the negative so that the monies that have already been spent on growth beyond the previous by-law are recovered within the current by-law period.

III POPULATION AND EMPLOYMENT FORECAST

This section sets out the background for the growth forecast used in calculating the development charges and provides a summary of the forecast results. This is followed by a summary of the results of the housing unit and population forecast and of the non-residential employment and space forecast.

A. THE RESIDENTIAL FORECAST IS BASED ON THE 2006 CENSUS AND LATEST AVAILABLE HOUSING MARKET INFORMATION

The base 2006 Census information for the forecast has been updated to include all currently available data.

The City's population is expected to increase by about 26% over the next 10 years reaching 587,600 by the year 2018. By 2031, the City will see an increase of 52% resulting in a population of 707,000.

The population figures referred to above reflect the "net" increase in population. The "net" population includes both the new growth and the decline in the existing population. In this study the "gross" population, which is the population increase directly attributable to growth in new units, is used to calculate the maximum allowable growth funding envelope for non-road services. This is calculated by multiplying the 10-year historical average service level per capita for a given service by the "gross" population. In the 2004 study the maximum allowable funding envelope was calculated by multiplying the per capita service level by the "net" population growth. While both methods are acceptable under the DCA, the "gross" method helps to ensure that development charges pay for levels of service in newly developing areas similar to the average service levels available in the existing community. It is also deemed more equitable that any implicit increase in service level in the existing community which arises due to population decline is retained by the existing community, not used to benefit new development.

It is important to note that this methodology does not change the calculation for road DCs as this growth envelope is not limited by a service level per capita calculation, but rather the total growth funding needed until build out is used.

The following table illustrates the forecasted growth in new units over the next 23 years:

RESIDENTIAL FORECAST	Existing	2009-2018		2009-2031	
	As At Mid-Year 2008	Forecast Change	As at Mid Year-2018	Forecast Change	As at Mid-Year 2031
Households	135,627	39,910	175,537	81,973	217,600
Population Census	466,300	121,300	587,600	240,700	707,000
In New Households		143,940		287,140	

*Census population reported above does not include undercount.

B. NON-RESIDENTIAL SPACE FORECAST IS BASED ON FORECAST EMPLOYMENT GROWTH.

Non-residential space is forecast for four categories: retail and service commercial, major office, industrial and mixed commercial-industrial and institutional. The retail space includes the traditional retail forms; that is, regional centres, district centres, neighborhood convenience; highway commercial, etc. occupied by retail and local service users. Major office space is office space in freestanding buildings of 20,000 sq. ft. or greater. The industrial and mixed commercial-industrial space includes those buildings in Brampton's industrial employment areas and may include some non-traditional retail space and office space associated with industrial or storage uses. Finally, institutional uses include the traditional forms for schools, hospitals, governments, etc.

A total of 5.1 million square metres of chargeable non-residential space is forecasted to be developed from 2009 to 2018. Roughly 77% of this growth is anticipated to be industrial, with the remainder being commercial and office space. By 2031 it is expected that 9.3 million square metres of chargeable non-residential space will be developed.

The following table illustrates the forecasted growth in non-residential space and employment over the next 23 years:

NON-RESIDENTIAL FORECAST	Existing	2009-2018		2009-2031	
	As At Mid-Year 2008	Forecast Change	As at Mid-Year 2009	Forecast Change	As at Mid-Year 2031
Employment	177,510	75,100	252,610	141,290	318,800
Industrial / Office		51,880		100,820	
Non-Industrial		23,220		40,470	
Non-Residential Building Space (sq.m.)		5,102,820		9,298,650	
Industrial / Office		4,185,620		7,699,850	
Non-Industrial		917,200		1,598,800	

IV SUMMARY OF HISTORIC CAPITAL SERVICE LEVELS

The DCA and Ontario Regulation 82/98 require that the development charges be set at a level no higher than the average service level provided in the municipality over the 10-year period immediately preceding the preparation of the background study, on a service by service basis.

For non-engineering services (fire, library, transit, etc.) the legislative requirement is met by documenting historic service levels for the preceding 10 years, in this case, for the period 1999 to 2008. Typically, service levels for non-engineering services are measured as a ratio of inputs per capita. For roads and related infrastructure, historic service levels as well as the City's engineering standards are referenced.

O. Reg. 82/98 requires that when defining and determining historical service levels, that both quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square foot per capita. The qualitative aspect is introduced by the consideration of the monetary value of the facility or service. In the case of buildings, the cost would be shown in terms of \$'s/square foot to replace or construct a facility of the same quality. This approach helps to ensure that the growth-related capital facilities that are to be charged to new growth reflect not only the quantity (number and size) but also the quality (value or cost) of service provided historically by the City. Both the quantitative and qualitative aspects of service levels used in the present analysis are based on information prepared by City staff and Boards based on historical records and their experience with costs to acquire or construct similar facilities, equipment and infrastructure.

The following table illustrates the calculated 10 year historical service level for each service (see Roads section for detailed explanation of its service level analysis):

SERVICE	10 YEAR AVERAGE SERVICE LEVEL	
GENERAL GOVERNMENT		
PUBLIC WORKS	\$123.30	\$ /population & employment
PARKING	\$99.54	\$ /population & employment
GROWTH STUDIES AND OTHER	\$14.74	\$ /population & employment
LIBRARY	\$174.02	\$ / capita
FIRE SERVICES	\$530.18	\$ /household
RECREATION	\$2,105.86	\$ / capita
TRANSIT	285.02	\$ /population & employment

V THE GROWTH-RELATED CAPITAL FORECAST

A. A GROWTH-RELATED CAPITAL FORECAST WAS PROVIDED FOR COUNCIL'S APPROVAL

The DCA requires the Council of a municipality to express its intent to provide future capital facilities at the level incorporated in the development charges calculation. As noted above in Section II, Ontario Regulation 82/98, s.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.”

Based on the growth forecasts in Section II, staff of City departments and the Library Board developed a growth-related capital forecast setting out those projects that are required to service anticipated growth. For all services the capital plan covers the 10 year period from 2009-2018. In addition, for the Roads program, the plan covers 2019 to 2031 to align with the provincial growth plan.

Council adopted the 10-year growth-related capital forecast developed as part of the 2009 capital budget submission for the purposes of the development charges calculation. The results of the Transportation and Transit Master Plan (TTMP) have been included in this development charge review with the understanding that Council will endorse this Plan or the necessary portion thereof in conjunction with passage of the new Development Charges by-law.

It is assumed that future capital budgets and forecasts will continue to bring forward the growth-related projects contained herein that are consistent with the growth occurring in the City.

B. SUMMARY OF THE GROWTH-RELATED CAPITAL FORECAST BY SERVICE

A summary of each development charge capital program, including historical inventories, service levels, major projects and development charges is included in each program's section.

In conjunction with the City's DC consultants, Hemson Consulting Ltd., and the TTMP consultants, ITrans, City staff have reviewed the forecast expenditures for the major projects contained within the 10 year capital forecast for non roads and 23 year capital forecast for roads. Minor adjustments were made to the forecast to ensure growth and non-growth funding splits and accurate total project amounts were defined appropriately and in accordance with legislation. While the TTMP output for Roads has been presented in this background study as unmodified, it should be understood that the cash flow and resulting DC calculations that are presented use a different timing premise than outlined in the TTMP data. This issue is discussed in more detail in both the covering report and the Roads section of this study.

The following table summarizes the growth related capital program for each service category:

Service	Growth-Related Capital Forecast				
	Total (Net of Grants/ Subsidies) (\$000)	Prior Growth (\$000)	Benefit to Existing Share (\$000)	Pre-Built Service (Calculated Oversizing) (\$000)	Growth-Related Net Capital Costs 2009-2018 (\$000)
GENERAL GOVERNMENT					
PUBLIC WORKS	\$128,636	\$0	\$47,953	\$53,676	\$27,007
PARKING	\$19,140	\$1,961	\$0	\$0	\$17,179
GROWTH STUDIES AND OTHER	\$8,629	\$1,449	\$2,250	\$0	\$4,930
RECREATION	\$439,176	\$3,432	\$52,819	\$79,807	\$303,118
FIRE DEPARTMENT	\$44,324	\$0	\$13,570	\$9,595	\$21,159
LIBRARY BOARD	\$63,320	\$8,261	\$24,300	\$5,711	\$25,048
TRANSIT	\$111,252	\$0	\$27,813	\$8,522	\$74,917
TOTAL OF SOFT SERVICES	\$814,477	\$15,103	\$168,704	\$157,311	\$473,359
ROADS(23 Years)	\$1,678,874	\$0	\$112,475	\$0	\$1,566,399

VI DEVELOPMENT CHARGES ARE CALCULATED IN ACCORDANCE WITH THE DCA

This section summarizes the calculation of development charges for each service category and the resulting total development charge by type of development. The calculation of the “unadjusted” per capita (residential) and per square metre (non-residential) charges is reviewed. Adjustments to these amounts resulting from a cash flow analysis that takes available reserve fund balances, interest earnings and borrowing costs into account are also discussed. The unadjusted and adjusted rates are shown within each service development charge summary.

For residential development, the adjusted total per capita amount is then converted to a variable charge by housing unit type using various unit occupancy factors. For non-residential development there is a development charge rate for industrial/office development and a development charge rate for non-industrial development. The non-residential charge is based on gross floor area (GFA) of building space.

Under the 1997 Development Charges Act, industrial buildings may expand up to 50% without a requirement to pay development charges. The City recognizes this exemption and does not charge for such expansions. It should be noted however that such legislated exemptions, or other exemptions which Council may choose to provide, will result in loss of development charge revenue for the affected types of development. Any such revenue loss may not be made up by offsetting increases in other portions of the calculated charge.

A. RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES

The proposed City-wide development charges are shown in the table below.

Program	Singles/ Semis (Per Unit)	Rows* (Per Unit)	Large Apartments (Per Unit)	Small Apartments (Per Unit)	Non- Residential, Non Industrial (Per M ²)	Industrial/ Office (Per M ²)
General Government	\$80.72	\$66.59	\$54.49	\$30.27	\$0.32	\$0.32
Library	\$681.20	\$561.99	\$459.81	\$255.45		
Fire	\$705.20	\$581.79	\$476.01	\$264.45	\$2.74	\$2.74
Recreation	\$7,921.92	\$6,535.58	\$5,347.30	\$2,970.72		
Public Works	\$550.80	\$454.41	\$371.79	\$206.55	\$2.14	\$2.14
Parking Lots	\$325.20	\$268.29	\$219.51	\$121.95	\$1.26	\$1.26
Transit	\$1,434.24	\$1,183.25	\$968.11	\$537.84	\$5.56	\$5.56
Roads	\$14,853.99	\$12,254.55	\$10,026.45	\$5,570.25	\$97.41	\$48.03
Total per unit or M ²	\$26,553.27	\$21,906.45	\$17,923.47	\$9,957.48	\$109.43	\$60.05

* Row houses are a newly differentiated charge in the 2009 by-laws.

VII COMPARISON OF NEW DEVELOPMENT CHARGES TO EXISTING CHARGES

The proposed development charge represents an increase over the development charge currently being collected under by-laws 218-2004 to 224-2004. A detail table outlining the changes by program and development type is shown below:

Change in Current Rates To Proposed Rates

Program	Singles/ Semis (Per Unit)	Rows* (Per Unit)	Large Apartments (Per Unit)	Small Apartments (Per Unit)	Non- Residential, Non Industrial (Per M ²)	Industrial/ Office** (Per M ²)
General Government	(\$8.67)	(\$22.80)	(\$11.24)	(\$3.89)	\$0.10	\$0.10
Library	\$383.93	\$264.72	\$241.22	\$141.78	\$0.00	\$0.00
Fire	\$291.63	\$168.22	\$171.91	\$106.32	\$1.69	\$1.69
Recreation	\$1,426.27	\$39.93	\$571.08	\$487.09	\$0.00	\$0.00
Public Works	(\$6.75)	(\$103.14)	(\$38.17)	(\$6.63)	\$0.73	\$0.73
Parking Lots	\$22.43	(\$34.48)	(\$2.82)	\$6.34	\$0.51	\$0.51
Transit	\$543.60	\$292.61	\$313.23	\$197.30	\$1.36	\$1.36
Roads	\$1,959.52	(\$639.92)	\$545.24	\$640.02	\$13.51	\$9.17
Total per unit or M²	\$4,611.96	(\$34.86)	\$1,790.45	\$1,568.33	\$17.90	\$13.56

* Row houses are a newly differentiated charge in the 2009 by-laws.

** Industrial/Office increase is representative of the increase from the current discounted rate to the 2009 calculated rate

Due to the retiming and revised cash flow of the Roads program, the increase in DC rates is almost completely attributable to the increase in PPU's for each type of development as well as the existing recoverable deficit amount found in each Reserve Fund.

VIII NON-DC FUNDING REQUIREMENTS ASSOCIATED WITH THE GROWTH RELATED CAPITAL FORECAST

Three categories of non-DC funding requirements associated with the growth capital program have been identified. These include operating costs associated with the operation of new capital assets, the “Benefit to Existing” portion of the growth related capital program and the 10% non-DC requirement.

A. OPERATING IMPACTS

Almost all capital assets that are constructed as a part of the Growth Related Capital Program have associated annual operating costs. A form of revenue stream offsets some of these operating costs. For instance, in the case of Transit the fares attributed to these growth related assets help to offset the operating costs in any given year. As a part of the 2009 Capital Budget and 10 Year Forecast exercise, Departmental staff undertook the calculation of the operating impacts net of revenue. This calculation has since been revised to include the effects of the TTMP Roads and Transit program. The operating impacts forecasted over the next 10 years as a result of implementing the Growth Related Capital Program is \$63M or an average of over \$6M per year. This is the equivalent of a 2.5% tax levy increase annually. However, the assessment growth generated by new development will bring an additional tax revenue to cover a large portion.

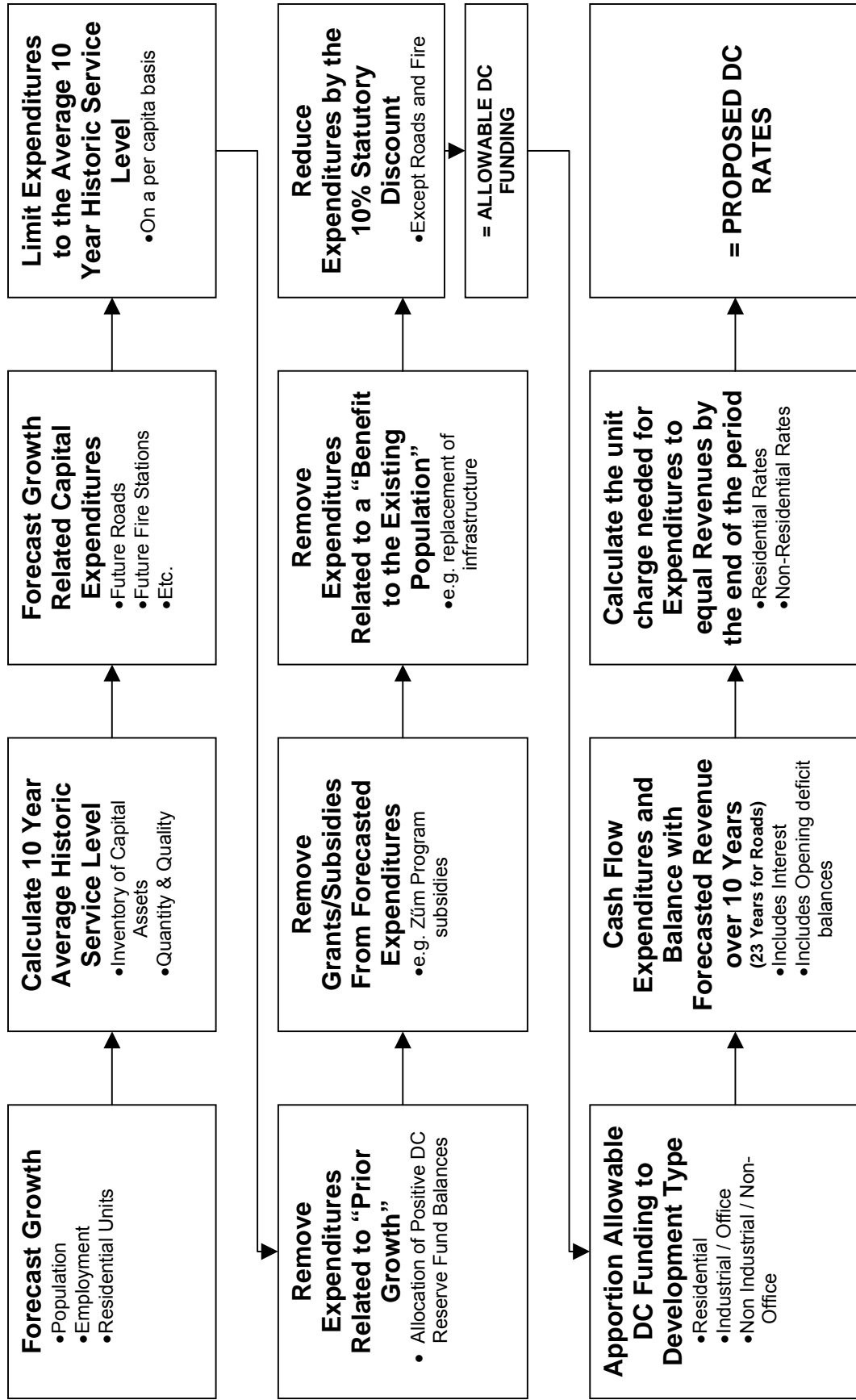
B. BENEFIT TO EXISTING

As discussed earlier in this study, many projects found in the growth related capital forecast are not wholly growth related. For instance, in the example of an expanded recreation centre, the portion of the facility that is simply being refinished must be funded through another source separate from DCs. In most cases the source of funding is the tax base, however in some instances (as in many recreation projects) the source of this funding is from the Cash in Lieu of Parkland reserves. In the Growth Related Capital Program contained within this study, the benefit to existing amounts to \$281M.

C. 10% NON-DC REQUIREMENT

As discussed earlier in this study, there is a 10% statutory discount that must be applied to all services with the exception of Roads and Fire. This 10% discount must be funded through non-DC sources and this usually equates to a draw on the tax base. In this Growth Related Capital Program the 10% statutory discount amounts to \$45M or an equivalent 1.8% tax levy increase annually.

Flow Chart 1: Key Steps in Calculating Development Charge Rates



GENERAL GOVERNMENT PROGRAM

The following Development Charge programs have been included in the General DC Program:

- Public Works Buildings and Fleet
- Parking Facilities
- Growth Studies and Other

A summary for each of these is presented below.

PUBLIC WORKS BUILDINGS AND FLEET

The Works Department is responsible for the City works yards and for the vehicles for all municipal departments, with the exception of the Fire and Transit Departments, which maintain their own rolling stock. Section 5 of the DCA provides the definition of the capital costs that may be included in development charges calculation. Section 5(3)4.i identifies costs related to “rolling stock with an estimated useful life of seven years or more” as being eligible. The eligible growth-related net capital costs for Fleet & Facilities are reduced by the statutory 10% discount in calculating the development charges.

The inventory used for DC calculation purposes contains only those vehicles with an estimated useful life of seven years or more, consistent with the definition of eligible capital cost included in the DCA. The Works Buildings and Fleet inventory (excluding Parking Facilities) is currently valued at \$77M with a 10-year average per population & employment service level of \$123.30. Based on this 10-year average service level and gross population growth and employment growth of 219,040 over the next 10 years, the 2009-2018 maximum allowable to be included in the development charge calculation for Works Buildings and Fleet is \$27.01M.

The 2009-2018 growth-related capital forecast for Buildings and Fleet is shown in the DC Project Tables in this section. The total capital forecast for this program is \$128.64M. Of this amount \$47.95M has been identified as a benefit to the existing population, relating primarily to a portion of the new works yards. The Growth Funding Envelope totals \$27.01M included as supporting growth in the 10-year period. \$53.68M in remaining growth-related capital cannot be funded under the funding envelope and has been identified as a benefit beyond the 10-year forecast period. This amount relates to the new works yards, which will be built to service the community beyond the 10-year forecast period. The 10% non-DC requirement of \$2.70M has been deducted from the \$27.01M of growth-

related capital on which the development charge is based leaving \$24.31M as the amount on which the development charge is calculated.

It should be noted that the 2010 Works Yards project totaling \$45.10M has been identified as a benefit to existing population. The funding for this project will be from non-DC sources. Calculations were completed to estimate the service levels and maximum allowable capital program by 2031 for Public Works and it was identified that the Works Yards component would be significantly above service levels by 2031 (by approximately \$60M). Hence, a proactive measure is suggested in this study to identify a new funding source for this program currently that would otherwise require a different funding source in the future in any event.

The growth-related net capital costs associated with this Public Works Buildings & Fleet have been allocated to forecasted residential and non-residential development using the population and employment shares. Based on this split 65% of the growth capital program is supported by residential and 35% is supported by non-residential development. In dollar terms, \$15.80M of the growth capital is charged to forecasted residential development and \$8.51M is charged to forecasted non-residential development.

This allocation of growth capital results in the following charge based on development type:

Small Apartment (per unit)	\$206.55
Large Apartment (per unit)	\$371.79
Row (per unit)	\$451.41
Single/Semi (per unit)	\$550.80
Industrial/Office (per m2)	\$2.14
Non-Industrial/Non-Office (per m2)	\$2.14

PARKING FACILITIES

The Works department is responsible for the provision of Parking Facilities to accommodate public parking requirements. The combined 10-year average service level for Parking Facilities is \$99.54/ population & employment. Based on this 10-year average service level and gross population growth and employment growth of 219,040 over the next 10 years, \$21.8M is the maximum allowable amount that can be included in the development charge calculation.

The 2009-2018 growth-related capital forecast for Parking Facilities is shown in the DC Project Tables in this section. The capital budget for this program is \$19.14M. None of this amount has been identified as a benefit to the existing population. The Growth Funding Envelope totals \$19.14M and consists of \$1.96M that has been included as a benefit to prior growth and \$17.18M has been included as supporting growth in the 10-year period. No post period benefit

has been allocated to this program. The 10% non-DC requirement of \$1.72M has been deducted from the \$17.18M of growth-related capital on which the development charge is based leaving \$15.46M as the amount on which the development charge is calculated.

The growth-related net capital costs associated with this service have been allocated to forecasted residential and non-residential development using population/employment shares. Based on this split 65% of the growth capital program is supported by residential and 35% is supported by non-residential development. In dollar terms, \$10.05M of the growth capital is charged to forecasted residential development and \$5.41M is charged to forecasted non-residential development.

This allocation of growth capital results in the following charge based on development type:

Small Apartment (per unit)	\$121.95
Large Apartment (per unit)	\$219.51
Row (per unit)	\$268.29
Single/Semi (per unit)	\$325.20
Industrial/Office (per m2)	\$1.26
Non-Industrial/Non-Office (per m2)	\$1.26

GROWTH STUDIES AND OTHER

Growth Studies and Other represent those capital projects that are growth related, but are attributable to a collection of soft services within the City. For instance studies related to planning for growth, the development charge study and recoveries for financing of the POA Courthouse are included. The 2009-2018 growth-related capital forecast for Growth Studies and Other is shown in the DC Project Tables in this section. In total, the growth-related capital forecast totals \$8.63M. Of this amount \$2.25M has been identified as a benefit to the existing population for the non-growth portion of studies such as the Official Plan Review. The remaining program of \$6.38M is eligible for DC funding and given the nature of the program it is difficult to identify a service level. \$1.45M has been identified as benefiting prior growth and \$4.93M has been attributed to benefit within the 10-year forecast period. Once the 10% non-DC requirement of \$0.49M is deducted a DC eligible program of \$4.44M is identified.

The growth-related net capital costs associated with this service have been allocated to forecasted residential and non-residential development using population/employment shares. Based on this split 65% of the growth capital program is supported by residential and 35% is supported by non-residential

development. In dollar terms, \$2.89M of the growth capital is charged to forecasted residential development and \$1.55M is charged to forecasted non-residential development.

This allocation of growth capital results in the following charge based on development type:

Small Apartment (per unit)	\$30.27
Large Apartment (per unit)	\$54.49
Row (per unit)	\$66.59
Single/Semi (per unit)	\$80.72
Industrial/Office (per m2)	\$0.32
Non-Industrial/Non-Office (per m2)	\$0.32

PUBLIC WORKS - BUILDING & FLEET

CENTRAL FLEET

INVENTORY OF CAPITAL ASSETS

FLEET (#)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Car, Station Wagons	-	-	-	-	-	-	-	-	31	30	30,000
Compact Pickups	-	-	-	-	-	-	-	-	7	7	37,000
Compact 4X4	-	-	-	-	-	-	-	-	67	79	34,000
3/4 & 1 Ton Pickup	-	-	-	-	-	-	-	-	39	37	44,000
3/4 & 1 Ton 4X4 Pickups	-	-	-	-	-	-	-	-	47	47	45,000
Compact Vans	-	-	-	-	-	-	-	-	5	5	28,000
3/4 & 1 Ton Vans	-	-	-	-	-	-	-	-	6	6	32,000
1 - 7.5 Ton S Axle, Dual Axle Dump, Flat Bed	-	-	-	-	-	-	-	-	23	25	72,000
7.5 - 20 Ton Sxle, D Wheel, Dump, Flat Bed, Tanker	5	5	5	5	5	5	5	5	43	43	126,000
20 - 34 Ton Tandem Axle Dumps, Flusher, Flat Bed	25	24	28	26	26	32	31	37	17	16	227,000
7.5 - 20 Ton Specvehicle, Buck, Crane, Bodyinterch	2	2	2	2	2	2	1	-	2	2	221,000
Trailer	24	23	22	22	22	29	26	26	34	44	13,000
Ice Resurfacers	16	16	16	17	17	18	19	22	19	19	65,000
Loader Backhoe Combinations And Excavators	8	8	8	9	9	8	13	14	3	3	168,000
Front End Loaders Rubber Tire And Crawler	5	5	5	5	5	5	6	6	5	5	249,000
Graders	1	1	1	1	1	1	1	1	1	1	271,000
Street Sweepers Mechanical And Vacuum	3	3	3	3	3	3	3	6	7	7	184,000
Tractors Farm Type All Sizes	13	13	13	11	11	12	7	4	24	24	65,000
Sidewalk Plows And Skid Steer Loaders	18	18	18	18	18	20	17	14	5	5	80,000
Turf Equipment Mowers, Trimmers, Gators	37	37	36	39	41	44	48	62	73	67	41,000
Asphrollers, Grinders, Hotbox, Com/Asphsaw, Tamper	15	15	15	15	15	11	9	11	10	9	25,000
Rd Mainteqp, Signbrds, Strms, Leafloadrs, Compres	4	4	4	4	4	4	3	2	12	12	24,000
Specialty Equipment Not Classified	14	19	18	22	23	18	22	29	51	52	54,000
Sub-total (#)	190	193	194	199	202	211	211	239	531	545	
Sub-total (\$000)	\$16,540.0	\$16,570.0	\$17,370.0	\$17,358.0	\$17,494.0	\$18,601.0	\$19,230.0	\$21,829.0	\$32,235.0	\$32,355.0	

PUBLIC WORKS - BUILDING & FLEET

CENTRAL FLEET

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
MAINTENANCE EQUIPMENT											
Small Water Tank	2	2	2	2	2	2	9	9	10	11	\$5,175
Bush Hog	1	1	1	-	-	-	-	-	-	2	\$6,400
Mott Mower	8	8	8	6	6	6	6	6	3	3	\$8,539
Plate Tamper	4	4	4	6	6	6	6	6	6	6	\$5,200
Chainsaws/ Polesaws / Cutsaws	36	41	46	48	50	64	82	97	104	141	\$900
Trueplay	4	4	4	4	4	6	10	10	10	10	\$4,500
Self Propelled Rotary Motor	22	22	22	22	21	21	21	21	21	21	5,500
Pumps	5	7	10	11	13	13	13	13	13	13	\$2,575
Siring Trimmers & Mowers	109	115	120	125	134	176	202	247	267	279	\$625
Painter	1	1	1	1	1	1	1	1	1	1	\$6,500
Generators	8	8	10	11	14	14	14	16	16	20	\$2,500
Brouwer Roller	3	3	3	3	3	3	3	3	3	3	\$6,500
Rototiller	6	6	8	8	12	16	24	26	28	31	\$2,500
Backpack Blower / STIHL Blowers	8	15	20	25	32	38	49	51	59	67	\$650
Sprayers	3	3	3	3	3	7	8	8	9	11	\$6,500
Sod Cutter	6	6	6	6	6	6	6	6	9	9	\$6,000
Self Propelled Reel Mower	3	3	3	2	2	2	2	2	2	2	\$22,000
Fertilizer Spreader	3	3	3	4	4	4	4	4	6	6	\$5,700
Snowmobile	1	1	1	1	1	1	2	2	2	2	\$12,000
Air Compressor	1	1	1	1	1	1	1	1	1	1	\$25,000
Salt & Sand Spreaders (Truck Mounted)	4	4	4	4	4	4	4	4	5	5	\$9,000
Trailer-Greenhouse	3	3	3	3	3	3	3	3	3	3	\$750
Snowblower Attachment	4	4	4	5	5	5	5	5	5	5	\$6,500
Disc	1	1	1	1	1	1	1	1	1	1	\$4,000
Brouwer Reel Mower	-	-	-	-	-	-	-	-	-	-	\$11,593
Trail Groomer	1	1	1	1	1	1	1	1	1	1	\$2,500
Bannerman/ Turfco Topdressers	2	2	2	2	2	2	4	4	5	5	\$27,400
Small Topdresser	1	1	1	1	1	1	1	1	2	2	\$9,000
Truck Mounted Sprayer	5	5	5	5	5	5	5	5	5	5	\$6,500
Gills	5	5	5	5	5	5	5	5	5	5	\$6,500
Brillion Seeder											\$8,358
Aerators	3	3	3	3	3	3	3	3	3	3	\$15,500
York Rake	-	-	-	-	-	-	-	-	-	-	\$5,796
Tractor Reel Mowers	-	-	-	-	-	-	-	-	-	-	\$28,981
Bannerman Overseeder	2	2	2	2	2	-	-	-	-	-	\$21,493
Olate Overseeder	-	-	-	-	-	-	-	-	-	-	\$8,115
Ice Edgers	16	16	16	16	16	16	16	16	18	19	\$2,000
Post Hole Auger	2	2	2	2	2	2	2	2	2	2	\$6,200
Outboard Motors	1	1	1	1	1	1	1	1	3	3	\$2,844
Belt Liner	-	-	-	-	-	-	-	-	-	-	\$809
Line Painter	1	1	1	1	1	1	1	1	1	1	\$6,500
White Wash Sprayer	-	-	-	-	-	-	-	-	-	-	\$3,478
Other Equipment	35	35	35	35	35	30	40	50	60	69	\$9,000
MADVAC						4	4	4	4	4	\$40,000
Redexim Overseeder						2	2	2	3	3	\$15,600
Smithco Sweeper						0	0	0	1	1	\$39,500
Deifino Sand Cleaner						0	1	4	4	4	\$16,000
Billy Goat Blower						3	3	3	3	7	\$975
Snowblowers						21	23	28	32	36	\$2,500
Sub-total (#)	320	341	363	377	403	504	588	672	738	823	

PUBLIC WORKS - BUILDING & FLEET

CENTRAL FLEET

SERVICE LEVEL ANALYSIS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
POPULATION	300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300
EMPLOYMENT	121,081	127,377	134,000	138,137	142,401	146,797	151,328	156,000	167,140	177,510
POPULATION & EMPLOYMENT	421,955	440,081	459,000	482,490	507,261	533,384	560,936	590,000	616,840	643,810

INVENTORY SUMMARY (\$000)

Total Fleet (#)	510	534	557	576	605	715	799	911	1,269	1,368
Total Fleet (\$000)	\$17,797.8	\$17,854.2	\$18,682.8	\$18,661.1	\$18,826.2	\$20,207.5	\$21,098.4	\$23,900.8	\$34,558.2	\$34,872.8

SERVICE LEVEL (\$/pop & employ)

Total Fleet (\$/pop & employ)	\$42.18	\$40.57	\$40.70	\$38.68	\$37.11	\$37.89	\$37.61	\$40.51	\$56.02	\$54.17
Average Service Level										\$42.54

PUBLIC WORKS - BUILDINGS & FLEET

BUILDINGS

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
BUILDINGS (\$000)										
Williams Parkway East Storage Shed	\$116.0	\$116.0	\$116.0	\$116.0	\$116.0	\$116.0	\$116.0	\$116.0	\$116.0	\$116.0
Williams Parkway Salt Dome	\$441.0	\$441.0	\$441.0	\$441.0	\$441.0	\$441.0	\$441.0	\$441.0	\$441.0	\$441.0
Williams Parkway Sand Dome	\$441.0	\$441.0	\$441.0	\$441.0	\$441.0	\$441.0	\$441.0	\$441.0	\$441.0	\$441.0
Williams Parkway South Storage Shed	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0
Williams Parkway Vehicle Wash	\$238.7	\$238.7	\$238.7	\$238.7	\$238.7	\$238.7	\$238.7	\$238.7	\$238.7	\$238.7
Williams Parkway Works Operation Centre	\$10,150.5	\$10,150.5	\$10,150.5	\$10,150.5	\$10,150.5	\$10,150.5	\$10,150.5	\$10,150.5	\$10,150.5	\$10,150.5
Sandalwood Yard	\$2,406.0	\$2,406.0	\$2,406.0	\$2,406.0	\$2,406.0	\$2,406.0	\$2,406.0	\$2,406.0	\$2,406.0	\$2,406.0
Sandalwood - Storage Building	\$126.0	\$126.0	\$126.0	\$126.0	\$126.0	\$126.0	\$126.0	\$126.0	\$126.0	\$126.0
Sandalwood Salt Dome	\$440.7	\$440.7	\$440.7	\$440.7	\$440.7	\$440.7	\$440.7	\$440.7	\$440.7	\$440.7
Sandalwood Sand Dome	\$440.7	\$440.7	\$440.7	\$440.7	\$440.7	\$440.7	\$440.7	\$440.7	\$440.7	\$440.7
Total (\$000)	\$14,858.6	\$14,858.6	\$14,858.6	\$14,858.6	\$14,858.6	\$14,858.6	\$14,858.6	\$14,858.6	\$14,858.6	\$14,858.6

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
LAND (acres)											
Williams Parkway East Storage Shed	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	\$464,000
Williams Parkway Salt Dome	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	\$464,000
Williams Parkway Sand Dome	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	\$464,000
Williams Parkway South Storage Shed	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	\$464,000
Williams Parkway Vehicle Wash	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	\$464,000
Williams Parkway Works Operation Centre	31.99	31.99	31.99	31.99	31.99	31.99	31.99	31.99	31.99	31.99	\$464,000
Sandalwood Yard	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	\$464,000
Sandalwood - Storage Building	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	\$464,000
Sandalwood Salt Dome	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	\$464,000
Sandalwood Sand Dome	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	\$464,000
Total (acres)	55.23	55.23	55.23	55.23	55.23	55.23	55.23	55.23	55.23	55.23	
Total (\$000)	\$25,625.4	\$25,625.4	\$25,625.4	\$25,625.4	\$25,625.4	\$25,625.4	\$25,625.4	\$25,625.4	\$25,625.4	\$25,625.4	

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
FURNITURE AND EQUIPMENT (excluding computers) (\$000)											
Williams Parkway East Storage Shed	93.50	93.50	93.50	93.50	93.50	93.50	93.50	93.50	93.50	93.50	\$23.37
Williams Parkway South Storage Shed	47.23	47.23	47.23	47.23	47.23	47.23	47.23	47.23	47.23	47.23	\$23.62
Williams Parkway Vehicle Wash	192.63	192.63	192.63	192.63	192.63	192.63	192.63	192.63	192.63	192.63	\$124.28
Williams Parkway Works Operation Centre	819.86	819.86	819.86	819.86	819.86	819.86	819.86	819.86	819.86	819.86	\$13.17
Sandalwood Yard	11.31	11.31	11.31	11.31	11.31	11.31	11.31	11.31	11.31	11.31	\$5.65
Sandalwood Yard - Storage Building	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	\$0.16
Total (\$000)	\$1,165	\$1,165	\$1,165	\$1,165	\$1,165	\$1,165	\$1,165	\$1,165	\$1,165	\$1,165	

PUBLIC WORKS - BUILDING & FLEET

SUMMARY OF SERVICE LEVEL ANALYSIS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
POPULATION	300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300
EMPLOYMENT	121,081	127,377	134,000	138,137	142,401	146,797	151,328	156,000	167,140	177,510
POPULATION & EMPLOYMENT	421,955	440,081	459,000	482,490	507,261	533,384	560,936	590,000	616,840	643,810

INVENTORY SUMMARY (\$000)

Buildings	\$14,859	\$14,859	\$14,859	\$14,859	\$14,859	\$14,859	\$14,859	\$14,859	\$14,859	\$14,859
Land	\$25,625	\$25,625	\$25,625	\$25,625	\$25,625	\$25,625	\$25,625	\$25,625	\$25,625	\$25,625
Furniture	\$1,165	\$1,165	\$1,165	\$1,165	\$1,165	\$1,165	\$1,165	\$1,165	\$1,165	\$1,165
Fleet	\$17,798	\$17,854	\$18,683	\$18,661	\$18,826	\$20,208	\$21,098	\$23,901	\$34,558	\$34,873
Total (\$000)	\$59,447	\$59,503	\$60,332	\$60,310	\$60,475	\$61,857	\$62,747	\$65,550	\$76,207	\$76,522

SERVICE LEVEL (\$/pop & employ)

Buildings	\$35.21	\$33.76	\$32.37	\$30.80	\$29.29	\$27.86	\$26.49	\$25.18	\$24.09	\$23.08
Land	\$60.73	\$58.23	\$55.83	\$53.11	\$50.52	\$48.04	\$45.68	\$43.43	\$41.54	\$39.69
Furniture	\$2.76	\$2.65	\$2.54	\$2.41	\$2.30	\$2.18	\$2.08	\$1.97	\$1.89	\$1.81
Fleet	\$42.18	\$40.57	\$40.70	\$38.68	\$37.11	\$37.89	\$37.61	\$40.51	\$66.02	\$54.17
Total (\$/pop & employ)	\$140.88	\$135.21	\$131.44	\$125.00	\$119.22	\$115.97	\$111.86	\$111.09	\$123.54	\$118.86

Average Service Level

**PUBLIC WORKS - BUILDING & FLEET
CALCULATION OF MAXIMUM ALLOWABLE**

10 Year Average Service Level (1999-2008)	\$123.30 / pop & employ
2008 Population & Employment	643,810
Population in New Units & Employment 2009-2018	219,040
Population in New Units & Employment 2009-2031	428,430

Average Service Level	
Maximum Allowable 10 Years (\$000)	
Total Public Works	\$123.30 / pop & employ
	\$27,007.6
	\$52,825.4

PUBLIC WORKS BUILDING AND FLEET

ASSUMPTIONS

BASE CASE DESCRIPTION:

BASE YEAR : 2009

FINANCIAL ASSUMPTIONS:

Inflation Rate:
Financing
Investment

2.0%
5.5%
3.5%

Source:

Bank of Canada Inflation Band Mid-Point
City of Brampton Target Borrowing Rate
City of Brampton Target Earnings Rate

ALLOCATION ASSUMPTIONS:

Residential Share
Non-Residential Share

65.00%
35.00%

10-year % Population/Employment Growth
10-year % Population/Employment Growth

OPENING BALANCE FOR CASH FLOW:

(\$1,854,022)

DEVELOPMENT CHARGE SUMMARY:

	Persons Per Unit	Unadjusted Development Charge	Adjusted Breakeven Development Charge
SMALL APARTMENT	1.5	\$164.64	\$206.55
LARGE APARTMENT	2.7	\$296.36	\$371.79
Row Residential	3.3	\$362.21	\$454.41
Single/Semi Residential	4.0	\$439.05	\$550.80
NON-RESIDENTIAL CHARGE (PER M2)		\$1.67	\$2.14

PROGRAM SUMMARY

(NOMINAL - YR \$2009)
TOTAL GROSS EXPENDITURES 2009-2018
LESS: BENEFIT BEYOND PERIOD
LESS: BENEFIT TO EXISTING POPULATION (NON-GROWTH)
LESS: PRIOR GROWTH
LESS: 10% DISCOUNT
ELIGIBLE GROWTH EXPENDITURES

\$128,636,000
(\$53,676,000)
(\$47,953,000)
\$0
(\$2,700,700)
\$24,306,300

TOTAL ELIGIBLE GROWTH EXPENDITURES

\$24,306,300

RESIDENTIAL/NON-RESIDENTIAL SHARE:

RESIDENTIAL
RESIDENTIAL SHARE
GROSS POPULATION GROWTH
NET CHARGE PER CAPITA (UNADJUSTED)
NET CHARGE PER CAPITA (ADJUSTED)

@ 65%
143,940
\$109.76
\$137.70

NON-RESIDENTIAL
NON-RESIDENTIAL SHARE
NON-RESIDENTIAL SPACE GROWTH
NET CHARGE PER M2 (UNADJUSTED)
NET CHARGE PER M2 (ADJUSTED)

@ 35%
88,507,205
5,102,820
\$1.67
\$2.14

PUBLIC WORKS BUILDING AND FLEET

	TOTAL	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ELIGIBLE GROWTH EXPENDITURES (INFLATED):											
RESIDENTIAL:											
Gross Eligible Growth Capital Cost	\$16,144,627	\$12,394,395	\$358,020	\$365,180	\$372,484	\$379,934	\$387,532	\$395,283	\$1,491,798	\$0	\$0
NON-RESIDENTIAL:											
Gross Eligible Growth Capital Cost	\$8,693,260	\$6,673,905	\$192,780	\$196,636	\$200,568	\$204,580	\$208,671	\$212,845	\$803,276	\$0	\$0
TOTAL GROSS ELIGIBLE GROWTH COST	\$24,837,887	\$19,068,300	\$550,800	\$561,816	\$573,052	\$584,513	\$596,204	\$608,128	\$2,295,074	\$0	\$0

REVENUES (INFLATED):

RESIDENTIAL:											
Charge per Person	\$138	\$140	\$143	\$146	\$149	\$152	\$155	\$158	\$161	\$166	\$165
Population Growth	12,680	7,480	6,400	6,110	14,010	18,930	24,670	21,890	17,070	14,700	14,700
TOTAL RESIDENTIAL REVENUE	\$22,033,685	\$1,746,000	\$1,050,596	\$916,884	\$892,844	\$2,088,203	\$2,877,964	\$3,825,640	\$3,462,429	\$2,754,031	\$2,419,094
NON-RESIDENTIAL:											
Net Charge Per m2	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$3	\$3
NON-RESIDENTIAL Area Forecast (m2)	\$5,102,820	\$181,500	\$116,300	\$246,250	\$570,600	\$845,900	\$943,200	\$839,020	\$683,800	\$574,200	\$574,200
TOTAL NON-RESIDENTIAL REVENUE	\$12,268,309	\$388,400	\$222,755	\$258,937	\$559,230	\$1,321,741	\$1,998,836	\$2,273,100	\$2,062,468	\$1,714,527	\$1,468,515
TOTAL REVENUES	\$34,301,994	\$2,134,400	\$1,273,351	\$1,175,821	\$1,452,074	\$3,409,944	\$4,876,800	\$6,098,740	\$5,524,897	\$4,468,558	\$3,887,609

FINANCING CALCULATION:

RESIDENTIAL:											
Beginning of Year Balance											
Net Annual Difference (Total Revenues-Net Expenditures)											
Sub-Total											
Financing/Investment Adjustment In Year											
Financing/Investment Adjustment Opening Balance											
Sub-Total											
End of Year Cumulative Balance	(\$12,212,622)	(\$12,179,620)	(\$12,288,140)	(\$12,434,522)	(\$11,380,257)	(\$9,472,156)	(\$6,502,737)	(\$4,855,270)	(\$2,320,084)	\$0	\$0
NON-RESIDENTIAL:											
Beginning of Year Balance											
Net Annual Difference (Total Revenues-Net Expenditures)											
Sub-Total											
Financing/Investment Adjustment In Year											
Financing/Investment Adjustment Opening Balance											
Sub-Total											
End of Year Cumulative Balance	(\$648,908)	(\$7,142,954)	(\$7,505,317)	(\$7,854,718)	(\$7,921,789)	(\$7,220,776)	(\$5,796,629)	(\$4,019,134)	(\$2,958,959)	(\$1,377,170)	\$0
TOTAL CUMULATIVE BALANCE	(\$19,355,576)	(\$19,684,937)	(\$20,142,858)	(\$20,356,311)	(\$18,601,032)	(\$15,268,786)	(\$10,521,871)	(\$7,814,229)	(\$3,697,254)	\$0	\$0

PARKING

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST	
PARKING LOTS (spaces)												
Nelson Square	280	280	280	280	280	278	278	278	278	278	278	\$28,000
Market Square	586	586	586	586	586	586	586	542	542	542	542	\$46,000
City Hall	372	372	372	372	372	372	372	368	368	368	368	\$46,000
Total (spaces)	1,238	1,238	1,238	1,238	1,238	1,236	1,236	1,188	1,188	1,188	1,188	
Total (\$000)	\$51,908	\$51,908	\$51,908	\$51,908	\$51,908	\$51,852	\$51,852	\$49,644	\$49,644	\$49,644	\$49,644	

SERVICE LEVEL ANALYSIS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
POPULATION	300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300
EMPLOYMENT	121,081	127,377	134,000	138,137	142,401	146,797	151,328	156,000	167,140	177,510
POPULATION & EMPLOYMENT	421,955	440,081	459,000	482,490	507,261	533,384	560,936	590,000	616,840	643,810

INVENTORY SUMMARY (\$000)

Parking Lots	\$51,908	\$51,908	\$51,908	\$51,908	\$51,908	\$51,852	\$51,852	\$49,644	\$49,644	\$49,644
Total (\$000)	\$51,908	\$51,908	\$51,908	\$51,908	\$51,908	\$51,852	\$51,852	\$49,644	\$49,644	\$49,644

SERVICE LEVEL (\$/pop & employ)

Parking Lots	\$123.02	\$117.95	\$113.09	\$107.58	\$102.33	\$97.21	\$92.44	\$84.14	\$80.48	\$77.11	\$99.54
Total (\$/pop & employ)	\$123.02	\$117.95	\$113.09	\$107.58	\$102.33	\$97.21	\$92.44	\$84.14	\$80.48	\$77.11	\$99.54

Average
Service
Level

CALCULATION OF MAXIMUM ALLOWABLE PARKING

10 Year Average Service Level (1999-2008) \$99.54 / pop & employ

2008 Population & Employment 643,810
 Population in New Units & Employment 2009-2018 219,040
 Population in New Units & Employment 2009-2031 428,430

Average
Service
Level

Maximum Allowable
10 Years

(\$000)

2031

Total Parking	\$99.54 / pop & employ	\$21,803.2	\$42,645.9
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PARKING

ASSUMPTIONS

BASE CASE DESCRIPTION:

BASE YEAR : 2009

FINANCIAL ASSUMPTIONS:

Inflation Rate:
Financing
Investment

2.0%
5.5%
3.5%

Source:

Bank of Canada Inflation Band Mid-Point
City of Brampton Target Borrowing Rate
City of Brampton Target Earnings Rate

ALLOCATION ASSUMPTIONS:

Residential Share
Non-Residential Share

65.00%
35.00%

10-year % Population/Employment Growth
10-year % Population/Employment Growth

OPENING BALANCE FOR CASH FLOW:

\$0

DEVELOPMENT CHARGE SUMMARY:

	Persons Per Unit	Unadjusted Development Charge	Adjusted Breakeven Development Charge
SMALL APARTMENT	1.5	\$104.73	\$121.95
LARGE APARTMENT	2.7	\$188.52	\$219.51
Row Residential	3.3	\$230.41	\$268.29
Single/Semi Residential	4.0	\$279.28	\$325.20
NON-RESIDENTIAL CHARGE (PER M2)		\$1.06	\$1.26

PROGRAM SUMMARY

(NOMINAL - YR \$2009)	\$18,140,000
TOTAL GROSS EXPENDITURES 2009-2018	\$0
LESS: BENEFIT BEYOND PERIOD	\$0
LESS: BENEFIT TO EXISTING POPULATION (NON-GROWTH)	(\$1,960,567)
LESS: PRIOR GROWTH	(\$1,717,943)
LESS: 10% DISCOUNT	
ELIGIBLE GROWTH EXPENDITURES	\$15,461,490
TOTAL ELIGIBLE GROWTH EXPENDITURES	\$15,461,490

RESIDENTIAL/NON-RESIDENTIAL SHARE:

RESIDENTIAL	NON-RESIDENTIAL
RESIDENTIAL SHARE	NON-RESIDENTIAL SHARE
GROSS POPULATION GROWTH	NON-RESIDENTIAL SPACE GROWTH
NET CHARGE PER CAPITA (UNADJUSTED)	NET CHARGE PER M2 (UNADJUSTED)
NET CHARGE PER CAPITA (ADJUSTED)	NET CHARGE PER M2 (ADJUSTED)
\$81.30	\$81.30
\$69.82	\$69.82
143,940	143,940
@ 65%	@ 35%
\$10,049,969	\$5,411,522
	5,102,820

PARKING

	TOTAL	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ELIGIBLE GROWTH EXPENDITURES (INFLATED):											
RESIDENTIAL:											
Gross Eligible Growth Capital Cost	\$10,250,968	\$0	\$10,250,968	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NON-RESIDENTIAL:											
Gross Eligible Growth Capital Cost	\$5,519,752	\$0	\$5,519,752	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL GROSS ELIGIBLE GROWTH COST	\$15,770,720	\$0	\$15,770,720	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

REVENUES (INFLATED):

RESIDENTIAL:											
Charge per Person	\$81	\$63	\$65	\$86	\$88	\$90	\$92	\$93	\$95	\$95	\$97
Population Growth	12,680	7,480	6,400	6,110	14,010	18,930	24,670	21,890	21,890	17,070	14,700
TOTAL RESIDENTIAL REVENUE	\$13,009,031	\$1,030,900	\$620,286	\$541,341	\$527,148	\$1,232,904	\$1,699,190	\$2,258,711	\$2,044,266	\$1,626,018	\$1,428,267
NON-RESIDENTIAL:											
Net Charge Per m2	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$2
NON-RESIDENTIAL Area Forecast (m2)	\$5,102,820	\$181,500	\$102,050	\$116,300	\$246,250	\$570,600	\$845,900	\$943,200	\$839,020	\$683,800	\$574,200
TOTAL NON-RESIDENTIAL REVENUE	\$7,223,413	\$228,700	\$131,155	\$152,458	\$329,266	\$778,221	\$1,176,767	\$1,338,367	\$1,214,351	\$1,009,488	\$864,640
TOTAL REVENUES	\$20,232,444	\$1,259,600	\$751,441	\$693,799	\$856,414	\$2,011,125	\$2,875,957	\$3,597,078	\$3,258,617	\$2,635,506	\$2,292,907

FINANCING CALCULATION:

RESIDENTIAL:											
Beginning of Year Balance	\$0	\$1,048,941	(\$8,809,872)	(\$8,743,600)	(\$8,688,125)	(\$7,911,492)	(\$6,617,699)	(\$4,683,434)	(\$2,860,982)	(\$1,363,863)	
Net Annual Difference (Total Revenues-Net Expenditures)	\$1,030,900	(\$9,630,862)	\$541,341	\$527,148	\$1,232,904	\$1,699,190	\$2,258,711	\$2,044,266	\$1,626,018	\$1,428,267	
Sub-Total	\$1,030,900	(\$8,581,741)	(\$8,268,531)	(\$8,216,452)	(\$7,455,221)	(\$6,212,302)	(\$4,358,988)	(\$2,639,168)	(\$1,053,152)	\$64,404	
Financing/Investment Adjustment In Year	\$18,041	(\$264,844)	\$9,473	\$9,225	\$21,576	\$29,736	\$39,527	\$35,775	\$28,455	\$24,995	
Financing/Investment Adjustment Opening Balance	\$0	\$36,713	(\$484,543)	(\$480,898)	(\$477,847)	(\$435,132)	(\$363,973)	(\$257,589)	(\$157,354)	(\$75,012)	
Sub-Total	\$18,041	(\$228,131)	(\$475,069)	(\$471,673)	(\$456,271)	(\$405,396)	(\$324,446)	(\$221,814)	(\$128,899)	(\$50,018)	
End of Year Cumulative Balance	\$1,048,941	(\$8,809,872)	(\$8,743,600)	(\$8,688,125)	(\$7,911,492)	(\$6,617,699)	(\$4,683,434)	(\$2,860,982)	(\$1,363,863)	\$0	
NON-RESIDENTIAL:											
Beginning of Year Balance	\$0	\$232,702	(\$5,295,937)	(\$5,432,087)	(\$5,395,824)	(\$4,900,754)	(\$3,972,935)	(\$2,829,658)	(\$1,749,687)	(\$818,766)	
Net Annual Difference (Total Revenues-Net Expenditures)	\$228,700	(\$5,388,597)	\$152,458	\$329,266	\$778,221	\$1,176,767	\$1,338,367	\$1,214,351	\$1,009,488	\$864,640	
Sub-Total	\$228,700	(\$5,155,895)	(\$5,143,479)	(\$5,102,821)	(\$4,617,603)	(\$3,723,987)	(\$2,634,568)	(\$1,615,307)	(\$740,199)	\$45,874	
Financing/Investment Adjustment In Year	\$4,002	(\$148,186)	\$2,668	\$5,762	\$13,619	\$20,593	\$23,421	\$21,251	\$17,666	\$15,131	
Financing/Investment Adjustment Opening Balance	\$0	\$8,145	(\$291,277)	(\$298,765)	(\$296,770)	(\$269,541)	(\$218,511)	(\$155,631)	(\$96,233)	(\$45,032)	
Sub-Total	\$4,002	(\$140,042)	(\$288,608)	(\$283,003)	(\$283,151)	(\$248,948)	(\$195,090)	(\$134,360)	(\$78,567)	(\$29,907)	
End of Year Cumulative Balance	\$232,702	(\$5,295,937)	(\$5,432,087)	(\$5,395,824)	(\$4,900,754)	(\$3,972,935)	(\$2,829,658)	(\$1,749,687)	(\$818,766)	\$0	
TOTAL CUMULATIVE BALANCE	\$1,281,643	(\$14,105,809)	(\$14,175,688)	(\$14,083,949)	(\$12,812,247)	(\$10,590,634)	(\$7,513,092)	(\$4,610,669)	(\$2,182,629)	\$0	

GROWTH STUDIES AND OTHER

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Buildings (sq.ft.)											
Court House	2,734	2,734	2,734	2,734	2,734	58,488	58,488	58,488	58,488	58,488	\$246
Total (sq.ft.)	2,734	2,734	2,734	2,734	2,734	58,488	58,488	58,488	58,488	58,488	
Total (\$000)	\$672.6	\$672.6	\$672.6	\$672.6	\$672.6	\$14,388.0	\$14,388.0	\$14,388.0	\$14,388.0	\$14,388.0	

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Land (acres)											
Court House						1.927	1.927	1.927	1.927	1.927	\$818,000
Total (acres)						1.927	1.927	1.927	1.927	1.927	
Total (\$000)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,576.2	\$1,576.2	\$1,576.2	\$1,576.2	\$1,576.2	

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Materials (\$000)										
Material Inventory						\$462	\$462	\$462	\$462	\$462

SERVICE LEVEL ANALYSIS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
POPULATION	300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300
EMPLOYMENT	121,081	127,377	134,000	138,137	142,401	146,797	151,328	156,000	167,140	177,510
TOTAL POPULATION AND EMPLOYMENT	421,955	440,081	459,000	482,490	507,261	533,384	560,936	590,000	616,840	643,810

INVENTORY SUMMARY (\$000)

Buildings	\$672.6	\$672.6	\$672.6	\$672.6	\$672.6	\$14,388.0	\$14,388.0	\$14,388.0	\$14,388.0	\$14,388.0
Land	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,576.2	\$1,576.2	\$1,576.2	\$1,576.2	\$1,576.2
Materials	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$462.5	\$462.5	\$462.5	\$462.5	\$462.5
Total (\$000)	\$672.6	\$672.6	\$672.6	\$672.6	\$672.6	\$16,426.7	\$16,426.7	\$16,426.7	\$16,426.7	\$16,426.7

SERVICE LEVELS (\$/pop & employ)

Buildings	\$1.59	\$1.53	\$1.47	\$1.39	\$1.33	\$26.98	\$25.65	\$24.39	\$23.33	\$22.35	Average Service Level
Land	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.96	\$2.81	\$2.67	\$2.56	\$2.45	\$13.00
Materials	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.87	\$0.82	\$0.78	\$0.75	\$0.72	\$1.35
Total (\$/pop & employ)	\$1.59	\$1.53	\$1.47	\$1.39	\$1.33	\$30.81	\$29.28	\$27.84	\$26.64	\$25.52	\$14.74

**GROWTH STUDIES AND OTHER
CALCULATION OF MAXIMUM ALLOWABLE**

10 Year Average Service Level (1999-2008) \$14.74 per pop & employ

2008 Population & Employment 643,810
 Population in New Units & Employment 2009-2018 219,040
 Population in New Units & Employment 2009-2031 428,430

Average Service Level	\$14.74 /pop & employ	\$3,228.6	\$6,315.1
Maximum Allowable 10 Years			
2031 (\$000)			

GROWTH STUDIES AND OTHER

ASSUMPTIONS

BASE CASE DESCRIPTION:

BASE YEAR : 2009

FINANCIAL ASSUMPTIONS:

Inflation Rate:
Financing
Investment

2.0%
5.5%
3.5%

Source:

Bank of Canada Inflation Band Mid-Point
City of Brampton Target Borrowing Rate
City of Brampton Target Earnings Rate

ALLOCATION ASSUMPTIONS:

Residential Share
Non-Residential Share

65.00%
35.00%

10-year % Population/Employment Growth
10-year % Population/Employment Growth

OPENING BALANCE FOR CASH FLOW:

\$0

DEVELOPMENT CHARGE SUMMARY:

	Persons Per Unit	Unadjusted Development Charge	Adjusted Breakeven Development Charge
SMALL APARTMENT	1.5	\$30.06	\$30.27
LARGE APARTMENT	2.7	\$54.10	\$54.49
Row Residential	3.3	\$66.12	\$66.59
Single/Semi Residential	4.0	\$80.15	\$80.72
NON-RESIDENTIAL CHARGE (PER M2)		\$0.30	\$0.32

PROGRAM SUMMARY

(NOMINAL - YR \$2009)	\$8,629,000
TOTAL GROSS EXPENDITURES 2009-2018	
LESS: BENEFIT BEYOND PERIOD	\$0
LESS: BENEFIT TO EXISTING POPULATION (NON-GROWTH)	(\$2,250,000)
LESS: PRIOR GROWTH	(\$1,448,800)
LESS: 10% DISCOUNT	(\$493,020)
ELIGIBLE GROWTH EXPENDITURES	\$4,437,180
TOTAL ELIGIBLE GROWTH EXPENDITURES	\$4,437,180

RESIDENTIAL/NON-RESIDENTIAL SHARE:

RESIDENTIAL	NON-RESIDENTIAL
RESIDENTIAL SHARE	NON-RESIDENTIAL SHARE
GROSS POPULATION GROWTH @ 65%	NON-RESIDENTIAL SPACE GROWTH @ 35%
\$20.04	\$20.04
NET CHARGE PER CAPITA (UNADJUSTED)	NET CHARGE PER M2 (UNADJUSTED)
\$20.18	\$20.18
NET CHARGE PER CAPITA (ADJUSTED)	NET CHARGE PER M2 (ADJUSTED)
	\$1,553,013
	5,102,820
	\$0.30
	\$0.32

GROWTH STUDIES AND OTHER

	TOTAL	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ELIGIBLE GROWTH EXPENDITURES (INFLATED):											
RESIDENTIAL:											
Gross Eligible Growth Capital Cost	\$3,199,330	\$247,397	\$192,674	\$196,528	\$200,458	\$204,468	\$532,276	\$377,429	\$384,978	\$392,678	\$470,444
NON-RESIDENTIAL:											
Gross Eligible Growth Capital Cost	\$1,722,716	\$133,214	\$103,748	\$105,823	\$107,939	\$110,098	\$286,610	\$203,231	\$207,296	\$211,442	\$253,316
TOTAL GROSS ELIGIBLE GROWTH COST	\$4,922,046	\$380,610	\$296,422	\$302,351	\$308,398	\$314,566	\$818,886	\$580,661	\$592,274	\$604,119	\$723,760

REVENUES (INFLATED):

RESIDENTIAL:											
Charge per Person	\$20.18	\$20.58	\$21.00	\$21.42	\$21.84	\$22.28	\$22.73	\$23.18	\$23.64	\$24.12	
Population Growth	12,680	7,480	6,400	6,110	14,010	18,930	24,670	21,880	17,070	14,700	
TOTAL RESIDENTIAL REVENUE	\$3,229,070	\$255,900	\$153,965	\$134,370	\$130,847	\$306,027	\$421,767	\$560,649	\$507,421	\$403,605	\$354,519
NON-RESIDENTIAL:											
Net Charge Per m2	\$0.32	\$0.33	\$0.33	\$0.34	\$0.35	\$0.35	\$0.36	\$0.37	\$0.37	\$0.38	
NON-RESIDENTIAL Area Forecast (m2)	181,500	102,050	116,300	246,250	570,600	845,900	943,200	839,020	683,800	574,200	
TOTAL NON-RESIDENTIAL REVENUE	\$1,834,534	\$58,100	\$33,309	\$38,720	\$83,623	\$197,643	\$298,861	\$339,903	\$308,406	\$256,378	\$219,591
TOTAL REVENUES	\$5,063,604	\$314,000	\$187,274	\$173,090	\$214,470	\$503,670	\$720,628	\$900,552	\$815,827	\$659,983	\$574,110

FINANCING CALCULATION:

RESIDENTIAL:											
Beginning of Year Balance	\$0	\$8,652	(\$30,819)	(\$96,381)	(\$173,208)	(\$79,398)	(\$197,312)	(\$21,738)	\$101,652	\$116,328	
Net Annual Difference (Total Revenues-Net Expenditures)	\$8,504	(\$38,709)	(\$62,158)	(\$69,611)	\$101,559	(\$110,509)	\$183,220	\$122,443	\$10,927	(\$115,925)	
Sub-Total	\$8,504	(\$30,057)	(\$92,977)	(\$165,993)	(\$71,648)	(\$189,906)	(\$14,093)	\$100,705	\$112,579	\$403	
Financing/Investment Adjustment In Year	\$149	(\$1,065)	(\$1,709)	(\$1,914)	\$1,777	(\$3,039)	\$3,206	\$2,143	\$191	(\$3,188)	
Financing/Investment Adjustment Opening Balance	\$0	\$303	(\$1,695)	(\$5,301)	(\$9,526)	(\$4,367)	(\$10,852)	(\$1,196)	\$3,558	\$4,071	
Sub-Total	\$149	(\$762)	(\$3,404)	(\$7,215)	(\$7,749)	(\$7,406)	(\$7,646)	\$947	\$3,749	\$684	
End of Year Cumulative Balance	\$8,652	(\$30,819)	(\$96,381)	(\$173,208)	(\$79,398)	(\$197,312)	(\$21,738)	\$101,652	\$116,328	\$0	
NON-RESIDENTIAL:											
Beginning of Year Balance	\$0	(\$77,179)	(\$153,800)	(\$231,207)	(\$268,908)	(\$194,621)	(\$192,860)	(\$64,403)	\$34,934	\$81,879	
Net Annual Difference (Total Revenues-Net Expenditures)	(\$75,114)	(\$70,439)	(\$67,103)	(\$24,316)	\$87,545	\$12,251	(\$136,672)	\$101,110	\$44,936	(\$33,725)	
Sub-Total	(\$75,114)	(\$147,618)	(\$220,903)	(\$255,523)	(\$181,363)	(\$182,370)	(\$66,188)	\$36,707	\$79,870	\$48,154	
Financing/Investment Adjustment In Year	(\$2,066)	(\$1,937)	(\$1,845)	(\$669)	\$1,532	\$214	\$2,392	\$1,769	\$786	(\$927)	
Financing/Investment Adjustment Opening Balance	\$0	(\$4,245)	(\$8,459)	(\$12,716)	(\$14,790)	(\$10,607)	(\$3,542)	\$1,223	\$2,866	\$1,936	
Sub-Total	(\$2,066)	(\$6,182)	(\$10,304)	(\$13,385)	(\$13,258)	(\$10,490)	(\$8,216)	(\$1,773)	\$2,009	\$1,936	
End of Year Cumulative Balance	(\$77,179)	(\$153,800)	(\$231,207)	(\$268,908)	(\$194,621)	(\$192,860)	(\$64,403)	\$34,934	\$81,879	\$0	
TOTAL CUMULATIVE BALANCE	(\$68,527)	(\$184,619)	(\$327,588)	(\$442,116)	(\$274,019)	(\$390,172)	(\$86,142)	\$136,586	\$195,208	\$0	

GENERAL GOVERNMENT - GROWTH RELATED CAPITAL PROGRAM

Timing	Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Prior Growth	Benefit Post 2018	Statutory 10% Current Period Non-DC	Current Period DC Contribution
Growth-Related Studies									
2009	Environmental Master Plan Study	150,000		150,000	75,000	75,000			
2009	Transportation and Transit Master Plan	150,000		150,000	75,000	75,000			
2009	Development Charges Study	100,000		100,000				10,000	90,000
2009	Growth Plan Compliance	100,000		100,000		100,000			
2009	Miscellaneous Planning Studies	100,000		100,000	50,000	50,000			
2010	Miscellaneous Planning Studies	200,000		200,000	100,000	100,000			
2010	Secondary Plan Reviews	50,000		50,000		50,000			
2010	Growth Management Program Support and Enhancement	50,000		50,000	25,000	25,000			
2010	Environmental Master Plan Study	100,000		100,000	50,000	50,000			
2011	Transportation and Transit Master Plan	50,000		50,000	25,000	25,000			
2011	Secondary Plan Reviews	50,000		50,000		50,000			
2011	Environmental Master Plan Study	100,000		100,000	50,000	50,000			
2011	Growth Management Program Support and Enhancement	50,000		50,000	25,000	25,000			
2011	Miscellaneous Planning Studies	200,000		200,000	100,000	100,000			
2012	Environmental Master Plan Study	100,000		100,000	50,000	50,000			
2012	Miscellaneous Planning Studies	200,000		200,000	100,000	100,000			
2012	Secondary Plan Reviews	50,000		50,000		50,000			
2012	Growth Management Program Support and Enhancement	50,000		50,000	25,000	25,000			
2012	Transportation and Transit Master Plan	50,000		50,000	25,000	25,000			
2013	Growth Management Program Support and Enhancement	50,000		50,000	25,000	25,000			
2013	Secondary Plan Reviews	50,000		50,000		50,000			
2013	Transportation and Transit Master Plan	250,000		250,000	125,000	125,000			
2013	Miscellaneous Planning Studies	200,000		200,000	100,000	100,000			
2013	Environmental Master Plan Study	100,000		100,000	50,000	50,000			

Timing	Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Prior Growth	Benefit Post 2018	Statutory 10%	
								Current Period Non-DC	Current Period DC Contribution
2014	Miscellaneous Planning Studies	200,000		200,000	100,000			10,000	90,000
2014	Transportation and Transit Master Plan	50,000		50,000	25,000			2,500	22,500
2014	Growth Management Program Support and Enhancement	50,000		50,000	25,000			2,500	22,500
2014	Environmental Master Plan Study	250,000		250,000	125,000	73,800		5,120	46,080
2014	Secondary Plan Reviews	50,000		50,000				5,000	45,000
2014	Development Charges Study	250,000		250,000				25,000	225,000
2015	Environmental Master Plan Study	100,000		100,000	50,000			5,000	45,000
2015	Miscellaneous Planning Studies	200,000		200,000	100,000			10,000	90,000
2015	Transportation and Transit Master Plan	50,000		50,000	25,000			2,500	22,500
2015	Growth Management Program Support and Enhancement	50,000		50,000	25,000			2,500	22,500
2015	Secondary Plan Reviews	50,000		50,000				5,000	45,000
2016	Environmental Master Plan Study	100,000		100,000	50,000			5,000	45,000
2016	Miscellaneous Planning Studies	200,000		200,000	100,000			10,000	90,000
2016	Secondary Plan Reviews	50,000		50,000				5,000	45,000
2016	Growth Management Program Support and Enhancement	50,000		50,000	25,000			2,500	22,500
2016	Transportation and Transit Master Plan	50,000		50,000	25,000			2,500	22,500
2017	Transportation and Transit Master Plan	50,000		50,000	25,000			2,500	22,500
2017	Miscellaneous Planning Studies	200,000		200,000	100,000			10,000	90,000
2017	Growth Management Program Support and Enhancement	50,000		50,000	25,000			2,500	22,500
2017	Environmental Master Plan Study	100,000		100,000	50,000			5,000	45,000
2017	Secondary Plan Reviews	50,000		50,000				5,000	45,000
2018	Growth Management Program Support and Enhancement	50,000		50,000	25,000			2,500	22,500
2018	Miscellaneous Planning Studies	200,000		200,000	100,000			10,000	90,000
2018	Environmental Master Plan Study	100,000		100,000	50,000			5,000	45,000
2018	Transportation and Transit Master Plan	250,000		250,000	125,000			12,500	112,500
2018	Secondary Plan Reviews	50,000		50,000				5,000	45,000

Timing	Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Prior Growth	Benefit Post 2018	Statutory 10%	
								Current Period Non-DC	Current Period DC Contribution
	Various Recovery of Oversized Courthouse 2009-2018 Share	3,229,000		3,229,000				322,900	2,906,100
	Sub-Total for Growth-Related Studies	\$8,629,000	\$0	\$8,629,000	\$2,250,000	\$1,448,800	\$0	\$493,020	\$4,437,180
	Parking Spaces								
2010	Parking Garage	19,140,000		19,140,000		1,960,567		1,717,943	15,461,490
	Sub-Total for Parking Spaces	\$19,140,000	\$0	\$19,140,000	\$0	\$1,960,567	\$0	\$1,717,943	\$15,461,490
	Buildings, Land & Equipment								
2009	New Works Yard (SW Satellite)	7,300,000		7,300,000				730,000	6,570,000
2009	New Works Yard (Williams)	9,790,000		9,790,000	2,644,000			714,600	6,431,400
2009	New Works Yard (Sandalwood)	6,950,000		6,950,000	209,000			674,100	6,066,900
2010	New Works Yard (Williams)	45,100,000		45,100,000	45,100,000				
2016	New Works Yard (SW Satellite)	22,296,000		22,296,000			20,076,000	222,000	1,998,000
2018	New Works Yard (NE Satellite)	31,800,000		31,800,000			31,800,000		
	Sub-Total for Buildings, Land & Equipment	\$123,236,000	\$0	\$123,236,000	\$47,953,000	\$0	\$51,876,000	\$2,340,700	\$21,066,300
	Equipment								
2010	New Equipment - Fleet	600,000		600,000				60,000	540,000
2011	New Equipment - Fleet	600,000		600,000				60,000	540,000
2012	New Equipment - Fleet	600,000		600,000				60,000	540,000
2013	New Equipment - Fleet	600,000		600,000				60,000	540,000
2014	New Equipment - Fleet	600,000		600,000				60,000	540,000
2015	New Equipment - Fleet	600,000		600,000				60,000	540,000
2016	New Equipment - Fleet	600,000		600,000			600,000		
2017	New Equipment - Fleet	600,000		600,000			600,000		
2018	New Equipment - Fleet	600,000		600,000			600,000		
	Sub-Total for Equipment	\$5,400,000	\$0	\$5,400,000	\$0	\$0	\$1,800,000	\$360,000	\$3,240,000
	Total for GENERAL GOVERNMENT	\$156,405,000	\$0	\$156,405,000	\$50,203,000	\$3,409,367	\$53,676,000	\$4,911,663	\$44,204,970



DRAFT XXX-2009

Development Charges

To establish development charges for the City of Brampton pertaining to General Government Services, and to repeal By-law 218-2004

WHEREAS subsection 2(1) of the Act provides that the Council of a municipality may by by-law impose development charges against land to pay for increased capital costs required because of increased needs for services arising from the development of the area to which the by-law applies;

AND WHEREAS the City has completed and has considered a report entitled "2009 Development Charge Background Study", the City of Brampton, dated JuneXX, 2009 (the "Study"), as required by section 10 of the Act;

AND WHEREAS the Study was made available to the public, and Council gave notice to the public of a public meeting, pursuant to section 12 of the Act, which was held on June 22, 2009, and at which the Study was again provided to the public, along with the proposed development charge by-laws, and Council heard representations from all persons who applied to be heard (the "Public Meeting");

AND WHEREAS Council held X further Public Meetings on XXXXX XX, XXXX and XXXXX XX, XXXX, and Council heard representations from all persons who applied to be heard;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council approved the Study, as amended by the matters identified in the staff report dated July 27, 2009;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council indicated that it intends to ensure that the increase in the need for services attributable to the anticipated development identified in the Study, as amended, will be met;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council indicated its intent that future excess capacity identified in the Study shall be paid for by development charges or other similar charges;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council determined that no further public meetings were required, under section 12 of the Act.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE CITY OF BRAMPTON ENACTS AS FOLLOWS:

Definitions

1. In this by-law,

“accessory” means, where used to describe a use, building or structure, that the use, building or structure is naturally and normally incidental to and exclusively devoted to a principal use, building or structure;

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

"agricultural use" means a bona fide farming operation, including sod farms, the breeding and boarding of horses, and greenhouses;

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

"apartment dwelling" means a building containing six or more dwelling units which have a common entrance from the street level, and the occupants of which have the right to use common elements;

“apartment” means a dwelling unit in a duplex, triplex, double duplex or in a mixed use building not exceeding three stories in height and a dwelling unit in a building where such dwelling unit is served by a principal entrance from the street level common to three or more other dwelling units;

“board of education” has the same meaning as “board” under the *Education Act*, R.S.O. 1990, ch. E.2;

"building or structure" means a structure occupying an area greater than 10 square metres consisting of a wall, roof, and floor or any of them or a structural system serving the function thereof, and includes an air-supported structure, mezzanine, and an exterior storage tank, but does not include: a farm building, or a canopy, or an exterior storage tank where such exterior storage tank constitutes an accessory use;

“*Building Code Act*” means the *Building Code Act*, S.O. 1992, chapter 23, as amended, and all Regulations thereto including the Ontario Building Code, 2006, as amended;

“canopy” means a canopy as defined in the *Building Code Act* and includes a free-standing roof-like structure constructed on lands used for a gas bar or service station;

"City" means The Corporation of the City of Brampton;

“college” has the same meaning as in section 171.1 of the *Education Act*, R.S.O. 1990, ch. E.2;

“Council” means the Council of the Corporation of the City of Brampton;

"development" means the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of increasing the total floor area, and includes redevelopment;

"development charge" means a charge imposed pursuant to this by-law;

“distribution centre” means a building or structure primarily used for the storage and distribution of goods, wares, merchandise, substances, articles or things;

“double duplex” means a separate building that consists of two duplexes attached to each other;

“duplex” means a separate building that is divided horizontally into two separate dwelling units, each of which has a separate entrance either directly or through a common vestibule;

"dwelling unit" means one or more habitable rooms designed or intended to be used together as a single and separate house-keeping unit by one person or jointly by two or more persons, containing its own kitchen and sanitary facilities;

“farm building” means a farm building as defined in the *Building Code Act*;

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

"grade" means the average level of proposed or finished ground adjoining a building or structure at all exterior walls;

“industrial use” means land, buildings or structures used or designed or intended for use for or in connection with manufacturing, producing, or processing of raw goods, warehousing or bulk storage of goods, distribution centre, truck terminal, research or development in connection with manufacturing, producing, or processing of raw goods, storage, and includes office uses and the sale of commodities to the general public where such uses are accessory to an industrial use, but does not include a building used exclusively for office or administrative purposes unless it is attached to an industrial building or structure as defined above, and does not include a retail warehouse;

“land” includes buildings or structures;

“large apartment” means, for the purposes of the Schedules attached: an apartment unit having a floor area of more than 750 square feet;

“local board” means a public utility commission, transportation commission, public library board, board of park management, local board of health, police services board, planning board, or any other board, commission, committee, body or local authority established or exercising any power or authority under any general or special act with respect to any of the affairs or purposes of the City or the Region;

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

“mixed use” means a use or intended use of the same land, building or structure for any two or more uses defined in this by-law;

“mobile temporary sales trailer” means a trailer that is designed to be made mobile, is placed without a foundation on land and is used exclusively for new residential sales, and concrete piers or sono tubes are deemed not to be foundations for the purposes of this definition;

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

“non-industrial use” means the use of land, buildings or structures or parts thereof, used, designed or intended to be used for any use other than for residential use or for industrial use, or for office use, as those terms are defined in this section, and a non-industrial use includes a retail warehouse;

“non-residential use” means the use of land, buildings or structures or portions thereof used, designed or intended to be used for any use other than for residential use as that term is defined in this section;

“office use” means the use of land, buildings or structures used primarily for, or designed or intended for use primarily for or in connection with office or administrative purposes, provided that the building or structure has an office or administrative component equal to or greater than 50 percent of the total gross floor area of the building or structure. For the purposes of this by-law office use excludes office or administrative uses located in a shopping centre or plaza, and excludes office or administrative uses where such uses are accessory to an industrial use;

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

“planned seniors retirement community” means a housing project consisting of ground-related dwelling units in single family, semi-detached, or multiple dwellings and other amenities, all of which are designed, marketed, developed, and constructed to provide living accommodation for and to meet the needs of senior citizens or older or retired persons on land designated by a resolution of the City Council as a planned seniors retirement community;

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

“public hospital” means a hospital as defined in the *Public Hospitals Act*, R.S.O. 1990, ch. P.40;

“redevelopment” means the construction, erection or placing of one or more buildings or structures on land where all or part of a building or structure has previously been demolished on such land, or changing the use of a building or structure for any of the following:

- i) from residential to non-residential,
- ii) from non-residential to residential,
- iii) from industrial to non-industrial and,
- iv) from office to non-office;

“Region” means The Regional Municipality of Peel;

“Regulation” means Ontario Reg.82/98, under the Act;

“residential use” means land, buildings or structures or portions thereof used, designed, or intended to be used as living accommodation within a dwelling unit, for one or more individuals;

“row house” means a building other than an apartment building, that is vertically divided into a minimum of three dwelling units, each of which has independent entrances at grade to the front and the rear of the building, and each of which shares a common wall adjoining dwelling units above grade;

“semi-detached dwelling” means a building divided vertically, into two separate dwelling units, with at least 50 per cent of the above-grade area of a main wall on one side of each dwelling unit attached to or the same as a main wall on one side of the other dwelling unit;

“services” means services designated in this by-law or in an agreement under section 44 of the Act, or both;

“shelf and rack storage system” means a shelf and rack storage system as defined in the Building Code Act;

“single detached dwelling” means a completely detached residential building containing only one dwelling unit;

“small apartment”, notwithstanding the definition of an “apartment”, means any residential unit having a total floor area equal to or less than 750 square feet;

“temporary building or structure” means a building or structure constructed or erected or placed on land for a continuous period not exceeding eight months, or an addition or alteration to a building or structure that has the effect of increasing the total floor area thereof for a continuous period not exceeding eight months;

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

- (a) includes the floor area of a mezzanine and air-supported structure and the space occupied by interior walls and partitions; and
- (b) excludes any parts of the building or structure used for mechanical equipment related to the operation or maintenance of the building or structure, stairwells, elevators and washrooms; and
- (c) excludes any part of a building or structure above or below grade, used exclusively for the temporary parking of a motor vehicle or used for the provision of loading spaces; and
- (d) includes any part of a building or structure above or below grade used as a commercial parking garage; and
- (e) where a building or structure does not have any walls, the total floor area shall be the sum total of the area of land directly beneath the roof of the building and the total areas of the floors in the building or structure; and
- (f) excludes the area of any self contained structural shelf and rack storage system as defined in the Building Code Act;

“triplex” means a building or structure that is divided horizontally into three separate dwelling units, each of which has a separate entrance through a common vestibule;

“truck terminal” means a building, structure or place where, for the purpose of a common carrier, trucks or transports are rented, leased, kept for hire, or stored, or parked for remuneration or from which trucks or transports are dispatched.

“university” has the same meaning as is set out in section 171.1 of the *Education Act*;

“use” means the use of land, a building or a structure.

Rules

2. For the purpose of complying with section 6 of the Act:
 - (a) the area to which this by-law applies shall be the area described in section 3 of this by-law;
 - (b) the rules developed under paragraph 9 of subsection 5(1) of the Act for determining if a development charge is payable in any particular case and for determining the amount of the charge are set forth in sections 4 through 17 inclusive;
 - (c) the exemptions provided for by such rules shall be the exemptions set forth in sections 18 through 22 inclusive, of this by-law, the indexing of charges shall be in accordance with section 15 of this by-law, and there shall be no phasing in as provided in subsection 16(1) of this by-law; and
 - (d) the calculation of development charges payable with respect to redevelopment of land shall be in accordance with the rules set forth in section 23 of this by-law.

Lands Affected

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

Designation of Services

4. It is hereby declared by Council that all development of land within the area to which this by-law applies will increase the need for services.
5. The development charge applicable to a development as determined under this by-law shall apply without regard to the services required or used by an individual development.
6. Development charges shall be imposed under this by-law, for the following categories of services to pay for the increased capital costs required because of increased needs for services arising from development:
General Government Services

Approvals for Development

7. Development charges shall be imposed against all lands, buildings or structures within the area to which this by-law applies, if the development of such lands, buildings or structures requires any of the following approvals:
 - (a) the passing of a zoning by-law or of an amendment thereto under section 34 of the *Planning Act*;
 - (b) the approval of a minor variance under section 45 of the *Planning Act*;
 - (c) a conveyance of land to which a by-law passed under subsection 50(7) of the *Planning Act* applies;
 - (d) the approval of a plan of subdivision under section 51 of the *Planning Act*;
 - (e) a consent under section 53 of the *Planning Act*;
 - (f) the approval of a description under section 9 of the *Condominium Act*; or
 - (g) the issuing of a permit under the *Building Code Act* in relation to a building or structure.
8. No more than one development charge for each service designated in

section 6 of this by-law shall be imposed upon any lands, buildings or structures to which this by-law applies even though two or more of the actions described in section 7 are required before the lands, buildings or structures can be developed.

9. Notwithstanding section 8, if two or more of the actions described in section 7 occur at different times, additional development charges shall be imposed in respect of any increased or additional development permitted by that action.
10. Where a development requires an approval described in section 7 after the issuance of a building permit and no development charge has been paid, then the development charge shall be paid prior to the granting of the approval required under section 7.
11. If a development does not require a building permit but does require one or more of the approvals described in section 7, then the development charge shall nonetheless be payable in respect of any increased or additional development permitted by such approval required for the increased or additional development being granted, and such development charge shall be paid prior to the granting of the approval required.

Calculation of Development Charges

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

Amount of Charge – Residential

13. (1) The development charges described in Schedule A to this by-law shall be imposed on residential uses of lands, buildings or structures, including a dwelling unit accessory to a non-residential use and, in the case of a mixed use building or structure, on the

residential component of the mixed use building or structure, according to the type of residential use.

- (2) Despite subsection 13(1), the development charges described in Schedule A to this by-law for dwelling units larger than 750 square feet in apartment dwellings shall be imposed on all dwelling units in single detached dwellings, semi-detached dwellings and multiple-dwellings constructed in a planned seniors retirement community, provided that the zoning by-law in force for the planned seniors retirement community limits the number of bedrooms in any dwelling unit to 2 bedrooms, and the number of dwelling units in the community and the maximum floor area of the dwelling units to amounts determined by Council in the zoning by-law.
- (3) If the development charges required to be paid by subsection 13(1) and subsection 13(2), or any part of them remains unpaid after they are payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes in accordance with subsection 32(1) of the Act.

Amount of Charge – Non-Residential

14. (1) The development charges described in Schedule B to this by-law shall be imposed on non-residential uses of lands, buildings or structures and, in the case of a mixed use building or structure, on the non-residential component of the mixed use building or structure, and calculated with respect to each of the services according to the total floor area of the non-residential use.
- (2) Despite clause (1), development charges shall not be imposed on the mechanical portions of buildings that service residential units and which are situated on the same land as all of the residential units that they service.
- (3) If the development charges required to be paid by subsection 14(1), or if any part of them remains unpaid after they are payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes in accordance with subsection 32(1) of the Act.

Indexing of Development Charges

15. The development charges set out in Schedules A and B, shall be adjusted, without amendment to this by-law, semi-annually on February 1st and August 1st in each year, commencing February 1st, 2010, in accordance with the Statistics Canada Quarterly, Construction Price Statistics (catalogue number 62-007) with the base index value being that in effect on August 1, 2009.

Phasing, Timing of Calculation and Payment

16. (1) The development charges set out in this by-law are not subject to phasing in and are payable in full from the effective date of this by-law, subject to applicable exemptions, credits, and discounts;
- (2) Subject to section 23 of this by-law (with respect to redevelopment) and subsection 16(3) below, the development charge shall be calculated as of, and shall be payable, on the date the first building permit is issued in relation to a building or structure on the land to which the development charge applies;
- (3) Where a development charge applies to land in relation to which a building permit is required, no building permit shall be issued until the development charge has been paid in full;
- (4) Notwithstanding subsection 16(3), the City may, in its sole discretion, require an owner to enter into an agreement, including the provision of security for the owner's obligations under agreement, pursuant to section 27 of the Act, providing for all or part of a development charge to be paid before or after it otherwise would be payable. In that event, the terms of such agreement shall then prevail over the provision of this by-law.

Payment By Money or the Provision of Services

17. (1) Payment of development charges shall be by cash or by certified cheque.
- (2) In the alternative to payment by the means provided in subsection (1), the City may, by an agreement entered into with the owner, accept the provision of services in full or partial satisfaction of the development charge otherwise payable, provided that:

- (a) if the City and the owner cannot agree as to the reasonable cost of doing the work under subsection (2), the dispute shall be referred to Council, whose decision shall be final and binding;
 - (b) if the credit exceeds the amount of the charge for the service to which the work relates,
 - (i) the excess amount shall not be credited against the charge for any other service, unless the City has so agreed in an agreement entered into under section 38 of the Act; and
 - (ii) in no event shall the City be required to make a cash payment to the credit holder.
 - (c) notwithstanding the repeal of By-law 218-2004, any credits owing to a landowner, or previous landowner, pursuant to an agreement entered into under section 38 of the Act, prior to the enactment of this by-law, may, at the City's sole discretion, be recognized and used as a credit under this by-law, pursuant to section 41 of the Act; or
 - (d) any credits owing to a landowner, or previous landowner, pursuant to an agreement entered into under section 38 of the Act, either prior to, or after, the enactment of this by-law, which credits do not relate to the category of services covered by this by-law, may, at the City's sole discretion, be recognized and used as a credit under this by-law, pursuant to section 41 of the Act.
- (3) Nothing in this by-law prevents Council from requiring, as a condition of an agreement under sections 51 or 53 of the *Planning Act*, that the owner, at his or her own expense, install such local services related to a plan of subdivision or within the area to which the plan relates, as Council may require, and/or that the owner pay for local connections to storm drainage facilities installed at the owner's expense, and/or administrative, processing, or inspection fees.

Rules with Respect to Exemptions for Intensification of Existing Housing

18. (1) This by-law does not apply with respect to approvals related to the residential development of land, buildings or structures that

would have the effect only,

- (a) of permitting the enlargement of an existing dwelling unit;
 - (b) of creating one or two additional dwelling units in an existing single detached dwelling unit;
 - (c) of creating one additional dwelling unit in an existing semi detached dwelling unit; or
 - (d) of creating one additional dwelling unit for any other existing residential building.
- (2) Notwithstanding clauses (1)(b) to (d), a development charge shall be imposed with respect to the creation of one or two additional dwelling units in a dwelling, if the total floor area of the additional one or two dwelling units exceeds the total floor area of the existing dwelling unit in clause (1)(b) and (1)(c), and the smallest existing dwelling unit in clause (1)(d).

Rules with Respect to Industrial Expansion Exemption

19. (1) If a development includes the enlargement of the gross floor area of an existing industrial building, the amount of the development charge that is payable under this by-law, is the following:
- (a) if the gross floor area is enlarged by 50 per cent or less, the amount of the development charge in respect of the enlargement is zero; and
 - (b) if the gross floor area is enlarged by more than 50 per cent, development charges are payable on the amount by which the enlargement exceeds 50 per cent of the gross floor area before the enlargement.(2) For the purpose of this section, the terms “gross floor area” and “existing industrial building” shall have the same meaning as those terms have in the Regulation made under the Act.
- (2) For the purpose of interpreting the definition of “existing industrial building” contained in the Regulation, regard shall be had for the classification of the lands in question pursuant to the *Assessment Act*, R.S.O. 1990, c.A.31, and in particular:

- (a) whether the lands fall within a tax class such that taxes on the lands are payable at the industrial tax rate; and
 - (b) whether more than fifty per cent (50%) of the gross floor area of the building or structure has an industrial property code for assessment purposes;
- (4) Despite subsection (3), distribution centres, warehousing, the bulk storage of goods and truck terminals shall be considered industrial uses.
- (5) For the purpose of the application of section 4 of the Act to the operation of this by-law:
- (a) the gross floor area of an existing industrial building shall be calculated as it existed prior to the first enlargement in respect of that building for which an exemption under section 4 of the Act is sought; and
 - (b) the enlargement of the gross floor area of the existing building must:
 - (i) be attached to the existing industrial building
 - (ii) not be attached to the existing industrial building by means only of a tunnel, bridge, canopy, corridor or other passageway, shared below-grade connection, foundation, footing, parking facility, service tunnel or service pipe;
 - (iii) be for use or in connection with an industrial purpose as set out in this by-law; and
 - (iv) constitute a bone fide increase in the size of the existing building.

Categories of Exempt Institutions

20. (1) The following categories of institutions are hereby designated as being exempt from the payment of development charges:

- (a) land, buildings or structures used as hospitals governed by the *Public Hospitals Act*, R.S.O. 1990, c. P. 40;
 - (b) land, buildings or structures owned by and used for the purposes of the City, the Region, or their local boards as required by the Act;
 - (c) land, buildings or structures owned by a board of education and used only for school purposes as required by the Act;
 - (d) land, buildings or structures owned by and used for the purposes of a college or university;
 - (e) that portion of land, buildings or structures owned by a church or religious organization which is used only as a place of worship; and
 - (f) land, buildings or structures used only for the purpose of a temporary office for new residential sales.
- (2) The exemption referred to in this paragraph 20(1)(b) does not apply to the development for residential uses of lands owned by:
- (a) the Region or any local board thereof, including the Peel Children's Aid Society; or
 - (b) any corporation owned, controlled, or operated by the Region, including Peel Non-Profit Housing Corporation.

Agricultural Uses

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

Temporary Buildings or Structures

22. (1) Temporary buildings or structures shall be exempt from the provisions of this by-law, so long as the status as a temporary building or structure is maintained in accordance with the provisions of this by-law;

- (2) In the event that a temporary building or structure becomes protracted, it shall be deemed not to be, or ever to have been a temporary building or structure, and the development charges required to be paid under this by-law shall become payable on the date the temporary building or structure becomes protracted; and
- (3) Prior to the City issuing a building permit for a temporary building or structure, the City may require an owner to enter into an agreement, including the provision of security for the owner's obligation under the agreement, pursuant to section 27 of the Act, providing for all or part of the development charge required by subsection 22(2) to be paid after it would otherwise be payable. The terms of such agreement shall then prevail over the provisions of this by-law.

Rules with Respect to the Redevelopment of Land

23. (1) Where there is a redevelopment of land on which there is a conversion of space proposed, or on which there was formerly erected a building or structure that has been demolished or will be demolished within a period no longer than 4 months from the date of issuance of a building permit, a credit shall be allowed against the development charge otherwise payable by the owner pursuant to this by-law, for the portion of the previous building or structure still in existence that is being converted or for the portion of the building or structure that has or will be demolished, as the case may be, calculated by multiplying the number and type of dwelling units being converted or demolished or the non-residential total floor area being converted or demolished by the relevant development charge in effect on the date when the development charge is payable in accordance with this by-law.
- (2) If a credit has been allowed against the development charge otherwise payable and a building permit for the redevelopment has been issued, in advance of the occurrence of the demolition, the owner must complete and provide proof of the demolition no later than 4 months after the issuance of the building permit or the amount for which the development charge credit was provided shall become fully payable.

- (3) A credit in respect of any demolition under this section shall not be given unless the demolition permit was issued on or after October 28, 1991.
- (4) The amount of any credit hereunder shall not exceed, in total, the amount of the development charges otherwise payable under this by-law with respect to the redevelopment.
- (5) For the purposes of this section, dwelling units or total floor area accidentally destroyed by fire shall be deemed to have been demolished under a demolition permit issued on the date of the fire.

Interest

- 24. The City shall pay interest on a refund under subsections 17(3), (5) and 24(2) of the Act at a rate equal to the Bank of Canada rate on the date this by-law comes into effect.

Front Ending Agreements

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

Schedules

- 26. The following Schedules to this by-law form an integral part of this by-law:

Schedule 'A'	Residential Development Charges
Schedule 'B'	Non-residential Development Charges

By-law Registration

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

Date By-law Effective

28. This by-law comes into force and effect on XXXXXX XX, 2009.

Date By-law Expires

29. This by-law expires five years after the date on which it comes into force and effect.

Repeal

30. By-law No. 218-2004 is hereby repealed, effective on the date this by-law comes into force and effect.

Headings for Reference Only

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

Interpretation

32. All words defined in the Act or the Regulation have the same meaning in this by-law as they have in the Act or the Regulation, unless they are defined differently in this by-law.

33. All references to the provisions of any statute or regulation or to the Ontario Building Code contained in this by-law shall also refer to the same or similar provision in the statute or regulation or code as amended, replaced, revised or consolidated from time to time.

Severability

34. If, for any reason, any provision, section, subsection or paragraph of this by-law is held invalid, it is hereby declared to be the intention of Council that all the remainder of this by-law shall continue in full force and effect until repealed, re-enacted or amended, in whole or in part or dealt with in any other way.

Short Title

35. This by-law may be referred to as the City of Brampton Development Charges By-law for General Government Services, 2009.

READ A FIRST, SECOND, AND THIRD TIME, AND PASSED IN OPEN COUNCIL THIS XXth DAY OF AUGUST, 2009.

THE CORPORATION OF THE CITY OF BRAMPTON

Original signed by
Susan Fennell, Mayor

Original Signed by
Peter Fay, City Clerk

Approved as to Content
Original Signed by Maurice Lewis

Approved as to Form
Original Signed by Colin Grant

Schedule A to By-Law XXX-2009
Residential Development Charge

Service Category	Charge for Singles/Semis	Charge for Rows	Charge for Apartment >750 Sq.Ft.	Charge for Apartment <= 750 Sq.Ft.
General Government - Public Works Building & Fleet	\$550.80	\$454.41	\$371.79	\$206.55
General Government - Parking Facilities	\$325.20	\$268.29	\$219.51	\$121.95
General Government - Growth Studies and Other	\$80.72	\$66.59	\$54.49	\$30.27
Total	\$956.72	\$789.29	\$645.79	\$358.77

Schedule B to By-Law xxx-2009
Non-Residential Development Charge

Service Category	Non-Residential Charge per Sq.M.
General Government - Public Works Building & Fleet	\$2.14
General Government - Parking Facilities	\$1.26
General Government - Growth Studies and Other	\$0.32
Total	\$3.72

RECREATION SUMMARY

The Community Services Department is responsible for the provision of Recreation services in the City of Brampton. The department operates ten major community centres that provide an extensive and wide variety of indoor recreation facilities, including pools, arenas, fitness centres, racquet courts, bocce courts, etc. In addition to the major facilities, the City operates five minor community centres, three seniors' centres, and a multitude of other special facilities. The current gross floor area of all of these facilities is 1,420,190 sq.ft. on approximately 120 acres of land. The Community Services Department also manages a variety of outdoor recreation facilities including baseball diamonds, soccer fields, tennis courts, bocce courts, wading pools, water play equipment, playground equipment, basketball and other play courts, etc and special city-wide facilities such as golf courses, minigolf, greenhouses, flower gardens, tennis bubbles, gateway features, etc.

Consistent with s.5(1)7 of the DCA, the eligible growth-related net capital cost for the provision of Recreation services is reduced by 10% in calculating the development charges.

The inventory of recreation services, as well as the service level calculation is shown in the Historical Inventory table contained within this section. The historic 10-year average service level is calculated at \$2,105.86/capita. Based on this average service level and the forecast development expected in the City over the next 10 years, an additional \$303.12M is the maximum allowable amount that can be included in the development charge calculation for Recreation.

The 2009-2018 growth-related capital budget for Recreation is shown in the DC Project Tables in this section. The capital forecast net of subsidies for this program is \$439.18M. Of this amount \$52.82M has been identified as a benefit to the existing population. The Growth Funding Envelope totals \$306.55M and consists of \$3.43M included as a benefit to prior growth and \$303.12M included as supporting growth in the 10-year period. \$79.81M in remaining growth-related capital cannot be funded under the funding envelope and has been identified as a benefit beyond the 10-year forecast period. The 10% non-DC requirement of \$30.31M has been deducted from the \$303.12M of growth-related capital on which the development charge is based leaving \$272.81M as the amount on which the development charge is calculated.

The growth-related net capital costs in the amount of \$272.81M have been fully allocated to residential development as residents largely utilize these facilities with only negligible non-residential corporate use.

This allocation of growth capital results in the following charge based on development type:

Small Apartment (per unit)	\$2,970.72
Large Apartment (per unit)	\$5,347.30
Row (per unit)	\$6,535.59
Single/Semi (per unit)	\$7,921.92

RECREATION

FACILITIES

INVENTORY OF CAPITAL ASSETS

MAJOR COMMUNITY CENTRES (sq.ft.)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
PowerAde Centre	152,040	152,040	152,040	152,040	152,040	152,040	152,040	152,040	152,040	152,040	\$251
Century Gardens Recreation Complex	76,591	76,591	77,129	77,129	77,129	77,129	77,129	77,129	77,129	77,129	\$287
Chris Gibson Recreation Centre	51,272	51,272	51,272	51,272	51,272	51,272	51,272	51,272	51,272	51,272	\$283
Eanscliffe Recreation Centre	47,699	47,699	47,699	47,699	47,699	47,699	47,699	47,699	47,699	47,699	\$285
Greenbriar Recreation Centre	38,424	38,424	38,424	38,424	38,424	38,424	38,424	38,424	38,424	38,424	\$275
Jim Archdekin Recreation Centre	47,052	47,052	47,052	47,052	47,052	47,052	47,052	47,052	47,052	47,052	\$285
South Fletcher's Sportsplex	151,959	151,959	151,959	151,959	151,959	151,959	151,959	151,959	151,959	151,959	\$228
Terry Miller Recreation Centre	60,344	60,344	60,344	60,344	60,344	60,344	60,344	60,344	60,344	60,344	\$267
Wellness Centre	43,188	43,188	43,188	43,188	43,188	43,188	43,188	43,188	43,188	43,188	\$264
Brampton Soccer Centre									134,309	134,309	\$264
Cassie Campbell Community Centre										166,355	\$286
Total (sq.ft.)	668,569	668,569	669,107	669,107	669,107	669,107	669,107	669,107	846,210	1,050,199	
Total (\$000)	\$174,097.8	\$174,097.8	\$174,252.1	\$174,252.1	\$174,252.1	\$174,252.1	\$174,252.1	\$174,252.1	\$221,867.5	\$280,227.6	

MINOR COMMUNITY CENTRES (sq.ft.)	UNIT COST
Balmoral Recreation Centre	17,439
Brampton Curling Club	28,258
Centre for Sports Excellence (formerly McMurphy Pool)	13,987
Chinguacousy Curling Club	26,857
Ellen Mitchell Recreation Centre	14,178
Howden Recreation Centre	18,867
Lofer's Lake Recreation Centre	30,480
Victoria Park Arena	35,379
Total (sq.ft.)	157,187
Total (\$000)	\$48,555.6

OTHER INDOOR FACILITIES (sq.ft.)	UNIT COST
Castlemore Bocce Courts	5,647
Central Public School Recreation and Arts Centre	25,930
Ebenezzer Hall	1,500
Eldorado Pavilion	6,572
Ken Giles Recreation Centre	30,951
Huttonville Community School	10,637
Norton Place Recreation Centre	1,580
OPP - Dorm Building "D"	1,580
OPP - Gymnasium	
Optimist Community Centre(Chinguacousy)	6,985
Professor's Lake Recreation Centre	13,061
Total (sq.ft.)	102,863
Total (\$000)	\$29,080.3

RECREATION

FACILITIES

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
SENIOR CENTRES (sq.ft.)											
Centennial Recreation Centre	7,766	7,766	7,766	7,766	7,766	7,766	7,766	7,766	7,766		\$270
Knightsbridge Community Centre	6,567	6,567	6,567	6,567	6,567	6,567	6,567	6,567	6,567	6,567	\$270
Snelgrove Community Centre	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	\$269
FCCC Seniors Centre								15,224	15,224	15,224	\$291
Total (sq.ft.)	21,486	21,486	21,486	21,486	21,486	21,486	21,486	36,710	28,944	28,944	
Total (\$000)	\$5,791.2	\$5,791.2	\$5,791.2	\$5,791.2	\$5,791.2	\$5,791.2	\$5,791.2	\$10,219.0	\$8,125.9	\$8,125.9	

											UNIT COST
ARENAS (sq.ft.)											
Memorial Arena	33,128	33,128	33,128	33,128	33,128	33,128	33,128	33,128	33,128	33,128	\$256
Total (sq.ft.)	33,128	33,128	33,128	33,128	33,128	33,128	33,128	33,128	33,128	33,128	
Total (\$000)	\$8,490.4	\$8,490.4	\$8,490.4	\$8,490.4	\$8,490.4	\$8,490.4	\$8,490.4	\$8,490.4	\$8,490.4	\$8,490.4	

											Average Service Level	UNIT COST
TOTAL RECREATION FACILITIES (Sq.ft.)												
Major Community Centres	668,569	668,569	669,107	669,107	669,107	669,107	669,107	669,107	846,210	1,050,199	\$724,819	
Minor Community Centres	157,187	185,445	185,445	208,305	208,305	208,738	208,738	208,738	208,738	208,738	\$198,838	
Other Indoor Facilities	102,863	100,819	95,849	125,041	128,807	124,727	124,727	124,727	124,727	99,181	\$115,147	
Seniors Centres	21,486	21,486	21,486	21,486	21,486	21,486	21,486	36,710	28,944	28,944	\$24,500	
Arenas	33,128	33,128	33,128	33,128	33,128	33,128	33,128	33,128	33,128	33,128	\$33,128	
Total (sq.ft.)	983,233	1,009,447	1,005,015	1,057,067	1,060,833	1,057,186	1,057,186	1,072,410	1,241,747	1,420,190		
Total (\$000)	\$266,015.3	\$272,863.8	\$271,592.9	\$287,823.6	\$288,903.6	\$287,868.5	\$287,868.5	\$292,296.3	\$337,818.7	\$389,506.6		

RECREATION

FACILITIES - EQUIPMENT

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/Sqft)
MAJOR COMMUNITY CENTRES (\$)											
PowerAde Centre	3,393,279	3,393,279	3,393,279	3,393,279	3,393,279	3,393,279	3,393,279	3,393,279	3,393,279	3,393,279	\$22
Century Gardens Recreation Complex	1,952,305	1,952,305	1,966,018	1,966,018	1,966,018	1,966,018	1,966,018	1,966,018	1,966,018	1,966,018	\$25
Chris Gibson Recreation Centre	1,293,080	1,293,080	1,293,080	1,293,080	1,293,080	1,293,080	1,293,080	1,293,080	1,293,080	1,293,080	\$25
Earncliffe Recreation Centre	1,208,693	1,208,693	1,208,693	1,208,693	1,208,693	1,208,693	1,208,693	1,208,693	1,208,693	1,208,693	\$25
Greenbriar Recreation Centre	943,309	943,309	943,309	943,309	943,309	943,309	943,309	943,309	943,309	943,309	\$25
Jim Archdekin Recreation Centre	1,190,416	1,190,416	1,190,416	1,190,416	1,190,416	1,190,416	1,190,416	1,190,416	1,190,416	1,190,416	\$25
South Fletcher's Sportsplex	3,072,611	3,072,611	3,072,611	3,072,611	3,072,611	3,072,611	3,072,611	3,072,611	3,072,611	3,072,611	\$20
Terry Miller Recreation Centre	1,439,808	1,439,808	1,439,808	1,439,808	1,439,808	1,439,808	1,439,808	1,439,808	1,439,808	1,439,808	\$24
Wellness Centre	1,001,962	1,001,962	1,001,962	1,001,962	1,001,962	1,001,962	1,001,962	1,001,962	1,001,962	1,001,962	\$23
Brampton Soccer Centre	-	-	-	-	-	-	-	-	3,262,366	-	\$24
Cassie Campell Community Centre	-	-	-	-	-	-	-	-	-	4,291,959	\$26
Total (\$)	\$15,495,461.3	\$15,495,461.3	\$15,509,174.9	\$15,509,174.9	\$15,509,174.9	\$15,509,174.9	\$15,509,174.9	\$15,509,174.9	\$19,855,940.5	\$25,107,190.2	

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/Sqft)
MINOR COMMUNITY CENTRES (\$)											
Balmoral Recreation Centre	574,615	574,615	574,615	574,615	574,615	574,615	574,615	574,615	574,615	574,615	\$33
Brampton Curling Club	0	571,903	571,903	571,903	571,903	571,903	571,903	571,903	571,903	571,903	\$20
Centre for Sports Excellence (formerly McMurphy Pool)	464,928	464,928	464,928	1,224,794	1,224,794	1,224,794	1,224,794	1,224,794	1,224,794	1,224,794	\$33
Chinguacousy Curling Club	543,549	543,549	543,549	543,549	543,549	543,549	543,549	543,549	543,549	543,549	\$20
Ellen Mitchell Recreation Centre	429,593	429,593	429,593	429,593	429,593	429,593	429,593	429,593	429,593	429,593	\$30
Howden Recreation Centre	562,803	562,803	562,803	562,803	562,803	562,803	562,803	562,803	562,803	562,803	\$30
Loafers Lake Recreation Centre	848,563	848,563	848,563	848,563	848,563	860,618	860,618	860,618	860,618	860,618	\$28
Victoria Park Arena	823,269	823,269	823,269	823,269	823,269	823,269	823,269	823,269	823,269	823,269	\$23
Total (\$)	\$4,247,320.5	\$4,819,223.9	\$4,819,223.9	\$5,579,090.3	\$5,579,090.3	\$5,591,145.0	\$5,591,145.0	\$5,591,145.0	\$5,591,145.0	\$5,591,145.0	

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/Sqft)
OTHER INDOOR FACILITIES (\$)											
Castlemore Bocce Courts	166,078	166,078	166,078	166,078	166,078	166,078	166,078	166,078	166,078	166,078	\$29
Central Public School Recreation and Arts Centre	506,154	506,154	506,154	506,154	506,154	506,154	506,154	506,154	506,154	506,154	\$20
Ebenezer Hall	36,885	36,885	36,885	36,885	36,885	36,885	36,885	36,885	36,885	36,885	\$25
Eldorado Pavilion	119,873	119,873	29,220	29,220	97,912	23,493	23,493	23,493	23,493	23,493	\$18
Ken Giles Recreation Centre	706,921	660,236	660,236	660,236	660,236	660,236	660,236	660,236	660,236	660,236	\$23
Huttonville Community School	261,564	261,564	261,564	261,564	261,564	261,564	261,564	261,564	261,564	261,564	\$25
Norton Place Recreation Centre	46,594	46,594	46,594	46,594	46,594	46,594	46,594	46,594	46,594	46,594	\$29
OPP - Dorm Building "D"	0	0	0	187,597	187,597	187,597	187,597	187,597	187,597	187,597	\$25
OPP - Gymnasium	0	0	0	514,662	514,662	514,662	514,662	514,662	514,662	514,662	\$24
Optimist Community Centre(Chinguacousy)	165,545	165,545	165,545	165,545	165,545	165,545	165,545	165,545	165,545	165,545	\$24
Professor's Lake Recreation Centre	324,566	324,566	324,566	324,566	324,566	324,566	324,566	324,566	324,566	324,566	\$25
Total (\$)	\$2,334,180.4	\$2,287,495.4	\$2,196,842.6	\$2,899,102.1	\$2,967,793.9	\$2,893,374.7	\$2,893,374.7	\$2,893,374.7	\$2,893,374.7	\$2,280,477.6	

RECREATION

FACILITIES - EQUIPMENT

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/Sqft)
SENIOR CENTRES (\$)											
Centennial Recreation Centre	184,598	184,598	184,598	184,598	184,598	184,598	184,598	184,598	0	0	\$24
Knightsbridge Community Centre	156,098	156,098	156,098	156,098	156,098	156,098	156,098	156,098	156,098	156,098	\$24
Shelgrove Community Centre	169,955	169,955	169,955	169,955	169,955	169,955	169,955	169,955	169,955	169,955	\$24
FCCC Seniors Centre	0	0	0	0	0	0	0	392,931	392,931	392,931	\$26
Total (\$)	\$510,650.7	\$510,650.7	\$510,650.7	\$510,650.7	\$510,650.7	\$510,650.7	\$510,650.7	\$903,582.1	\$718,984.3	\$718,984.3	

	UNIT COST (\$/Sqft)
ARENAS (\$)	
Memorial Arena	753,233
Total (\$)	\$753,233.4

	UNIT COST (\$/Sqft)	Average Service Level
TOTAL RECREATION EQUIPMENT (\$)		
Major Community Centres	15,495,461	16,900,910
Minor Community Centres	4,247,321	5,299,967
Other Indoor Facilities	2,334,180	2,280,478
Seniors Centres	510,651	718,984
Arenas	753,233	753,233
Total (\$)	\$23,340,846.2	\$34,451,030.4

RECREATION

FACILITIES - LAND

INVENTORY OF CAPITAL ASSETS

INDOOR RECREATION - LAND (acres)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
MAJOR COMMUNITY CENTRES (acres)											
Brampton Centre for Sports Excellence (Powerade)	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	\$354,000
Century Gardens Recreation Complex	4.69	4.69	4.69	4.69	4.69	4.69	4.69	4.69	4.69	4.69	\$354,000
Chris Gibson Recreation Centre	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	\$354,000
Earncliffe Recreation Centre	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	\$354,000
Greenbriar Recreation Centre	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	\$354,000
Jim Archdekin Recreation Centre	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	\$354,000
South Fletcher's Sportsplex	10.82	10.82	10.82	10.82	10.82	10.82	10.82	10.82	10.82	10.82	\$354,000
Terry Miller Recreation Centre	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	\$354,000
Wellness Centre	4.74	4.74	4.74	4.74	4.74	4.74	4.74	4.74	4.74	4.74	\$354,000
Brampton Soccer Centre										9.78	\$354,000
Cassie Campell Community Centre										10.83	\$354,000
Total (acres)	65.68	65.68	65.68	65.68	65.68	65.68	65.68	65.68	80.01	94.07	
Total (\$000)	\$23,250.4	\$23,250.4	\$23,250.4	\$23,250.4	\$23,250.4	\$23,250.4	\$23,250.4	\$23,250.4	\$28,322.3	\$33,301.3	

MINOR COMMUNITY CENTRES (acres)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Balmoral Recreation Centre	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	\$354,000
Brampton Curling Club		1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	\$354,000
Centre for Sports Excellence (formerly McMurphy Pool)	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	\$354,000
Chinguacousy Curling Club	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	\$354,000
Ellen Mitchell Recreation Centre	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	\$354,000
Howden Recreation Centre	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	\$354,000
Loafer's Lake Recreation Centre	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	\$354,000
Victoria Park Arena	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	\$354,000
Total (acres)	11.54	13.52	13.52	13.52	13.52	13.52	13.52	13.52	13.52	13.52	
Total (\$000)	\$4,085.0	\$4,784.8	\$4,784.8	\$4,784.8	\$4,784.8	\$4,784.8	\$4,784.8	\$4,784.8	\$4,784.8	\$4,784.8	

RECREATION

FACILITIES - LAND

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST	
OTHER INDOOR FACILITIES (acres)												
Castlemore Boce Courts	-	-	-	-	-	-	-	-	-	-	-	\$354,000
Central Public School Recreation and Arts Centre	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	\$354,000
Ebenezer Hall	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$354,000
Eldorado Pavilion	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	\$354,000
Norton Place Recreation Centre	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	\$354,000
OPP - Dorm Building "D"				0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	\$354,000
OPP - Gymnasium				1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	\$354,000
Optimist Community Centre	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	\$354,000
Professor's Lake Recreation Centre	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	\$354,000
Total (acres)	5.86	5.86	5.86	8.53	8.53	8.53	8.53	8.53	8.53	8.53	8.53	6.55
Total (\$000)	\$2,073.1	\$2,073.1	\$2,073.1	\$3,017.9	\$3,017.9	\$3,017.9	\$3,017.9	\$3,017.9	\$3,017.9	\$3,017.9	\$3,017.9	\$2,318.1

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST	
SENIOR CENTRES (acres)												
Centennial Recreation Centre	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	\$354,000
Knightbridge Community Centre	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	\$354,000
Snelgrove Community Centre	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	\$354,000
FCCC Seniors Centre												\$354,000
Total (acres)	2.10	2.10	2.10	2.10	2.10	2.10	2.10	4.35	3.34	3.34	3.34	
Total (\$000)	\$743.5	\$743.5	\$743.5	\$743.5	\$743.5	\$743.5	\$743.5	\$1,540.0	\$1,181.4	\$1,181.4	\$1,181.4	

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST	
ARENAS (acres)												
Memorial Arena	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	\$354,000
Total (acres)	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	
Total (\$000)	\$927.2	\$927.2	\$927.2	\$927.2	\$927.2	\$927.2	\$927.2	\$927.2	\$927.2	\$927.2	\$927.2	

SERVICE LEVEL ANALYSIS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
POPULATION	300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300

INVENTORY SUMMARY

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Land for Indoor Recreation Facilities (acres)	87.79	89.77	89.77	92.44	92.44	92.44	92.44	94.69	108.00	120.09
Total Land for Indoor Recreation Facilities (\$000)	\$31,079.3	\$31,779.1	\$31,779.1	\$32,723.8	\$32,723.8	\$32,723.8	\$32,723.8	\$33,520.3	\$38,233.5	\$42,512.8

SERVICE LEVELS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average Service Level
Total Land for Indoor Recreation Facilities (acres/10,000 pop)	2.92	2.87	2.76	2.68	2.53	2.39	2.26	2.18	2.40	2.58	2.56
Total Land for Indoor Recreation Facilities (\$/capita)	\$103.30	\$101.63	\$97.78	\$95.03	\$89.69	\$84.65	\$79.89	\$77.24	\$85.02	\$91.17	\$90.54

RECREATION

PARK FACILITIES

INVENTORY OF CAPITAL ASSETS

Major Soccer - Lighted

Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Avondale (Stadium)								1	1	1	\$554,100
Century Gardens Park	1	1	1	1	1	1	1	1	1	1	\$455,972
Chinguacousy	2	2	2	2	2	2	2	2	2	2	\$393,587
Chris Gibson Park	1	1	1	1	1	1	1	1	1	1	\$393,587
Creditview Sandalwood								2	2	2	\$300,624
Morris Kerbel District Park	1	1	1	1	1	1	1	1	1	1	\$393,587
Norton Place	1	1	1	1	1	1	1	1	1	1	\$393,587
Victoria Park (Stadium)	1	1	1	1	1	1	1	1	1	1	\$554,100
Subtotal (#)	7	7	7	7	7	7	7	10	10	10	
Subtotal (\$)	\$2,978,008	\$2,978,008	\$2,978,008	\$2,978,008	\$2,978,008	\$2,978,008	\$2,978,008	\$4,133,357	\$4,133,357	\$4,133,357	

Major Diamond - Lighted

Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Blue Oak Park	1	1	1	1	1	1	1	1	1	1	\$380,522
Bramalea Community	2	2	2	2	2	2	2	2	2	2	\$380,522
Brampton Sports Park	5	5	5	5	5	5	5	5	5	5	\$380,522
Caterpillar Lands	2	2	2	2	2	2	2	2	2	2	\$380,522
Carabram Park	1	1	1	1	1	1	1	1	1	1	\$380,522
Century Gardens	1	1	1	1	1	1	1	1	1	1	\$380,522
Chinguacousy Park	2	2	2	2	2	2	2	2	2	2	\$380,522
Chris Gibson	3	3	3	3	3	3	3	3	3	3	\$531,120
Dave Dash	1	1	1	1	1	1	1	1	1	1	\$531,120
Drinkwater Community Park	2	2	2	2	2	2	2	2	2	2	\$531,120
Duggan Park	2	2	2	2	2	2	2	2	2	2	\$378,751
Earncliffe	1	1	1	1	1	1	1	1	1	1	\$531,120
Fletchers Green Park	2	2	2	2	2	2	2	2	2	2	\$531,120
FCCC											\$969,637
Moorehead Park	1	1	1	1	1	1	1	1	1	1	\$531,120
Morris Kerbel District Park	2	2	2	2	2	2	2	2	2	2	\$531,120
Norton Place Park	1	1	1	1	1	1	1	1	1	1	\$531,120
Old Brampton Fairgrounds Park	2	2	2	2	2	2	2	2	2	2	\$531,120
Rosalea Park	1	1	1	1	1	1	1	1	1	1	\$380,522
Sesquicentennial Park					3	3	7	7	7	7	\$531,120
Victoria Park	2	2	2	2	2	2	2	2	2	2	\$380,522
Subtotal (#)	34	34	34	34	37	37	41	37	37	37	
Subtotal (\$)	\$15,193,183	\$15,193,183	\$15,193,183	\$15,193,183	\$16,786,543	\$16,786,543	\$18,911,023	\$17,388,935	\$17,388,935	\$17,978,050	

Football

Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Lighted											
Chinguacousy Park	1	1	1	1	1	1	1	1	1	1	\$393,587
Creditview Sandalwood								1	1	1	\$393,587
Unlighted											
Chinguacousy Park	1	1	1	1	1	1					\$239,438
Creditview Sandalwood								1	1	1	\$239,438
Subtotal (#)	2	2	2	2	2	2	1	3	2	2	
Subtotal (\$)	\$633,025	\$633,025	\$633,025	\$633,025	\$633,025	\$633,025	\$393,587	\$1,026,612	\$633,025	\$633,025	

RECREATION

PARK FACILITIES

INVENTORY OF CAPITAL ASSETS

Major Soccer - Unlighted

Park Name	# of Fields										
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Blue Oak Park	1	1	1	1	1	1	1	1	1	1	\$239,438
Bramalea Ltd. Community Park	2	2	2	2	2	2	2	2	2	2	\$239,438
Cherrytree Park	1	1	1	1	1	1	1	1	1	2	\$146,475
Ching Sandalwood (Cassie Campbell)										2	\$146,475
Chinguacousy Park										2	\$239,438
Chris Gibson Park	2	2	2	2	2	2	2	2	2	2	\$146,475
Creditview Sandalwood								6	6	6	\$146,475
Dixie HWY 407 park							7	7	7	7	\$146,475
Dixie/Sandalwood	4	4	4	4	4	4	4	4	4	4	\$130,919
Eldorado Park	1	1	1	1	1	1	1	1	1	1	\$146,475
FCCC	2	2	2	2	2	2	2	2	2	2	\$146,475
Greenbriar Park S	1	1	1	1	1	1	1	1	1	1	\$239,438
Homestead park							1	1	1	1	\$146,475
Leander Park	1	1	1	1	1	1	1	1	1	1	\$40,541
Loafer's Lake Park	1	1	1	1	1	1	1	1	1	1	\$239,438
Major Oaks Park	1	1	1	1	1	1	1	1	1	1	\$188,570
Northampton Park	1	1	1	1	1	1	1	2	2	2	\$239,438
Richvale Park	2	2	2	2	2	2	2	2	2	2	\$40,541
Subtotal (#)	20	20	21	22	22	22	29	36	35	37	
Subtotal (\$)	\$3,149,348	\$3,149,348	\$3,388,787	\$3,535,262	\$3,535,262	\$3,535,262	\$4,560,584	\$5,771,835	\$5,625,360	\$5,918,309	

Minor Soccer - Unlighted

Park Name	# of Fields										
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Ashurst Park	1	1									\$115,480
Balmoral Park	1	1	1	1	1	1	1	1	1	1	\$115,480
Centennial Park	1	1	1	1	1	1	1	1	1	1	\$115,480
Dearborne Park	2	2	2	2	2	2	2	2	2	2	\$115,480
Earncliffe Park	2	2	2	2	2	2	2	2	2	2	\$115,480
FCCC	2	2	2	2	2	2	2	2	2	2	\$115,480
Fred Kline Park	1	1	1	1	1	1	1	1	1	1	\$61,220
Greenbriar Park S	1	1	1	1	1	1	1	1	1	1	\$115,480
Hilldale Park S	1	1	1	1	1	1	1	1	1	1	\$115,480
James William Hewson											\$115,480
Kingswood Park	1	1	1	1	1	1	1	1	1	1	\$115,480
Loafer's Lake Park	1	1	1	1	1	1	1	1	1	1	\$115,480
Valleybrook Park	1	1	1	1	1	1	1	1	1	1	\$61,220
Valleydown Park	1	1	1	1	1	1	1	1	1	1	\$115,480
Victoria Park	1	1	1	1	1	1	1	1	1	1	\$115,480
Jefferson park	2	2	2	2	2	2	2	2	2	2	\$115,480
Lafrence Park	1	1	1	1	1	1	1	1	1	1	\$115,480
Mosswood Park	1	1	1	1	1	1	1	1	1	1	\$115,480
Sandalwood Park	1	1	1	1	1	1	1	1	1	1	\$115,480
St. John Bosco	1	1	1	1	1	1	1	1	1	1	\$16,032
Grenoble	1	1	1	1	1	1	1	1	1	1	\$16,032
Subtotal (#)	24	24	22	23	23	21	21	21	21	21	
Subtotal (\$)	\$2,464,108	\$2,464,108	\$2,233,148	\$2,348,628	\$2,348,628	\$2,117,668	\$2,117,668	\$2,117,668	\$2,117,668	\$2,117,668	

RECREATION

PARK FACILITIES

INVENTORY OF CAPITAL ASSETS

Park Name	# of Fields										
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Mini Soccer - Unlighted											
Ambro Park			1	1	1	1	1	1	1	1	\$16,032
Ashurst Park			2	2	2	2	2	2	2	2	\$16,032
Carabram Park	1	1	1	1	1	1	1	1	1	1	\$115,480
Centennial Park						3	3	3	3	3	\$115,480
Central Public	2	2	2	2	2	2	2	2	2	2	\$119,719
Century Gardens Park	2	2	2	2	2	2	2	2	2	2	\$70,137
Chris Gibson Park	2	2	2	2	2	2	2	2	2	2	\$161,183
Creditview Sandalwood							1	8	8	8	\$45,447
D.M.G Ching Park	2	2	2	2	2	2	2	2	2	2	\$161,183
Dearborne Park	2	2	3	3	3	3	3	3	3	3	\$16,032
Dixie HWY 407 Park							6	6	6	6	\$59,860
Earncliffe	4	4	4	4	4	4	4	4	4	4	\$70,137
FCCC								4	4	4	\$59,860
Fred Kee Park	2	2	2	2	2	2	2	2	2	2	\$86,655
Hilldale Park S	1	1	1	1	1	1	1	1	1	1	\$16,032
Meadowlands				2	2	2	2	2	2	2	\$70,137
Seaborn Park	2	2	2	2	2	2	2	2	2	2	\$20,271
Sheridan Woodlands	1	1	1	1	1	1	1	1	1	1	\$115,480
South Fletcher's			2	2	2	2	2	2	2	2	\$70,137
Tobram Sandalwood											
Weybridge Park	2	2	2	2	2	2	2	2	2	2	\$70,137
Hilldale Park N	1	1	1	1	1	1	1	1	1	1	\$86,655
Subtotal (#)	24	24	30	32	32	35	42	53	53	61	
Subtotal (\$)	\$1,987,244	\$1,987,244	\$2,191,646	\$2,331,920	\$2,331,920	\$2,678,360	\$3,082,966	\$3,640,533	\$3,640,533	\$4,297,627	\$4,297,627

Park Name	# of Fields										
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Major Diamond - Unlighted											
Caterpillar Lands	1	1	1	1	1	1	1	1	1	1	\$149,640
Century Gardens Park	1	1	1	1	1	1	1	1	1	1	\$290,886
Conservation Drive Park	2	2	2	2	2	2	2	2	2	2	\$240,018
County Court Park	3	3	3	3	3	3	3	3	3	3	\$290,886
Duggan Park	1	1	1	1	1	1	1	1	1	1	\$240,018
Earncliffe Park	1	1	1	1	1	1	1	1	1	1	\$149,640
Fallen Oak Park	1	1	1	1	1	1	1	1	1	1	\$290,886
Fred Kline Park	1	1	1	1	1	1	1	1	1	1	\$290,886
Madoc Drive Park	1	1	1	1	1	1	1	1	1	1	\$149,640
Major William Sharpe	1	1	1	1	1	1	1	1	1	1	\$149,640
Moorehead Park	1	1	1	1	1	1	1	1	1	1	\$392,387
Ray Lawson	2	2	2	2	2	2	2	2	2	2	\$149,640
Richvale Park	2	2	2	2	2	2	2	2	2	2	\$149,640
Sesquicentennial Park											
Subtotal (#)	18	18	18	18	19	19	19	18	18	18	
Subtotal (\$)	\$4,054,881	\$4,054,881	\$4,054,881	\$4,054,881	\$4,447,267	\$4,447,267	\$4,447,267	\$4,297,627	\$4,297,627	\$4,297,627	\$4,297,627

RECREATION

PARK FACILITIES

INVENTORY OF CAPITAL ASSETS

Minor Diamond - Unlighted

Park Name	# of Fields																	
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST							
Ambro Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
Burton Park	2	2	2	2	2	2	2	2	2	2	\$161,880							
Central Public	2	2	2	2	2	2	2	2	2	2	\$190,705							
Centennial	1	1	1	1	1	1	1	1	1	1	\$161,880							
Chris Gibson Park	1	1	1	1	1	1	1	1	1	1	\$190,705							
Donnelly East Park	1	1	1	1	1	1	1	1	1	1	\$161,880							
Earncliffe Park	2	2	2	2	2	2	2	2	2	2	\$190,705							
Fred Kline Park	3	3	3	3	3	3	3	3	3	3	\$161,880							
Gatesgill	1	1	1	1	1	1	1	1	1	1	\$91,255							
Greenbriars	1	1	1	1	1	1	1	1	1	1	\$161,880							
Hickory Wood Park	2	2	2	2	2	2	2	2	2	2	\$91,255							
Kaneff Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
Loafer's Lake Park	1	1	1	1	1	1	1	1	1	1	\$190,705							
Meadowlands Park	2	2	2	0	0	0	0	0	0	0	\$91,255							
Nasmith Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
Northampton	1	1	1	1	1	1	1	1	1	1	\$161,880							
Richvale Park	2	2	2	2	2	2	2	2	2	2	\$91,255							
Allan Kerbell Park	1	1	1	1	1	1	1	1	1	1	\$190,705							
Bach Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
Beatty -Fleming Park	1	1	1	1	1	1	1	1	1	1	\$190,705							
Castlehill Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
Cherrytree Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
Fred Kee Park	1	1	1	1	1	1	1	1	1	1	\$190,705							
Havelock Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
Hickory Wood Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
Jefferson Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
Knightsbridge Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
Notre Dame Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
Timberlane Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
White Spruce Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
Kingswood Park	1	1	1	1	1	1	1	1	1	1	\$91,255							
Sandalwood Park	1	1	1	1	1	1	1	1	1	1	\$190,705							
Subtotal (#)	39	21	21	19	19	18	18	18	18	18								
Subtotal (\$)	\$5,189,076	\$5,189,076	\$5,189,076	\$5,006,565	\$5,006,565	\$4,682,806	\$4,682,806	\$4,682,806	\$4,591,551	\$4,591,551								

RECREATION

PARK FACILITIES

INVENTORY OF CAPITAL ASSETS

Park Name	# of Courts											2008	UNIT COST		
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008				
Lighted Tennis															
Century Gardens Park	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$82,606
Chingacousy Park	6	6	6	6	6	6	6	6	6	6	6	6	6	6	\$93,099
County Court Park	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$93,099
Drinkwater Community Park	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$85,879
Earncliffe Park	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$85,879
Greenbriar Park S.	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$93,099
Howden	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$85,879
Morris Kerbel District Park	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$85,489
Professor's Lake Park	2	0	0	0	0	0	0	0	0	0	0	0	0	0	\$93,099
Richvale	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$81,622
Sandalwood	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$90,216
Steady Park	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$82,996
Valleybrook	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$90,216
Victoria Park	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$85,489
White Spruce Park	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$90,216
Cassie Campell															\$85,489
Subtotal (#)	46	44	44	42	42	34	34	34	35	39					
Subtotal (\$)	\$4,036,944	\$3,850,746	\$3,850,746	\$3,678,988	\$3,678,988	\$2,993,517	\$2,993,517	\$2,993,517	\$3,064,956	\$3,406,911					

Park Name	# of Courts											2008	UNIT COST		
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008				
Unlighted Tennis															
Allen Kerbel Park	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$66,123
Centennial Park	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$59,874
Clark Park	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$54,646
English St.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$54,646
Kenpark Avenue Park	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$54,646
Knightsbridge Park	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$54,646
Northwood	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$54,646
Peel Village	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$54,646
Professor's Lake	3	0	0	0	0	0	0	0	0	0	0	0	0	0	\$59,874
Vanier Park	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$54,646
Subtotal (#)	22	19	19	19	19	19	19	19	19	19	19	19	19	19	
Subtotal (\$)	\$1,256,531	\$1,076,908	\$1,076,908	\$1,076,908	\$1,076,908	\$1,076,908	\$1,076,908	\$1,076,908	\$1,076,908	\$1,076,908	\$1,076,908	\$1,076,908	\$1,076,908	\$1,076,908	

Park Name	# of Courts											2008	UNIT COST		
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008				
Bocce															
Lighted															
Calvert	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$24,794
Castlemore	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$24,794
Flower City COM															\$39,237
Wildfield- St.Johns	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$24,794
Unlighted															
County Court Park	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$28,961
Subtotal (#)	12	12	12	12	12	12	12	12	12	12	12	12	12	13	
Subtotal (\$)	\$310,032	\$310,032	\$310,032	\$310,032	\$310,032	\$310,032	\$310,032	\$310,032	\$310,032	\$310,032	\$310,032	\$310,032	\$310,032	\$349,270	\$3,406,911

RECREATION

PARK FACILITIES

INVENTORY OF CAPITAL ASSETS

Park Name	# of Facilities											2008	UNIT COST	
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008			
Batting Cages														
Century Gardens Park	1	1	1	1	1	1	1	1	1	0	0	0	\$56,766	
Chingacousy Park	2	2	2	2	2	2	2	2	2	1	1	1	\$56,766	
Flower City													\$56,766	
Old Fair Grounds	1	1	1	1	1	1	1	1	1	1	1	1	\$56,766	
Rosaliea	1	0	0	0	0	0	0	0	0	0	0	0	\$56,766	
Subtotal (#)	4	4	4	4	4	4	4	4	3	2	2	3		
Subtotal (\$)	\$227,064	\$227,064	\$227,064	\$227,064	\$227,064	\$227,064	\$227,064	\$170,298	\$113,532	\$170,298	\$170,298	\$170,298		

Park Name	# of Facilities											2008	UNIT COST
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008		
Cricket													
Brampton Sports Park	2	2	2	2	2	2	2	2	2	2	2	2	\$146,476
Camden Park	1	1	1	1	1	1	1	1	1	1	1	1	\$146,476
Creditview/Sandalwood													\$40,540
Dixie/407													\$40,540
Dixie/Sandalwood	1	2	2	2	2	2	2	2	2	2	2	2	\$13,818
Earncliffe													\$93,508
Torbram/Sandalwood													\$40,540
Subtotal (#)	4	5	5	5	5	5	5	11	11	11	12	12	
Subtotal (\$)	\$453,246	\$467,064	\$467,064	\$467,064	\$467,064	\$467,064	\$629,225	\$816,241	\$816,241	\$816,241	\$856,781	\$856,781	

Park Name	# of Facilities											2008	UNIT COST
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008		
Rugby													
Brampton Sports Park	2	2	2	2	2	2	2	2	2	2	2	2	\$131,919
Subtotal (#)	2	2	2	2	2	2	2	2	2	2	2	2	
Subtotal (\$)	\$263,838	\$263,838	\$263,838	\$263,838	\$263,838	\$263,838	\$263,838	\$263,838	\$263,838	\$263,838	\$263,838	\$263,838	

Park Name	# of Facilities											2008	UNIT COST
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008		
Multi Purpose Courts													
Allan Kerbel Park	1	1	1	1	1	1	1	1	1	1	1	1	\$54,687
Aloma Park	1	1	1	1	1	1	1	1	1	1	1	1	\$54,687
Blue Lake Parkette	1	1	1	1	1	1	1	1	1	1	1	1	\$54,687
Burnt Elm Park													\$54,687
Ching Sandalwood													\$87,671
Dixie Sandalwood PK													\$87,671
Earncliffe Park	1	1	1	1	1	1	1	1	1	1	1	1	\$54,687
Edenbrooke Hill Parkette													\$54,687
Fairlawn Park													\$54,687
Fiddlers Parkette													\$54,687
Flower City COM													\$87,671
Howden Park													\$87,671
Minaker Park													\$54,687
Morris Kerbel Park	4	4	4	4	4	4	4	4	4	4	4	4	\$54,687
Peelton Park	1	1	1	1	1	1	1	1	1	1	1	1	\$54,687
Timberlane Park													\$54,687
Todd Edward Park	1	1	1	1	1	1	1	1	1	1	1	1	\$54,687
Treeline Park													\$54,687
Van Scott Parkette													\$54,687
Wiggins Park													\$54,687
Worthington Park													\$91,800
Ernest Matury	1	1	1	1	1	1	1	1	1	1	1	1	\$54,687
Cassie Campbell													\$87,671
Subtotal (#)	10	11	14	19	20	15	15	15	15	19	21	21	
Subtotal (\$)	\$546,867	\$601,553	\$765,614	\$1,072,032	\$1,163,832	\$890,398	\$890,398	\$890,398	\$1,175,115	\$1,175,115	\$1,383,442	\$1,383,442	

RECREATION

PARK FACILITIES

INVENTORY OF CAPITAL ASSETS

Track												
Location	# of Facilities											
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST	UNIT COST
Chinguacousy Park	1	1	1	1	1	1	1	1	1	1		\$216,259
Subtotal (#)	1	1	1	1	1	1	1	1	1	1		
Subtotal (\$)	\$216,259	\$216,259	\$216,259	\$216,259	\$216,259	\$216,259	\$216,259	\$216,259	\$216,259	\$216,259		\$216,259

Wading Pools / Splashpads												
Location	# of Facilities											
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST	UNIT COST
Balmoral Park	1	1	1	1	1	1	1	1	1	1		\$149,524
Beatty Flemming Park	1	1	1	1	1	1	1	1	1	1		\$149,524
Chinguacousy Park	1	1	1	1	1	1	1	1	1	1		\$149,524
Dearbourne Park	1	1	1	1	1	1	1	1	1	1		\$149,524
Earncliffe Park	1	1	1	1	1	1	1	1	1	1		\$149,524
Folkstone Park	1	1	1	1	1	1	1	1	1	1		\$149,524
Gage Park	1	1	1	1	1	1	1	1	1	1		\$149,524
Northwood Park	1	1	1	1	1	1	1	1	1	1		\$149,524
Peel Village Park	1	1	1	1	1	1	1	1	1	1		\$149,524
Brampton Soccer Center												\$355,500
Cassie Campbell												\$332,200
Subtotal (#)	9	9	9	9	9	9	9	9	9	9		
Subtotal (\$)	\$1,345,717	\$1,345,717	\$1,345,717	\$598,097	\$598,097	\$598,097	\$598,097	\$598,097	\$953,597	\$1,285,797		

Skateboard Parks												
Location	# of Facilities											
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST	UNIT COST
Ching Park E Skate Park						1	1	1	1	1		\$150,000.00
Ching Park E Skate Park						1	1	1	1	1		\$775,000.00
Jim Archdekin Recreation Ctr						1	1	1	1	1		\$150,000.00
Memorial Fairgrounds						1	1	1	1	1		\$350,000.00
South Fletchers Sports Complex						1	1	1	1	1		\$350,000.00
Worthington Park						1	1	1	1	1		\$91,800.00
Subtotal (#)	0	0	0	0	0	4	5	5	5	5		
Subtotal (\$)	\$0	\$0	\$0	\$0	\$0	\$741,800	\$1,091,800	\$1,091,800	\$1,716,800	\$1,716,800		\$1,716,800

Lacrosse												
Park Name	# of Facilities											
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST	UNIT COST
Creditview Sandalwood			2	2	2	2	2	2	2	2		\$40,541
FCCC - Box Lacrosse		2	2	2	2	2	2	2	2	2		\$40,541
Weybridge Park	1	1	1	1	1	1	1	1	1	1		\$546,000
Subtotal (#)	3	2	2	2	2	2	2	2	2	2		\$40,541
Subtotal (\$)	\$121,623	\$81,082	\$81,082	\$81,082	\$81,082	\$81,082	\$81,082	\$81,082	\$81,082	\$81,082		\$627,082

RECREATION

PARK FACILITIES

INVENTORY OF CAPITAL ASSETS

Park Name	# of Facilities											UNIT COST	
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008			
Abilibi Park												1	\$ 105,500.00
Albert Callaghan Parkette												1	\$ 112,300.00
Albright Park												1	\$ 93,900.00
Allan Kerbel Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 118,500.00
Aloma Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 96,400.00
Armbro Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 85,800.00
Ashby Field Park												1	\$ 94,300.00
Bach Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 89,200.00
Banting Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 84,500.00
Barkwood	1	1	1	1	1	1	1	1	1	1	1	1	\$ 98,000.00
Bayridge Park												1	\$ 91,900.00
Beaconsfield Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 119,200.00
Beatty Fleming Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 111,500.00
Bennmore												1	\$ 91,900.00
Berisford Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 139,600.00
Black Forest Park												1	\$ 127,400.00
Blackmere Parkette	1	1	1	1	1	1	1	1	1	1	1	1	\$ 105,200.00
Bloomington Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 50,600.00
Blue Lake Parkette	1	1	1	1	1	1	1	1	1	1	1	1	\$ 101,500.00
Blue Oak Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 149,600.00
Robert Reid Park & Trail	1	1	1	1	1	1	1	1	1	1	1	1	\$ 74,200.00
Boreham Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 84,100.00
Bottomwood												1	\$ 91,900.00
Bramalea Ltd. Community Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 115,500.00
Bramtrail												1	\$ 96,400.00
Bridekirk Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 74,200.00
Brighton Parkette	1	1	1	1	1	1	1	1	1	1	1	1	\$ 53,500.00
Brookbank Parkette	1	1	1	1	1	1	1	1	1	1	1	1	\$ 69,800.00
Bruce Beer Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 84,600.00
Buick												1	\$ 107,600.00
Burnt Elm Park												1	\$ 111,700.00
Burton Court Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 127,100.00
Calderstone Park												1	\$ 104,100.00
Camden Park (East)	1	1	1	1	1	1	1	1	1	1	1	1	\$ 93,800.00
Camden (West)	1	1	1	1	1	1	1	1	1	1	1	1	\$ 91,600.00
Cantrill Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 85,400.00
Carabram Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 113,000.00
Carleton Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 81,600.00
Caruso Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 76,300.00
Castlehill Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 114,100.00
Centennial Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 92,700.00
Chamney Court Parkette	1	1	1	1	1	1	1	1	1	1	1	1	\$ 79,600.00
Chingacousy Park East	1	1	1	1	1	1	1	1	1	1	1	1	\$ 121,400.00
Ching Park W	1	1	1	1	1	1	1	1	1	1	1	1	\$ 171,000.00
Chris Gibson North	1	1	1	1	1	1	1	1	1	1	1	1	\$ 108,800.00
Chris Gibson South	1	1	1	1	1	1	1	1	1	1	1	1	\$ 83,900.00
Chris Gibson West	1	1	1	1	1	1	1	1	1	1	1	1	\$ 69,600.00
Chudleigh Park												1	\$ 95,000.00
Churchville Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 49,900.00
Clark Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 97,700.00

RECREATION

PARK FACILITIES

INVENTORY OF CAPITAL ASSETS

Park Name	# of Facilities											UNIT COST
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
Clover Bloom Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 77,700.00
Cobblehill Park												\$ 98,000.00
Conservation Drive Park	1	1	1	1	1	1	1	1	1	1	1	\$ 87,600.00
County Court Park	1	1	1	1	1	1	1	1	1	1	1	\$ 99,600.00
Crenshaw Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 87,900.00
Crescent Hill Park	1	1	1	1	1	1	1	1	1	1	1	\$ 73,400.00
Cresthaven park	1	1	1	1	1	1	1	1	1	1	1	\$ 84,500.00
Crown Victoria Parkette												\$ 104,400.00
Crystalview Park												\$ 125,200.00
Cunnington Park	1	1	1	1	1	1	1	1	1	1	1	\$ 82,400.00
Curtis Park	1	1	1	1	1	1	1	1	1	1	1	\$ 76,500.00
Cutters Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 87,500.00
Dafoe Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 108,200.00
Damatia Park												\$ 106,100.00
Dearbourne Park	1	1	1	1	1	1	1	1	1	1	1	\$ 81,200.00
Desuri Park												\$ 115,800.00
Devonsleigh Park												\$ 81,600.00
Dexfield Park	1	1	1	1	1	1	1	1	1	1	1	\$ 80,700.00
Dixie Sandalwood Soccer Ctr												\$ 138,400.00
Don Minaker Parkette												\$ 96,400.00
Don Reynolds Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 91,500.00
Donnelly Park	1	1	1	1	1	1	1	1	1	1	1	\$ 78,000.00
Dorchester Park	1	1	1	1	1	1	1	1	1	1	1	\$ 91,000.00
Dorset Park	1	1	1	1	1	1	1	1	1	1	1	\$ 85,000.00
Drinkwater Community Park	1	1	1	1	1	1	1	1	1	1	1	\$ 96,400.00
Duggan Park	1	1	1	1	1	1	1	1	1	1	1	\$ 101,700.00
Dumfries Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 91,600.00
Durham Park	1	1	1	1	1	1	1	1	1	1	1	\$ 101,000.00
Earl Cook Park												\$ 111,500.00
Earncliffe Park	2	2	2	2	2	2	2	2	2	2	2	\$ 118,600.00
Eastbourne Park	1	1	1	1	1	1	1	1	1	1	1	\$ 73,800.00
Eden Valley Parkette												\$ 98,200.00
Edenbrook Hill Parkette												\$ 128,900.00
Eldorado East	1	1	1	1	1	1	1	1	1	1	1	\$ 78,200.00
Eldorado West	1	1	1	1	1	1	1	1	1	1	1	\$ 81,000.00
English Street Park	1	1	1	1	1	1	1	1	1	1	1	\$ 122,700.00
Ernest Majury Park	1	1	1	1	1	1	1	1	1	1	1	\$ 92,900.00
Ezard Park	1	1	1	1	1	1	1	1	1	1	1	\$ 78,600.00
Fairhill Park												\$ 99,100.00
Fairlawn Park												\$ 88,200.00
Fallen Oak Park	1	1	1	1	1	1	1	1	1	1	1	\$ 96,400.00
Fallindale Park	1	1	1	1	1	1	1	1	1	1	1	\$ 84,900.00
Fanshawe Parkette												\$ 73,500.00
Father Tobin Park												\$ 98,000.00
Fernforest Way Park	1	1	1	1	1	1	1	1	1	1	1	\$ 76,400.00
Fern Valley Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 77,300.00
Ferri Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 82,200.00
Fiddler's Parkette												\$ 89,900.00
Fletchers Parkette												\$ 110,700.00
Folkstone Park	1	1	1	1	1	1	1	1	1	1	1	\$ 116,000.00

RECREATION

PARK FACILITIES

INVENTORY OF CAPITAL ASSETS

Park Name	# of Facilities											UNIT COST				
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008						
Play Equipment																
Fred Kee Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 102,000.00
Fred Kline Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 77,900.00
Gage Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 86,000.00
Gatesgill Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 86,800.00
George Ransier Park																\$ 111,800.00
Giffen Family Park																\$ 109,900.00
Gladstone-Shaw Park																\$ 24,900.00
Glenforest Park S.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 70,300.00
Glenmanor Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 71,500.00
Gold Parkette																\$ 111,200.00
Goldcrest Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 182,700.00
Great Lakes Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 131,400.00
Greenbriar Park S.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 107,100.00
Greenmount Park N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 119,800.00
Greywhale Park																\$ 81,900.00
Haldorson Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 91,900.00
Harry A. Shields	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 73,500.00
Havelock Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 81,700.00
Hazelwood S.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 88,500.00
Heartview Park																\$ 107,100.00
Hedgevine Parkette																\$ 97,800.00
Hickory Wood Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 86,800.00
Hilldale Park N.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 39,200.00
Hilldale Park S.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 79,700.00
Homestead Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 109,200.00
Howden Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 99,700.00
Inder Heights Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 86,300.00
Ivy Bridge Parkette	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 84,700.00
James Potter																\$ 96,400.00
James William Hewson Parkette	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 85,900.00
James&Margaret McGie Park																\$ 98,000.00
Jefferson Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 97,700.00
Jellicoe Parkette	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 72,000.00
Jordan Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 74,600.00
Kanashiro Parkette																\$ 119,200.00
Kenpark Avenue Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 83,100.00
Kincaid Parkette	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 77,200.00
Kindle Parkette	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 69,100.00
Kingfisher Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 77,200.00
Kingnoll Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 97,500.00
Kingswood Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 87,100.00
Keirstead Park																\$ 77,200.00
Knightsbridge Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 99,700.00
Koreiz	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 77,200.00
LaFrance Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 106,200.00
Lake Louise Parkette																\$ 113,400.00
Lakelands Park																\$ 121,900.00
Larande Park																\$ 78,800.00
Lascelles Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 80,900.00
Laurelcrest Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$ 98,200.00

RECREATION

PARK FACILITIES

INVENTORY OF CAPITAL ASSETS

Park Name	# of Facilities										UNIT COST	
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
Leander Park	1	1	1	1	1	1	1	1	1	1	1	\$ 99,500.00
Leparc Park												\$ 98,000.00
Leithbridge Park	1	1	1	1	1	1	1	1	1	1	1	\$ 83,100.00
Lloyd Sanderson Park	1	1	1	1	1	1	1	1	1	1	1	\$ 80,100.00
Lougheed Park												\$ 115,900.00
Madronna Parkette												\$ 124,400.00
Major William Sharpe Park	1	1	1	1	1	1	1	1	1	1	1	\$ 107,100.00
Manitou Park	1	1	1	1	1	1	1	1	1	1	1	\$ 106,200.00
Manorcrest Park	1	1	1	1	1	1	1	1	1	1	1	\$ 93,500.00
Maplehurst Park	1	1	1	1	1	1	1	1	1	1	1	\$ 91,900.00
Martindale Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 89,600.00
Mary Goodwillie Park												\$ 98,000.00
Massey Park	1	1	1	1	1	1	1	1	1	1	1	\$ 74,200.00
McKinney Park												\$ 98,200.00
Meadowland Park	1	1	1	1	1	1	1	1	1	1	1	\$ 73,300.00
Meadowlark Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 59,400.00
Memorial Fairgrounds												\$ 500,000.00
Merganser Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 87,500.00
Millstone Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 81,500.00
Moorehead Park	1	1	1	1	1	1	1	1	1	1	1	\$ 109,700.00
Morris Kerbal District Park	1	1	1	1	1	1	1	1	1	1	1	\$ 102,300.00
Mosswood Park	1	1	1	1	1	1	1	1	1	1	1	\$ 86,000.00
Mount Royal Park												\$ 119,300.00
Mountainash Parkette												\$ 98,000.00
Murray Street Park	1	1	1	1	1	1	1	1	1	1	1	\$ 94,400.00
Nancy McCredie Park	1	1	1	1	1	1	1	1	1	1	1	\$ 69,800.00
Naismith Park	1	1	1	1	1	1	1	1	1	1	1	\$ 75,300.00
Native Landing Park												\$ 93,100.00
Newton Road Park	1	1	1	1	1	1	1	1	1	1	1	\$ 82,500.00
Northampton Park (North)	1	1	1	1	1	1	1	1	1	1	1	\$ 107,500.00
Northampton Park (South)	1	1	1	1	1	1	1	1	1	1	1	\$ 80,300.00
Northwood Park	1	1	1	1	1	1	1	1	1	1	1	\$ 78,600.00
Norton Place Park	1	1	1	1	1	1	1	1	1	1	1	\$ 97,200.00
Noire Dame Park	1	1	1	1	1	1	1	1	1	1	1	\$ 76,900.00
Old Brampton Fairgrounds Park	1	1	1	1	1	1	1	1	1	1	1	\$ 140,600.00
Omega Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 82,900.00
Pannahill Park												\$ 122,700.00
Peddle Family Wood												\$ 74,400.00
Peel Village Park	1	1	1	1	1	1	1	1	1	1	1	\$ 110,000.00
Piane Park	1	1	1	1	1	1	1	1	1	1	1	\$ 87,900.00
Professor's Lake East	1	1	1	1	1	1	1	1	1	1	1	\$ 134,500.00
Professor's Lake West	1	1	1	1	1	1	1	1	1	1	1	\$ 114,500.00
Ravenscliffe Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 89,100.00
Red Willow Park												\$ 104,400.00
Reed Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 79,800.00
Richvale (NORTH)	1	1	1	1	1	1	1	1	1	1	1	\$ 90,500.00
Richvale (SOUTH)	1	1	1	1	1	1	1	1	1	1	1	\$ 71,000.00
Ridgehill Park	1	1	1	1	1	1	1	1	1	1	1	\$ 73,300.00
Roehampton Park	1	1	1	1	1	1	1	1	1	1	1	\$ 86,100.00
Rollingwood Park												\$ 94,400.00

RECREATION

PARK FACILITIES

INVENTORY OF CAPITAL ASSETS

Play Equipment Park Name	# of Facilities											UNIT COST
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
Rosepak Park	1	1	1	1	1	1	1	1	1	1	1	\$ 85,300.00
Royal Salisbury Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 73,700.00
Rushmore Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 78,100.00
Salisbury Circle Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 96,300.00
Scottsdale Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 78,200.00
Seaborn Park	1	1	1	1	1	1	1	1	1	1	1	\$ 74,900.00
Sheridan Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 77,000.00
Sheridan Woodlands	1	1	1	1	1	1	1	1	1	1	1	\$ 106,000.00
Sled Dog Park												\$ 91,900.00
Snowcap Park	1	1	1	1	1	1	1	1	1	1	1	\$ 124,000.00
Softneedle Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 83,100.00
Southwell Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 27,900.00
Sparhill												\$ 106,900.00
Sparrow Park	1	1	1	1	1	1	1	1	1	1	1	\$ 72,100.00
Springwd PK (Unofficial Name)												\$ 102,900.00
Streetsville Glen Park												\$ 108,300.00
Sugarberry Park												\$ 77,400.00
Summer Valley Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 110,400.00
Suncrest Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 76,600.00
Sunforest Parkette	1	1	1	1	1	1	1	1	1	1	1	\$ 85,000.00
Sunny Meadow Park	1	1	1	1	1	1	1	1	1	1	1	\$ 93,400.00
Swales Parkette												\$ 103,400.00
Talbot Park	1	1	1	1	1	1	1	1	1	1	1	\$ 74,400.00
Tara Park	1	1	1	1	1	1	1	1	1	1	1	\$ 99,300.00
Thorndale Parkette												\$ 104,800.00
Tianalee												\$ 91,200
Timberlane Park	1	1	1	1	1	1	1	1	1	1	1	\$ 91,000.00
Todd Edward Bayliss Park	1	1	1	1	1	1	1	1	1	1	1	\$ 85,000.00
Trailside Park												\$ 106,900.00
Treeline Park												\$ 112,300.00
Treleaven	1	1	1	1	1	1	1	1	1	1	1	\$ 78,000.00
Trudelle Park												\$ 120,400.00
Tumbleweed Park	1	1	1	1	1	1	1	1	1	1	1	\$ 80,100.00
Turtle Creek Park	1	1	1	1	1	1	1	1	1	1	1	\$ 91,000.00
Upwood Park	1	1	1	1	1	1	1	1	1	1	1	\$ 112,000.00
Valleybrook Park	1	1	1	1	1	1	1	1	1	1	1	\$ 82,600.00
Valleydown Park	1	1	1	1	1	1	1	1	1	1	1	\$ 78,400.00
Vanier Park	1	1	1	1	1	1	1	1	1	1	1	\$ 88,600.00
Van Scott Parkette												\$ 112,200.00
Via Romano Parkette												\$ 118,900.00

RECREATION

PARK FACILITIES

INVENTORY OF CAPITAL ASSETS

Play Equipment Park Name	# of Facilities											2008	UNIT COST
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008		
W.A. Russel Parkette	1	1	1	1	1	1	1	1	1	1	1	1	\$ 79,500.00
Watchman Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 117,900.00
Watertower Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 96,400.00
Watson Valley (East)	1	1	1	1	1	1	1	1	1	1	1	1	\$ 79,800.00
Watson Valley (West)	1	1	1	1	1	1	1	1	1	1	1	1	\$ 111,100.00
Weybridge Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 117,300.00
Whitewash Parkette				1	1	1	1	1	1	1	1	1	\$ 111,200.00
Wiggins Park			1	1	1	1	1	1	1	1	1	1	\$ 115,600.00
William Sheard Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 114,600.00
Williams St. Parkette	1	1	1	1	1	-	-	-	-	-	-	-	\$ 92,700.00
Winterfold Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 94,400.00
Woodview Park	1	1	1	1	1	1	1	1	1	1	1	1	\$ 70,500.00
Worthington Park					1	1	1	1	1	1	1	1	\$ 160,200.00
Subtotal (#)	174	181	185	189	196	201	221	229	244	251	251	251	
Subtotal (\$)	15,731,000	16,481,300	16,920,700	17,348,500	18,135,300	18,765,600	21,119,100	21,888,800	23,395,600	24,130,200	24,130,200	24,130,200	

Total All Facilities (\$)	\$60,157,994	\$60,570,438	\$61,386,778	\$61,421,335	\$64,285,682	\$64,490,598	\$70,671,228	\$73,456,641	\$75,651,251	\$79,354,800
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RECREATION

PARK FACILITIES

SERVICE LEVEL ANALYSIS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Level
POPULATION	300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300	
Major Soccer - Lighted (#/100,000 pop)	2.33	2.24	2.15	2.03	1.92	1.81	1.71	2.3	2.22	2.14	2.085
Major Soccer - Lighted (\$/capita)	\$9.90	\$9.52	\$9.16	\$8.65	\$8.16	\$7.70	\$7.27	\$9.52	\$9.19	\$8.86	\$8.79
Major Diamond - Lighted (#/100,000)	11.3	10.87	10.46	9.87	10.14	9.57	10.01	8.53	8.23	7.93	9.69
Major Diamond - Lighted (\$ / Capita)	\$50.50	\$48.59	\$46.75	\$44.12	\$46.01	\$43.42	\$46.17	\$40.07	\$38.67	\$38.55	\$44.29
Football (#/100,000)	0.66	0.64	0.62	0.58	0.55	0.52	0.24	0.69	0.44	0.43	0.54
Football - Lighted (\$ / Capita)	\$2.10	\$2.02	\$1.95	\$1.84	\$1.73	\$1.64	\$0.96	\$2.37	\$1.41	\$1.36	\$1.74
Major Soccer - Unlighted (#/100,000)	6.65	6.4	6.46	6.39	6.03	5.69	7.08	8.29	7.78	7.93	6.87
Major Soccer - Unlighted (\$ / Capita)	\$10.47	\$10.07	\$10.43	\$10.27	\$9.69	\$9.14	\$11.13	\$13.30	\$12.51	\$12.69	\$10.97
Minor Soccer - Unlighted (#/100,000)	7.98	7.67	6.77	6.68	6.3	5.43	5.13	4.84	4.67	4.5	6.00
Minor Soccer - Unlighted (\$ / Capita)	\$8.19	\$7.88	\$6.87	\$6.82	\$6.44	\$5.48	\$5.17	\$4.88	\$4.71	\$4.54	\$6.10
Mini Soccer - Unlighted (#/100,000)	7.98	7.67	9.23	9.29	8.77	9.05	10.25	12.21	11.79	13.08	9.93
Mini Soccer - Unlighted (\$ / Capita)	\$6.60	\$6.36	\$6.74	\$6.77	\$6.39	\$6.93	\$7.53	\$8.39	\$8.10	\$9.01	\$7.28
Major Diamond - Unlighted (#/100,000)	5.98	5.76	5.54	5.23	5.21	4.91	4.64	4.15	4	3.86	4.93
Major Diamond - Unlighted (\$ / Capita)	\$13.48	\$12.97	\$12.48	\$11.78	\$12.19	\$11.50	\$10.86	\$9.90	\$9.56	\$9.22	\$11.39
Minor Diamond - Unlighted (#/100,000)	12.96	6.72	6.46	5.52	5.21	4.66	4.39	4.15	4	3.86	5.79
Minor Diamond - Unlighted (\$ / Capita)	\$17.25	\$16.59	\$15.97	\$14.54	\$13.72	\$12.11	\$11.43	\$10.79	\$10.21	\$9.85	\$13.25
Lighted Tennis (#/100,000)	15.29	14.07	13.54	12.2	11.51	8.79	8.3	7.83	7.78	8.36	10.77
Lighted Tennis (\$/capita)	\$13.42	\$12.31	\$11.85	\$10.68	\$10.08	\$7.74	\$7.31	\$6.90	\$6.82	\$7.31	\$9.44
Unlighted Tennis (#/100,000)	7.31	6.08	5.85	5.52	5.21	4.91	4.64	4.38	4.23	4.07	5.22
Unlighted Tennis (\$/capita)	\$4.18	\$3.44	\$3.31	\$3.13	\$2.95	\$2.79	\$2.63	\$2.48	\$2.39	\$2.31	\$2.96
Bocce Courts (#/100,000)	3.99	3.84	3.69	3.48	3.29	3.1	2.93	2.76	2.89	2.79	3.28
Bocce Courts (\$/capita)	\$1.03	\$0.99	\$0.95	\$0.90	\$0.85	\$0.80	\$0.76	\$0.71	\$0.78	\$0.75	\$0.85
Batting Cages (#/100,000)	1.33	1.28	1.23	1.16	1.1	1.03	0.98	0.69	0.44	0.64	0.99
Batting Cages (\$/capita)	\$0.75	\$0.73	\$0.70	\$0.66	\$0.62	\$0.59	\$0.55	\$0.39	\$0.25	\$0.37	\$0.56
Cricket (#/100,000)	1.33	1.6	1.54	1.45	1.37	1.29	2.2	2.53	2.45	2.57	1.83
Cricket (\$/capita)	\$1.51	\$1.49	\$1.44	\$1.36	\$1.28	\$1.21	\$1.54	\$1.88	\$1.82	\$1.84	\$1.54
Rugby (#/100,000)	0.66	0.64	0.62	0.58	0.55	0.52	0.49	0.46	0.44	0.43	0.54
Rugby (\$/capita)	\$0.88	\$0.84	\$0.81	\$0.77	\$0.72	\$0.68	\$0.64	\$0.61	\$0.59	\$0.57	\$0.71
Multi Purpose Courts (#/100,000)	3.32	3.52	4.31	5.52	5.48	3.88	3.66	3.46	4.23	4.5	4.19
Multi Purpose Courts (\$/capita)	\$1.82	\$1.92	\$2.36	\$3.11	\$3.19	\$2.30	\$2.17	\$2.05	\$2.61	\$2.97	\$2.45
Track (#/100,000)	0.33	0.32	0.31	0.29	0.27	0.26	0.24	0.23	0.22	0.21	0.27
Track (\$/capita)	\$0.72	\$0.69	\$0.67	\$0.63	\$0.59	\$0.56	\$0.53	\$0.50	\$0.48	\$0.46	\$0.58
Wading Pool (#/100,000)	2.99	2.88	2.77	1.16	1.1	1.03	0.98	0.92	1.11	1.29	1.62
Wading Pool (\$/capita)	\$4.47	\$4.30	\$4.14	\$1.74	\$1.64	\$1.55	\$1.46	\$1.38	\$2.12	\$2.76	\$2.56
Skateboard Park (#/100,000)	0	0	0	0	0	1.03	1.22	1.15	1.11	1.07	0.56
Skateboard Park (\$/capita)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.92	\$2.67	\$2.52	\$3.82	\$3.68	\$1.46

RECREATION

PARK FACILITIES

SERVICE LEVEL ANALYSIS

POPULATION	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Level
	300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300	
Lacrosse (#/100,000)	1	0.64	0.62	0.58	0.55	0.52	0.49	0.46	0.44	0.64	0.59
Lacrosse (\$/capita)	\$0.40	\$0.26	\$0.25	\$0.24	\$0.22	\$0.21	\$0.20	\$0.19	\$0.18	\$1.34	\$0.35

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Level
Play Equipment (#/100,000)	57.83	57.88	56.92	54.89	53.72	51.99	53.95	52.76	54.26	53.83	54.80
Play Equipment (\$/capita)	\$52.28	\$52.71	\$52.06	\$50.38	\$49.70	\$48.54	\$51.56	\$50.44	\$52.02	\$51.75	\$51.14

Total All Facilities (\$/capita)	\$199.95	\$193.68	\$188.89	\$178.39	\$176.17	\$166.81	\$172.54	\$169.27	\$168.24	\$170.19	\$178.41
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RECREATION

OUTDOOR BUILDINGS

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Brampton Cemetery Mice Bldg	762	762	762	762	762	762	762	762	762	762	\$180
Brampton Cemetery Office	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	\$180
Ellen Street Parks Garage	898	898	898	898	898	898	898	898	898	898	\$180
Century Gardens Fieldhouse	4,141	4,141	4,141	4,141	4,141	4,141	4,141	4,141	4,141	4,141	\$180
Chingquacousy Park Parks building	3,502	3,502	3,502	3,502	3,502	3,502	3,502	3,502	3,502	3,502	\$180
Ching. Ski-hill Pump House	506	506	506	506	506	506	506	506	506	506	\$180
Ching. Ski-hill Rope-low Hut	152	152	152	152	152	152	152	152	152	152	\$180
Ching. Ski-hill T-bar Line Hut	59	59	59	59	59	59	59	59	59	59	\$180
Chingquacousy Park Mini Golf / Snack Bar	3,385	3,385	3,385	3,385	3,385	3,385	3,385	3,385	3,385	3,385	\$180
Chingquacousy Park Garage	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	\$180
Chingquacousy Park Wading Pool Buildings	285	285	285	285	285	285	285	285	285	285	\$180
Chingquacousy Sports Box	450	450	450	450	450	450	450	450	450	450	\$180
Chingquacousy Park Track Building	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	\$180
County Court Field House	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	\$180
Crescent Hill Storage Bldg	2,724	2,724	2,724	2,724	2,724	2,724	2,724	2,724	2,724	2,724	\$180
Duggan Park Fieldhouse	1,681	1,681	1,681	1,681	1,681	1,681	1,681	1,681	1,681	1,681	\$180
Earncliffe Storage Shed	931	931	931	931	931	931	931	931	931	931	\$180
Eldorado Parks Shed	500	500	500	500	500	500	500	500	500	500	\$180
Eldorado Storage Well Building	36	36	36	36	36	36	36	36	36	36	\$180
Eldorado Well Holding Tank Building	120	120	120	120	120	120	120	120	120	120	\$180
Fred Kline Fieldhouse	500	500	500	500	500	500	500	500	500	500	\$180
Loater's Lake Sheds	500	500	500	500	500	500	500	500	500	500	\$180
Northwood Park Wading Pool	83	83	83	83	83	83	83	83	83	83	\$180
Norton Park Shed	1,580	1,580	1,580	1,580	1,580	1,580	1,580	1,580	1,580	1,580	\$180
Orenda Road Parks Operation Centre	29,698	29,698	29,698	29,698	29,698	29,698	29,698	29,698	29,698	29,698	\$180
OPP - Helicopter Hanger (Park Maintenance)	4,718	4,718	4,718	4,718	4,718	4,718	4,718	4,718	4,718	4,718	\$180
OPP - Greenhouse (Chapel Building)	4,162	4,162	4,162	4,162	4,162	4,162	4,162	4,162	4,162	4,162	\$180
Peel Village Golf Course Garage	1,809	1,809	1,809	1,809	1,809	1,809	1,809	1,809	1,809	1,809	\$180
Rotary Club House & Shed	1,278	1,278	1,278	1,278	1,278	1,278	1,278	1,278	1,278	1,278	\$180
Valleybrook Field House	210	210	210	210	210	210	210	210	210	210	\$180
Victoria Park Shed	108	108	108	108	108	108	108	108	108	108	\$180
White Spruce Park Storage Bldg.	4,443	4,443	4,443	4,443	4,443	4,443	4,443	4,443	4,443	4,443	\$180
Chingquacousy Wellness Centre Fieldhouse	500	500	500	500	500	500	500	500	500	500	\$180
Memorial Snack Bar/Washrooms	500	500	500	500	500	500	500	500	500	500	\$180
Quonset Hut/Ogoda Wilderness Centre	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	\$180
Chingquacousy Park Tennis & Baseball Storage	613	613	613	613	613	613	613	613	613	613	\$180
Sesquicentennial Park Fieldhouse											\$180
Total (sq.ft.)	82,233	82,233	82,233	79,608	79,608	74,962	72,238	72,179	71,248	67,419	
Total (\$000)	\$14,801.9	\$14,801.9	\$14,801.9	\$14,329.4	\$14,329.4	\$13,493.2	\$13,002.8	\$12,992.2	\$12,824.6	\$12,135.4	

RECREATION

OUTDOOR BUILDINGS

INVENTORY OF CAPITAL ASSETS

LAND FOR OUTDOOR BUILDINGS (acres)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Brampton Cemetery Mice Bldg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$354,000
Brampton Cemetery Office	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$354,000
Ellen Street Parks Garage	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$354,000
Century Gardens Fieldhouse	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$354,000
Chinguacousy Park Parks building	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$354,000
Ching, Ski-hill Pump House	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$354,000
Ching, Ski-hill Rope-tow Hut	-	-	-	-	-	-	-	-	-	-	\$354,000
Ching, Ski-hill T-bar Line Hut	-	-	-	-	-	-	-	-	-	-	\$354,000
Chinguacousy Park Mini Golf / Snack Bar	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$354,000
Chinguacousy Park Garage	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$354,000
Chinguacousy Park Wading Pool Buildings	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$354,000
Chinguacousy Sports Box	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$354,000
Chinguacousy Park Track Building	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$354,000
County Court Field House	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$354,000
Crescent Hill Storage Bldg	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	\$354,000
Duggan Park Fieldhouse	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$354,000
Earncliffe Storage Shed	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$354,000
Eldorado Parks Shed	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$354,000
Eldorado Storage Well Building	-	-	-	-	-	-	-	-	-	-	\$354,000
Eldorado Well Holding Tank Building	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$354,000
Fred Klime Fieldhouse	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$354,000
Loater's Lake Sheds	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$354,000
Northwood Park Wading Pool	-	-	-	-	-	-	-	-	-	-	\$354,000
Norton Park Shed	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$354,000
Orenda Road Parks Operation Centre	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	\$354,000
OPP - Helicopter Hanger (Park Maintenance)	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	\$354,000
OPP - Greenhouse (Chapel Building)	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	\$354,000
Peel Village Golf Course Garage	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	\$354,000
Rotary Club House & Shed	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	\$354,000
Valleybrook Field House	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$354,000
Victoria Park Shed	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$354,000
White Spruce Park Storage Bldg.	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	\$354,000
Chinguacousy Wellness Centre Fieldhouse	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$354,000
Memorial Snack Bar/Washrooms	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$354,000
Quonset Hut/Ogoda Wilderness Centre	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	\$354,000
Chinguacousy Park Tennis & Baseball Storage	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$354,000
Sesquicentennial Park Fieldhouse	-	-	-	-	-	-	-	-	-	-	\$354,000
Total (acres)	9.37	9.37	9.37	9.30	9.30	7.99	7.44	7.44	7.40	7.38	
Total (\$000)	\$3,317.7	\$3,317.7	\$3,317.7	\$3,291.4	\$3,291.4	\$2,927.8	\$2,635.4	\$2,635.4	\$2,617.9	\$2,612.7	

RECREATION

OUTDOOR BUILDINGS

INVENTORY OF CAPITAL ASSETS

EQUIPMENT FOR OUTDOOR BUILDINGS (\$000)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Brampton Cemetery Mice Bldg	\$12.19	\$12.19	\$12.19	\$12.19	\$12.19	\$12.19	\$12.19	\$12.19	\$12.19	\$12.19	\$16
Brampton Cemetery Office	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$16
Ellen Street Parks Garage	\$14.37	\$14.37	\$14.37	\$14.37	\$14.37	\$14.37	\$14.37	\$14.37	\$14.37	\$14.37	\$16
Century Gardens Fieldhouse	\$66.26	\$66.26	\$66.26	\$66.26	\$66.26	\$66.26	\$66.26	\$66.26	\$66.26	\$66.26	\$16
Chinguacousy Park Parks building	\$56.03	\$56.03	\$56.03	\$56.03	\$56.03	\$56.03	\$56.03	\$56.03	\$56.03	\$56.03	\$16
Ching, Ski-hill Pump House	\$8.10	\$8.10	\$8.10	\$8.10	\$8.10	\$8.10	\$8.10	\$8.10	\$8.10	\$8.10	\$16
Ching, Ski-hill Rope-tow Hut	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	\$16
Ching, Ski-hill T-bar Line Hut	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$16
Chinguacousy Park Mini Golf / Snack Bar	\$54.16	\$54.16	\$54.16	\$54.16	\$54.16	\$54.16	\$54.16	\$54.16	\$54.16	\$54.16	\$16
Chinguacousy Park Garage	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$16
Chinguacousy Park Wading Pool Buildings	\$4.56	\$4.56	\$4.56	\$4.56	\$4.56	\$4.56	\$4.56	\$4.56	\$4.56	\$4.56	\$16
Chinguacousy Sports Box	\$7.20	\$7.20	\$7.20	\$7.20	\$7.20	\$7.20	\$7.20	\$7.20	\$7.20	\$7.20	\$16
Chinguacousy Park Track Building	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$16
County Court Field House	\$20.78	\$20.78	\$20.78	\$20.78	\$20.78	\$20.78	\$20.78	\$20.78	\$20.78	\$20.78	\$16
Crescent Hill Storage Bldg	\$43.58	\$43.58	\$43.58	\$43.58	\$43.58	\$43.58	\$43.58	\$43.58	\$43.58	\$43.58	\$16
Duggan Park Fieldhouse	\$26.90	\$26.90	\$26.90	\$26.90	\$26.90	\$26.90	\$26.90	\$26.90	\$26.90	\$26.90	\$16
Earncliffe Storage Shed	\$14.90	\$14.90	\$14.90	\$14.90	\$14.90	\$14.90	\$14.90	\$14.90	\$14.90	\$14.90	\$16
Eldorado Parks Shed	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$16
Eldorado Storage Well Building	\$0.58	\$0.58	\$0.58	\$0.58	\$0.58	\$0.58	\$0.58	\$0.58	\$0.58	\$0.58	\$16
Eldorado Well Holding Tank Building	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$16
Fred Kline Fieldhouse	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$16
Loater's Lake Sheds	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$16
Northwood Park Wading Pool	\$1.33	\$1.33	\$1.33	\$1.33	\$1.33	\$1.33	\$1.33	\$1.33	\$1.33	\$1.33	\$16
Northwood Park Shed	\$25.28	\$25.28	\$25.28	\$25.28	\$25.28	\$25.28	\$25.28	\$25.28	\$25.28	\$25.28	\$16
Orenda Road Parks Operation Centre	\$475.17	\$475.17	\$475.17	\$475.17	\$475.17	\$475.17	\$475.17	\$475.17	\$475.17	\$475.17	\$16
OPP - Helicopter Hanger (Park Maintenance)	\$75.49	\$75.49	\$75.49	\$75.49	\$75.49	\$75.49	\$75.49	\$75.49	\$75.49	\$75.49	\$16
OPP - Greenhouse (Chapel Building)	\$66.59	\$66.59	\$66.59	\$66.59	\$66.59	\$66.59	\$66.59	\$66.59	\$66.59	\$66.59	\$16
Peel Village Golf Course Garage	\$28.94	\$28.94	\$28.94	\$28.94	\$28.94	\$28.94	\$28.94	\$28.94	\$28.94	\$28.94	\$16
Rotary Club House & Shed	\$20.45	\$20.45	\$20.45	\$20.45	\$20.45	\$20.45	\$20.45	\$20.45	\$20.45	\$20.45	\$16
Valleybrook Field House	\$3.36	\$3.36	\$3.36	\$3.36	\$3.36	\$3.36	\$3.36	\$3.36	\$3.36	\$3.36	\$16
Victoria Park Shed	\$1.73	\$1.73	\$1.73	\$1.73	\$1.73	\$1.73	\$1.73	\$1.73	\$1.73	\$1.73	\$16
White Spruce Park Storage Bldg.	\$71.09	\$71.09	\$71.09	\$71.09	\$71.09	\$71.09	\$71.09	\$71.09	\$71.09	\$71.09	\$16
Chinguacousy Wellness Centre Fieldhouse	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$16
Memorial Snack Bar/Washrooms	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$16
Quonset Hut/Ogoda Wilderness Centre	\$57.60	\$57.60	\$57.60	\$57.60	\$57.60	\$57.60	\$57.60	\$57.60	\$57.60	\$57.60	\$16
Chinguacousy Park Tennis & Baseball Storage	\$9.81	\$9.81	\$9.81	\$9.81	\$9.81	\$9.81	\$9.81	\$9.81	\$9.81	\$9.81	\$16
Sesquicentennial Park Fieldhouse	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16
Animal Shelter	\$29.42	\$29.42	\$29.42	\$29.42	\$29.42	\$29.42	\$29.42	\$29.42	\$29.42	\$29.42	\$3
Park Maintenance Equipment	\$1,257.84	\$1,284.15	\$1,312.75	\$1,303.12	\$1,332.25	\$1,606.50	\$1,868.40	\$2,071.83	\$2,323.20	\$2,517.85	
Total (\$000)	\$2,603.0	\$2,629.3	\$2,657.9	\$2,606.3	\$2,635.4	\$2,835.3	\$3,053.6	\$3,256.1	\$3,492.6	\$3,626.0	

RECREATION

OUTDOOR BUILDINGS

SERVICE LEVEL ANALYSIS

POPULATION	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300

INVENTORY SUMMARY (\$000)

Outdoor Buildings	\$14,801.9	\$14,801.9	\$14,801.9	\$14,329.4	\$14,329.4	\$13,493.2	\$13,002.8	\$12,992.2	\$12,824.6	\$12,135.4
Land for Outdoor Buildings	\$3,317.7	\$3,317.7	\$3,317.7	\$3,291.4	\$3,291.4	\$2,827.8	\$2,635.4	\$2,635.4	\$2,617.9	\$2,612.7
Equipment for Outdoor Buildings	\$2,603.0	\$2,629.3	\$2,657.9	\$2,606.3	\$2,635.4	\$2,835.3	\$3,053.6	\$3,256.1	\$3,492.6	\$3,626.0
Total Outdoor Buildings (\$000)	\$18,119.6	\$18,119.6	\$18,119.6	\$17,620.9	\$17,620.9	\$16,321.0	\$15,638.2	\$15,627.6	\$15,442.5	\$14,748.1

SERVICE LEVELS (\$/capita)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average Service Levels
Outdoor Buildings	\$49.20	\$47.34	\$45.54	\$41.61	\$39.27	\$34.90	\$31.74	\$29.94	\$28.52	\$26.02	\$37.41
Land for Outdoor Buildings	\$11.03	\$10.61	\$10.21	\$9.56	\$9.02	\$7.31	\$6.43	\$6.07	\$5.82	\$5.60	\$8.17
Equipment for Outdoor Buildings	\$8.65	\$8.41	\$8.18	\$7.57	\$7.22	\$7.33	\$7.46	\$7.50	\$7.77	\$7.78	\$7.79
Total Outdoor Buildings (\$/capita)	\$60.23	\$57.95	\$55.75	\$51.17	\$48.29	\$42.21	\$38.17	\$36.01	\$34.34	\$31.62	\$45.58

RECREATION

OUTDOOR MAINTENANCE EQUIPMENT

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Small Water Tank	2	2	2	2	2	9	9	9	10	11	\$5,175
Bush Hog	1	1	1	1	-	-	-	-	-	2	\$6,400
Mott Mower	8	8	8	6	6	6	6	6	3	3	\$8,539
Plate Tamper	4	4	4	6	6	6	6	6	6	6	\$5,200
Chainsaws/ Polesaws / Cutsaws	36	41	46	48	50	64	82	97	104	141	\$900
Truplay	4	4	4	4	4	6	10	10	10	10	\$4,500
Self Propelled Rotary Motor	22	22	22	22	21	21	21	21	21	21	5,500
Pumps	5	7	10	11	13	13	13	13	13	13	\$2,575
String Trimmers & Mowers	109	115	120	125	134	176	202	247	267	279	\$625
Painter	1	1	1	1	1	1	1	1	1	1	\$6,500
Generators	8	8	10	11	14	14	14	16	16	20	\$2,500
Brouwer Roller	3	3	3	3	3	3	3	3	3	3	\$6,500
Rototiller	6	6	8	8	12	16	24	26	28	31	\$2,500
Backpack Blower / STIHL Blowers	8	15	20	25	32	38	49	51	59	67	\$650
Sprayers	3	3	3	3	3	7	8	8	9	11	\$6,500
Sod Cutter	6	6	6	6	6	6	6	6	9	9	\$6,000
Self Propelled Reel Mower	3	3	3	2	2	2	2	2	2	2	\$22,000
Fertilizer Spreader	3	3	3	4	4	4	4	4	6	6	\$5,700
Snowmobile	1	1	1	1	1	1	2	2	2	2	\$12,000
Air Compressor	1	1	1	1	1	1	1	1	1	1	\$25,000
Salt & Sand Spreaders (Truck Mounted)	4	4	4	4	4	4	4	4	5	5	\$9,000
Trailer-Greenhouse	3	3	3	3	3	3	3	3	3	3	\$750
Snowblower Attachment	4	4	4	5	5	5	5	5	5	5	\$6,500
Disc	1	1	1	1	1	1	1	1	1	1	\$4,000
Brouwer Reel Mower	-	-	-	-	-	-	-	-	-	-	\$11,593
Trail Groomer	1	1	1	1	1	1	1	1	1	1	\$2,500
Bannerman/ Turfco Topdressers	2	2	2	2	2	2	4	4	5	5	\$27,400
Small Topdresser	1	1	1	1	1	1	1	1	2	2	\$9,000
Truck Mounted Sprayer	5	5	5	5	5	5	5	5	5	5	\$6,500
Gills	5	5	5	5	5	5	5	5	5	5	\$6,500
Brillon Seeder	1	1	1	1	1	-	-	-	-	-	\$8,358
Aerators	3	3	3	3	3	3	3	3	3	3	\$15,500
York Rake	-	-	-	-	-	-	-	-	-	-	\$5,796
Tractor Reel Mowers	-	-	-	-	-	-	-	-	-	-	\$28,981
Bannerman Overseeder	2	2	2	2	2	-	-	-	-	-	\$21,493
Olathe Overseeder	-	-	-	-	-	-	-	-	-	-	\$8,115
Ice Edgers	16	16	16	16	16	16	16	16	18	19	\$2,000
Post Hole Auger	2	2	2	2	2	2	2	2	1	2	\$6,200
Outboard Motors	1	1	1	1	1	1	1	1	3	3	\$2,844
Belt Liner	-	-	-	-	-	-	-	-	-	-	\$809
Line Painter	1	1	1	1	1	1	1	1	1	1	\$6,500
White Wash Sprayer	-	-	-	-	-	-	-	-	-	-	\$3,478
Other Equipment	35	35	35	35	35	30	40	50	60	69	\$9,000
MADVAC	-	-	-	-	-	4	4	4	4	4	\$40,000
Redexim Overseeder	-	-	-	-	-	2	2	2	3	3	\$15,600
Smithco Sweeper	-	-	-	-	-	0	0	0	1	1	\$39,500
Delfino Sand Cleaner	-	-	-	-	-	0	0	1	4	4	\$16,000
Billy Goat Blower	-	-	-	-	-	3	3	3	6	7	\$975
Snowblowers	-	-	-	-	-	21	23	28	32	36	\$2,500
Sub-total (#)	320	341	363	377	403	504	588	672	738	823	
Sub-total (\$000)	\$1,258	\$1,284	\$1,313	\$1,303	\$1,332	\$1,607	\$1,868	\$2,072	\$2,323	\$2,518	

RECREATION

PARK DEVELOPMENT

INVENTORY OF CAPITAL ASSETS

TABLELAND (acre)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Development Cost
											Per Acre
Active Tableland	1,319.04	1,362.29	1,391.72	1,504.20	1,569.75	1,596.17	1,662.23	1,670.11	1,699.89	1,774.60	\$144,647
Other Tableland	251.06	252.02	252.02	252.02	252.02	252.02	256.94	256.94	260.28	261.17	\$144,647
Cemeteries	27.18	27.18	27.18	27.18	27.18	27.18	27.18	28.39	28.39	28.39	\$75,105
Total (acre)	1,597.28	1,641.49	1,670.92	1,783.40	1,848.96	1,875.38	1,946.35	1,955.44	1,988.55	2,064.16	
Total (\$000)	\$229,151.6	\$235,545.8	\$239,802.7	\$256,072.6	\$265,555.0	\$269,376.9	\$279,642.3	\$280,873.4	\$285,663.3	\$296,598.9	

HAZARDLAND (acre)	Development Cost										
	Per Acre										
Various Hazardland	524.64	560.18	580.22	617.43	624.47	682.92	717.00	764.47	816.93	872.18	\$64,552
Total (acre)	524.64	560.18	580.22	617.43	624.47	682.92	717.00	764.47	816.93	872.18	
Total (\$000)	\$33,866.9	\$36,160.6	\$37,454.2	\$39,856.4	\$40,311.0	\$44,084.3	\$46,284.0	\$49,348.2	\$52,734.6	\$56,301.3	

SERVICE LEVEL ANALYSIS

POPULATION	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average Service Level
		300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300
Total Tableland											
Total (acre/1,000 pop)	5.31	5.25	5.14	5.18	5.07	4.85	4.75	4.51	4.42	4.43	4.89
Total (\$/capita)	\$761.62	\$753.25	\$737.85	\$743.63	\$727.83	\$696.81	\$682.71	\$647.17	\$635.23	\$636.07	\$702.22

Total Hazardland	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average Service Level
		174	179	179	179	171	177	175	176	182	187
Total (acre/1,000 pop)	1.74	1.79	1.79	1.79	1.71	1.77	1.75	1.76	1.82	1.87	1.78
Total (\$/capita)	\$112.56	\$115.64	\$115.24	\$115.74	\$110.48	\$114.03	\$113.00	\$113.71	\$117.27	\$120.74	\$114.84

RECREATION**SPECIAL FACILITIES****INVENTORY OF CAPITAL ASSETS**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Miscellaneous Special Facilities (\$000)										
Century Gardens Lawn Bowling Club	1,167	1,167	1,167	1,167	1,167	1,167	1,167	1,167	1,167	1,167
Chinguacousy Bandshell	719	719	719	719	719	719	719	719	719	719
Chinguacousy Geerhouses/ Barns, Paddocks, Parking	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232
Chinguacousy Winter Tennis Centre	3,015	3,015	3,015	3,015	3,015	3,015	3,015	3,015	3,015	3,015
Civic Centre Outdoor Rink	992	992	992	992	992	992	992	992	992	992
Eldorado Outdoor Pool	971	971	971	971	971	971	971	971	971	971
Ezard Park Silo	173	173	173	173	173	173	173	173	173	173
Formal Gardens (acres)	4,164	4,164	4,164	4,164	4,164	4,164	4,164	4,164	4,164	4,164
Gage Park Artif. Ice/Fieldhse	3,240	3,240	3,240	3,240	3,240	3,240	3,240	3,240	3,240	3,240
Gage Park Bandshell	107	107	107	107	107	107	107	107	107	107
Kiwanis Memorial Park Gazebo	87	87	87	87	87	87	87	87	87	87
Mini-Golf	1,272	1,272	1,272	1,272	1,272	1,272	1,272	1,272	1,272	1,272
Peel Village Golf										
- Clubhouse	734	734	734	734	734	734	734	734	734	734
- Development (# holes)	2,482	2,482	2,482	2,482	2,482	2,482	2,482	2,482	2,482	2,482
Animal Shelter	366	366	366	366	366	366	366	366	366	366
Total (\$000)	\$21,719.1	\$21,719.1	\$21,719.1	\$21,719.1	\$21,719.1	\$21,719.1	\$21,719.1	\$21,719.1	\$21,000.3	\$21,000.3

SPECIAL FACILITIES LAND**INVENTORY OF CAPITAL ASSETS**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Unit Price (\$)
Miscellaneous Special Facilities (Acres)											
Century Gardens Lawn Bowling Club	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	354,000
Chinguacousy Bandshell	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	354,000
Chinguacousy Geerhouses/ Barns, Paddocks, Parking	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	354,000
Chinguacousy Winter Tennis Centre	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	354,000
Civic Centre Outdoor Rink	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	354,000
Eldorado Outdoor Pool	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	354,000
Ezard Park Silo	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	354,000
Formal Gardens (acres)	11.37	11.37	11.37	11.37	11.37	11.37	11.37	11.37	11.37	11.37	354,000
Gage Park Artif. Ice/Fieldhse	2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	354,000
Gage Park Bandshell	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	354,000
Kiwanis Memorial Park Gazebo	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	354,000
Mini-Golf	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	354,000
Peel Village Golf											
- Clubhouse	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	354,000
- Development (# holes)	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	354,000
- Land	59.81	59.81	59.81	59.81	59.81	59.81	59.81	59.81	59.81	59.81	38,770
Animal Shelter	4.57	4.57	4.57	4.57	4.57	4.57	4.57	4.57	4.57	4.57	464,000
Total (#)	100.78	100.78	100.78	100.78	100.78	100.78	100.78	100.78	95.91	95.91	
Total (\$000)	\$17,325.1	\$17,325.1	\$17,325.1	\$17,325.1	\$17,325.1	\$17,325.1	\$17,325.1	\$17,325.1	\$15,601.9	\$15,601.9	

SERVICE LEVEL ANALYSIS

POPULATION	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300

INVENTORY SUMMARY (\$000)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Miscellaneous Special Facilities	\$21,719.1	\$21,719.1	\$21,719.1	\$21,719.1	\$21,719.1	\$21,719.1	\$21,719.1	\$21,719.1	\$21,000.3	\$21,000.3
Miscellaneous Special Facilities Land	\$17,325.1	\$17,325.1	\$17,325.1	\$17,325.1	\$17,325.1	\$17,325.1	\$17,325.1	\$17,325.1	\$15,601.9	\$15,601.9
Total (\$000)	\$39,044.2	\$39,044.2	\$39,044.2	\$39,044.2	\$39,044.2	\$39,044.2	\$39,044.2	\$39,044.2	\$36,602.2	\$36,602.2

SERVICE LEVELS (\$/capita)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average Service Level
Miscellaneous Special Facilities	\$72.19	\$69.46	\$66.83	\$63.07	\$59.53	\$56.18	\$53.02	\$50.04	\$46.70	\$45.04	\$58.21
Miscellaneous Special Facilities Land	\$57.58	\$55.40	\$53.31	\$50.31	\$47.48	\$44.82	\$42.30	\$39.92	\$34.69	\$33.46	\$45.93
Service Level (\$/capita)	\$129.77	\$124.86	\$120.14	\$113.38	\$107.01	\$101.00	\$95.32	\$89.96	\$81.39	\$78.50	\$104.13

RECREATION

SUMMARY OF SERVICE LEVEL ANALYSIS

POPULATION	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300

INVENTORY SUMMARY (\$000)

Indoor Recreation - Major Facilities	\$266,015	\$272,864	\$271,593	\$287,824	\$288,904	\$287,869	\$287,869	\$292,296	\$337,819	\$389,507
Indoor Recreation - Equipment	\$23,341	\$23,866	\$23,789	\$25,251	\$25,320	\$25,258	\$25,258	\$25,651	\$29,813	\$34,451
Indoor Recreation - Land	\$31,079	\$31,779	\$31,779	\$32,724	\$32,724	\$32,724	\$32,724	\$33,520	\$38,234	\$42,513
Park Facilities	\$60,158	\$60,570	\$61,387	\$61,421	\$64,266	\$64,491	\$70,671	\$73,457	\$75,651	\$79,355
Outdoor Buildings	\$14,802	\$14,802	\$14,802	\$14,329	\$14,329	\$13,493	\$13,003	\$12,992	\$12,825	\$12,135
Land for Outdoor Buildings	\$3,318	\$3,318	\$3,318	\$3,291	\$3,291	\$2,828	\$2,635	\$2,635	\$2,618	\$2,613
Equipment for Outdoor Buildings	\$2,603	\$2,629	\$2,658	\$2,606	\$2,635	\$2,835	\$3,054	\$3,256	\$3,493	\$3,626
Parkland	\$263,018	\$271,706	\$277,257	\$295,929	\$305,866	\$313,461	\$325,926	\$330,222	\$338,398	\$352,900
Special Facilities Buildings	\$21,719	\$21,719	\$21,719	\$21,719	\$21,719	\$21,719	\$21,719	\$21,719	\$21,000	\$21,000
Special Facilities Land	\$17,325	\$17,325	\$17,325	\$17,325	\$17,325	\$17,325	\$17,325	\$17,325	\$15,602	\$15,602
Total (\$000)	\$703,379	\$720,579	\$725,627	\$762,420	\$776,400	\$782,002	\$800,183	\$813,073	\$875,451	\$953,702

Average Service Level

SERVICE LEVEL (\$/capita)

Indoor Recreation - Major Facilities	\$884.14	\$872.59	\$835.67	\$835.84	\$791.82	\$744.64	\$702.79	\$673.49	\$751.21	\$835.31
Indoor Recreation - Equipment	\$77.58	\$76.32	\$73.20	\$73.33	\$69.40	\$65.33	\$61.66	\$59.10	\$66.29	\$73.88
Indoor Recreation - Land	\$103.30	\$101.63	\$97.78	\$95.03	\$89.69	\$84.65	\$79.89	\$77.24	\$85.02	\$90.54
Park Facilities	\$199.94	\$193.70	\$188.88	\$178.37	\$176.19	\$166.82	\$172.53	\$169.25	\$168.23	\$170.18
Outdoor Buildings	\$49.20	\$47.34	\$45.54	\$41.61	\$39.27	\$34.90	\$31.74	\$29.94	\$28.52	\$26.02
Land for Outdoor Buildings	\$11.03	\$10.61	\$10.21	\$9.56	\$9.02	\$7.31	\$6.43	\$6.07	\$5.82	\$5.60
Equipment for Outdoor Buildings	\$8.65	\$8.41	\$8.18	\$7.57	\$7.22	\$7.33	\$7.46	\$7.50	\$7.77	\$7.79
Parkland	\$874.18	\$868.89	\$853.10	\$859.38	\$838.31	\$810.84	\$795.70	\$760.88	\$752.50	\$796.81
Special Facilities Buildings	\$72.19	\$69.46	\$66.83	\$63.07	\$59.53	\$56.18	\$53.02	\$50.04	\$46.70	\$45.04
Special Facilities Land	\$57.58	\$55.40	\$53.31	\$50.31	\$47.48	\$44.82	\$42.30	\$39.92	\$34.69	\$33.46
Total (\$/capita)	\$2,337.79	\$2,304.34	\$2,232.70	\$2,214.07	\$2,127.94	\$2,022.83	\$1,953.53	\$1,873.44	\$1,946.74	\$2,045.25

CALCULATION OF MAXIMUM ALLOWABLE RECREATION

10 Year Average Service Level (1999-2008) \$2,105.86 per capita

2008 Population 466,300
 Population in New Units 2009-2018 143,940
 Population in New Units 2009-2031 287,140

Average Service Level	Maximum Allowable 10 Years (\$000)	2031
\$2,105.86 per capita	\$303,118.0	\$604,677.7

RECREATION

ASSUMPTIONS

BASE CASE DESCRIPTION:

BASE YEAR : 2009

FINANCIAL ASSUMPTIONS:

Inflation Rate:
Financing
Investment

2.0%
5.5%
3.5%

Source:

Bank of Canada Inflation Band Mid-Point
City of Brampton Target Borrowing Rate
City of Brampton Target Earnings Rate

ALLOCATION ASSUMPTIONS:

Residential Share
Non-Residential Share

100.00%
0.00%

10-year % Population
10-year % Population

OPENING BALANCE FOR CASH FLOW:

\$0

DEVELOPMENT CHARGE SUMMARY:

	Persons Per Unit	Unadjusted Development Charge	Adjusted Breakeven Development Charge
SMALL APARTMENT	1.5	\$2,842.92	\$2,970.72
LARGE APARTMENT	2.7	\$5,117.25	\$5,347.30
Row Residential	3.3	\$6,254.41	\$6,535.59
Single/Semi Residential	4.0	\$7,581.11	\$7,921.92
NON-RESIDENTIAL CHARGE (PER M2)		\$0.00	\$0.00

PROGRAM SUMMARY

(NOMINAL - YR \$2009)
TOTAL GROSS EXPENDITURES 2009-2018
LESS: BENEFIT BEYOND PERIOD
LESS: BENEFIT TO EXISTING POPULATION (NON-GROWTH)
LESS: PRIOR GROWTH
LESS: 10% DISCOUNT

\$438,176,000
(\$79,807,307)
(\$52,818,500)
(\$3,432,193)
(\$30,311,800)

ELIGIBLE GROWTH EXPENDITURES

\$272,806,200

TOTAL ELIGIBLE GROWTH EXPENDITURES

\$272,806,200

RESIDENTIAL/NON-RESIDENTIAL SHARE:

RESIDENTIAL
RESIDENTIAL SHARE
GROSS POPULATION GROWTH
NET CHARGE PER CAPITA (UNADJUSTED)
NET CHARGE PER CAPITA (ADJUSTED)

@ 100%

NON-RESIDENTIAL
NON-RESIDENTIAL SHARE
NON-RESIDENTIAL SPACE GROWTH
NET CHARGE PER M2 (UNADJUSTED)
NET CHARGE PER M2 (ADJUSTED)

\$0
5,102,820
\$0.00
\$0.00

RECREATION

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ELIGIBLE GROWTH EXPENDITURES (INFLATED):										
RESIDENTIAL:										
Gross Eligible Growth Capital Cost	\$22,788,726	\$33,939,837	\$21,674,861	\$28,625,396	\$16,297,694	\$41,791,887	\$127,292,278	\$3,440,226	\$0	\$0
TOTAL GROSS ELIGIBLE GROWTH COST	\$22,788,726	\$33,939,837	\$21,674,861	\$28,625,396	\$16,297,694	\$41,791,887	\$127,292,278	\$3,440,226	\$0	\$0

REVENUES (INFLATED):

RESIDENTIAL:										
Charge per Person	\$1,980	\$2,020	\$2,060	\$2,102	\$2,144	\$2,187	\$2,230	\$2,275	\$2,320	\$2,367
Population Growth	12,680	7,480	6,400	6,110	14,010	18,930	24,670	21,890	17,070	14,700
TOTAL RESIDENTIAL REVENUE	\$25,112,495	\$15,110,275	\$13,187,149	\$12,841,399	\$30,033,741	\$41,392,540	\$55,022,559	\$49,798,650	\$39,610,060	\$34,792,808
TOTAL REVENUES	\$25,112,495	\$15,110,275	\$13,187,149	\$12,841,399	\$30,033,741	\$41,392,540	\$55,022,559	\$49,798,650	\$39,610,060	\$34,792,808

FINANCING CALCULATION:

RESIDENTIAL:										
Beginning of Year Balance	\$0	\$2,364,435	(\$16,900,185)	(\$26,550,820)	(\$44,229,172)	(\$32,685,348)	(\$34,893,372)	(\$111,069,643)	(\$70,008,777)	(\$33,556,024)
Net Annual Difference (Total Revenues-Net Expenditures)	\$2,323,769	(\$18,829,562)	(\$8,487,712)	(\$15,763,997)	\$13,736,047	(\$399,347)	(\$72,269,719)	\$46,358,424	\$39,610,060	\$34,792,808
Sub-Total	\$2,323,769	(\$16,465,127)	(\$25,387,897)	(\$42,334,817)	(\$30,493,125)	(\$33,084,696)	(\$107,163,091)	(\$64,711,219)	(\$30,398,717)	\$1,236,784
Financing/Investment Adjustment In Year	\$40,666	(\$517,813)	(\$233,412)	(\$434,060)	\$240,381	(\$10,982)	(\$1,987,417)	\$811,272	\$693,176	\$608,874
Financing/Investment Adjustment Opening Balance	\$0	\$82,755	(\$929,510)	(\$1,460,295)	(\$2,432,604)	(\$1,797,694)	(\$1,919,435)	(\$6,108,830)	(\$3,850,483)	(\$1,845,581)
Sub-Total	\$40,666	(\$435,058)	(\$1,162,922)	(\$1,894,355)	(\$2,192,224)	(\$1,808,676)	(\$3,906,553)	(\$5,297,558)	(\$3,157,307)	(\$1,236,707)
End of Year Cumulative Balance	\$2,364,435	(\$16,900,185)	(\$26,550,820)	(\$44,229,172)	(\$32,685,348)	(\$34,893,372)	(\$111,069,643)	(\$70,008,777)	(\$33,556,024)	\$0

RECREATION - GROWTH RELATED CAPITAL PROGRAM

Timing	Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Prior Growth	Benefit Post 2018	Statutory 10% Current Period Non-DC	Current Period DC Contribution
Major Facilities									
2009	Bram East Community Parkland Campus	750,000		750,000				75,000	675,000
2009	Loafer's Lake Facility Expansion	500,000		500,000	200,000			30,000	270,000
2010	Loafer's Lake Facility Expansion	15,000,000		15,000,000	6,000,000			900,000	8,100,000
2010	Mississauga/Embleton Facility	9,300,000		9,300,000	5,800,000			350,000	3,150,000
2010	Chris Gibson Facility Expansion	100,000		100,000	40,000			6,000	54,000
2010	Bram East Community Parkland Campus	14,640,000		14,640,000	5,800,000			884,000	7,956,000
2011	Mississauga/Embleton Facility	780,000		780,000				78,000	702,000
2011	Chris Gibson Facility Expansion	750,000		750,000	300,000			45,000	405,000
2011	Bram East Community Parkland Campus	10,000,000		10,000,000				1,000,000	9,000,000
2012	Chris Gibson Facility Expansion	15,000,000		15,000,000	6,000,000			900,000	8,100,000
2012	Mississauga/Embleton Facility	5,330,000		5,330,000				533,000	4,797,000
2014	Mississauga/Embleton Facility	100,000		100,000				10,000	90,000
2015	Bram East Community Parkland Campus	70,935,000		70,935,000				7,093,500	63,841,500
2015	Mississauga/Embleton Facility	4,500,000		4,500,000				450,000	4,050,000
2016	Mississauga/Embleton Facility	40,500,000		40,500,000			40,500,000		
Sub-Total for Major Facilities		\$188,185,000	\$0	\$188,185,000	\$24,140,000	\$0	\$40,500,000	\$12,354,500	\$111,190,500
Park Facilities									
2009	Garden Square Urban Spaces	1,000,000		1,000,000				100,000	900,000
2009	FCCC Recreation Building & Park	3,856,000		3,856,000		3,432,193		42,381	381,426
2010	FCCC Recreation Building & Park	290,000		290,000				29,000	261,000
2010	Chinguacousy Park Enhancements	5,037,000		5,037,000	1,261,500			377,550	3,397,950
2010	Kabaddi Stadium	750,000		750,000				75,000	675,000
2011	FCCC Recreation Building & Park	160,000		160,000	39,000			12,100	108,900
2011	Chinguacousy Park Enhancements	6,680,000		6,680,000	1,472,500			520,750	4,686,750
2012	Chinguacousy Park Enhancements	4,380,000		4,380,000	610,000			377,000	3,393,000

Timing	Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Prior Growth	Benefit Post 2018	Statutory 10%	
								Current Period Non-DC	Current Period DC Contribution
2012	FCCC Recreation Building & Park	3,700,000		3,700,000				370,000	3,330,000
2013	Chinguacousy Park Enhancements	3,169,500		3,169,500	600,000			256,950	2,312,550
2014	Animal Shelter	10,000,000		10,000,000				1,000,000	9,000,000
2014	Chinguacousy Park Enhancements	8,134,000		8,134,000	2,635,000			549,900	4,949,100
2015	Chinguacousy Park Enhancements	12,551,000		12,551,000	906,000			1,164,500	10,480,500
2016	Chinguacousy Park Enhancements	20,683,000		20,683,000	8,699,000		11,984,000		
	Sub-Total for Park Facilities	\$80,390,500	\$0	\$80,390,500	\$16,223,000	\$3,432,193	\$11,984,000	\$4,875,131	\$43,876,176
	Parkland Development								
2009	Valleyland Development - Lockspur Estates block 285	46,000		46,000				4,600	41,400
2009	Sesquicentennial City Wide Park	800,000		800,000				80,000	720,000
2009	Civic Design	340,000		340,000				34,000	306,000
2009	White Spruce Park	250,000		250,000	75,000			17,500	157,500
2009	Chinguacousy / Queen Community Park	14,900,000		14,900,000				1,490,000	13,410,000
2009	Valleyland Development - Renaturalization program	225,000		225,000				22,500	202,500
2009	Valleyland Development - Huntingwood Developments block 141	234,000		234,000				23,400	210,600
2009	Neighbourhood Park - Dezen Park block 55 & 61	250,000		250,000				25,000	225,000
2009	Century Gardens - Outdoor Program	2,200,000	1,320,000	880,000				88,000	792,000
2009	Cassie Campbell - Outdoor Fields	4,000,000		4,000,000				400,000	3,600,000
2009	Eldorado Park Development	500,000		500,000	375,000			12,500	112,500
2009	Neighbourhood Park - Port Mark Investments block 172	73,000		73,000				7,300	65,700
2009	Valleyland Development - Starserra Homes Block 110	74,000		74,000				7,400	66,600
2009	Neighbourhood Park - Georgian Riverview Park block 98	161,000		161,000				16,100	144,900
2009	Valleyland Development - Dezen Valley Block 60, 65,27	210,000		210,000				21,000	189,000
2009	Norton Park Development	250,000		250,000	188,000			6,200	55,800

Timing	Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Prior Growth	Benefit Post 2018	Statutory 10%	
								Current Period Non-DC	Current Period DC Contribution
2009	Valleyland Development - Springdale 902 / Hermosa block 370	292,000		292,000				29,200	262,800
2010	Civic Design	195,000		195,000				19,500	175,500
2010	Wayfinding & Signage Program	250,000		250,000	125,000			12,500	112,500
2010	Valleyland Development	3,248,000		3,248,000	1,500			324,650	2,921,850
2010	Springdale Central Community Park	2,578,000		2,578,000				257,800	2,320,200
2010	Neighbourhood Park Development	1,817,000		1,817,000				181,700	1,635,300
2010	Eldorado Park Development	1,500,000		1,500,000	1,125,000			37,500	337,500
2010	Norton Park Development	1,375,000		1,375,000				137,500	1,237,500
2010	Century Gardens - Outdoor Program	900,000		900,000	540,000			36,000	324,000
2010	Mississauga / Bovaird Community Park	150,000		150,000				15,000	135,000
2010	Pathway Implementation Program	537,500		537,500	3,000			53,450	481,050
2011	Gore / Castlemore Community Park	100,000		100,000				10,000	90,000
2011	Valleyland Development	3,248,000		3,248,000	1,500			324,650	2,921,850
2011	Mississauga / Bovaird Community Park	375,000		375,000				37,500	337,500
2011	Community Park "A"	100,000		100,000				10,000	90,000
2011	Neighbourhood Parks	1,304,500		1,304,500				130,450	1,174,050
2011	Pathway Implementation Program	286,500		286,500	6,000			28,050	252,450
2011	Civic Design	195,000		195,000				19,500	175,500
2011	Norton Park Development	3,450,000		3,450,000	2,587,000			86,300	776,700
2011	Wayfinding & Signage Program	250,000		250,000	125,000			12,500	112,500
2012	Civic Design	195,000		195,000	0			19,500	175,500
2012	Wayfinding & Signage Program	250,000		250,000	125,000			12,500	112,500
2012	Pathway Implementation Program	282,500		282,500	3,000			27,950	251,550
2012	Mississauga / Bovaird Community Park	2,972,500		2,972,500				297,250	2,675,250
2012	Neighbourhood Parks	1,253,000		1,253,000				125,300	1,127,700
2012	Sesquicentennial City Wide Park	100,000		100,000				10,000	90,000
2012	Valleyland Development	3,248,000		3,248,000	1,500			324,650	2,921,850
2013	White Spruce Park	3,000,000		3,000,000	900,000			210,000	1,890,000

Timing	Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Prior Growth	Benefit Post 2018	Statutory 10%	
								Current Period Non-DC	Current Period DC Contribution
2013	Community Park "A"	1,150,000		1,150,000				115,000	1,035,000
2013	Neighbourhood Parks	2,424,000		2,424,000				242,400	2,181,600
2013	Pathway Implementation Program	571,000		571,000	10,000			56,100	504,900
2013	Wayfinding & Signage Program	500,000		500,000	250,000			25,000	225,000
2013	Civic Design	507,000		507,000				50,700	456,300
2013	Valleyland Development	6,496,000		6,496,000	3,000			649,300	5,843,700
2013	Gore / Castlemore Community Park	675,000		675,000				67,500	607,500
2014	Civic Design	300,000		300,000				30,000	270,000
2014	Community Park "A"	8,755,000		8,755,000				875,500	7,879,500
2014	Gore / Castlemore Community Park	4,835,000		4,835,000				483,500	4,351,500
2014	Sesquicentennial City Wide Park	1,350,000		1,350,000				135,000	1,215,000
2014	Valleyland Development	6,496,000		6,496,000	3,000			649,300	5,843,700
2014	Pathway Implementation Program	568,000		568,000	5,000			56,300	506,700
2014	Wayfinding & Signage Program	500,000		500,000	250,000			25,000	225,000
2014	Neighbourhood Parks	2,369,000		2,369,000				236,900	2,132,100
2014	Heritage / Bovaird City Wide Park	1,544,000		1,544,000				154,400	1,389,600
2015	Wayfinding & Signage Program	500,000		500,000				25,000	225,000
2015	Heritage / Bovaird City Wide Park	13,783,000		13,783,000				1,378,300	12,404,700
2015	Civic Design	300,000		300,000				30,000	270,000
2015	NW Brampton Community Park	8,700,000		8,700,000	4,706,000			399,400	3,594,600
2015	Pathway Implementation Program	562,000		562,000	10,000			55,200	496,800
2015	Sesquicentennial City Wide Park	10,845,000		10,845,000				1,084,500	9,760,500
2015	Valleyland Development	6,496,000		6,496,000	3,000			649,300	5,843,700
2015	Neighbourhood Parks	2,294,000		2,294,000				229,400	2,064,600
2016	Neighbourhood Parks	2,310,000		2,310,000				231,000	2,079,000
2016	Pathway Implementation Program	617,000		617,000	5,000			61,200	550,800
2016	Valleyland Developments	6,496,000		6,496,000	3,000		6,387,307	10,569	95,124
2016	Wayfinding & Signage Program	500,000		500,000	250,000			250,000	

Timing	Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Prior Growth	Benefit Post 2018	Statutory 10%	
								Current Period Non-DC	Current Period DC Contribution
2016	Civic Design	300,000		300,000				30,000	270,000
2017	Pathway Implementation Program	510,000		510,000	10,000		500,000		
2017	Civic Design	300,000		300,000			300,000		
2017	Valleyland Development	6,496,000		6,496,000	3,000		6,493,000		
2017	Neighbourhood Parks	2,300,000		2,300,000			2,300,000		
2017	NW Brampton Community Park	300,000		300,000			300,000		
2017	Wayfinding & Signage Program	500,000		500,000	250,000		250,000		
2018	Civic Design	300,000		300,000			300,000		
2018	Wayfinding & Signage Program	500,000		500,000	250,000		250,000		
2018	Valleyland Development	6,496,000		6,496,000	3,000		6,493,000		
2018	Pathway Implementation Program	510,000		510,000	10,000		500,000		
2018	Neighbourhood Parks	2,300,000		2,300,000			2,300,000		
2018	NW Brampton Community Park	700,000		700,000			700,000		
Sub-Total for Parkland Development		\$171,920,500	\$1,320,000	\$170,600,500	\$12,455,500	\$0	\$27,323,307	\$13,082,169	\$117,739,524
Total for RECREATION		\$440,496,000	\$1,320,000	\$439,176,000	\$52,818,500	\$3,432,193	\$79,807,307	\$30,311,800	\$272,806,200



DRAFT XXX-2009

Development Charges

To establish development charges for the City of Brampton pertaining to Recreation Services, and to repeal By-law 219-2004 and By-Law 220-2004

WHEREAS subsection 2(1) of the Act provides that the Council of a municipality may by by-law impose development charges against land to pay for increased capital costs required because of increased needs for services arising from the development of the area to which the by-law applies;

AND WHEREAS the City has completed and has considered a report entitled "2009 Development Charge Background Study", the City of Brampton, dated JuneXX, 2009 (the "Study"), as required by section 10 of the Act;

AND WHEREAS the Study was made available to the public, and Council gave notice to the public of a public meeting, pursuant to section 12 of the Act, which was held on June 22, 2009, and at which the Study was again provided to the public, along with the proposed development charge by-laws, and Council heard representations from all persons who applied to be heard (the "Public Meeting");

AND WHEREAS Council held X further Public Meetings on XXXXX XX, XXXX and XXXXX XX, XXXX, and Council heard representations from all persons who applied to be heard;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council approved the Study, as amended by the matters identified in the staff report dated July 27, 2009;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council indicated that it intends to ensure that the increase in the need for services attributable to the anticipated development identified in the Study, as amended, will be met;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council indicated its intent that future excess capacity identified in the Study shall be paid for by development charges or other similar charges;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council determined that no further public meetings were required, under section 12 of the Act.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE CITY OF BRAMPTON ENACTS AS FOLLOWS:

Definitions

1. In this by-law,

“accessory” means, where used to describe a use, building or structure, that the use, building or structure is naturally and normally incidental to and exclusively devoted to a principal use, building or structure;

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

"agricultural use" means a bona fide farming operation, including sod farms, the breeding and boarding of horses, and greenhouses;

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

"apartment dwelling" means a building containing six or more dwelling units which have a common entrance from the street level, and the occupants of which have the right to use common elements;

“apartment” means a dwelling unit in a duplex, triplex, double duplex or in a mixed use building not exceeding three stories in height and a

dwelling unit in a building where such dwelling unit is served by a principal entrance from the street level common to three or more other dwelling units;

“board of education” has the same meaning as “board” under the *Education Act*, R.S.O. 1990, ch. E.2;

"building or structure" means a structure occupying an area greater than 10 square metres consisting of a wall, roof, and floor or any of them or a structural system serving the function thereof, and includes an air-supported structure, mezzanine, and an exterior storage tank, but does not include: a farm building, or a canopy, or an exterior storage tank where such exterior storage tank constitutes an accessory use;

“*Building Code Act*” means the *Building Code Act*, S.O. 1992, chapter 23, as amended, and all Regulations thereto including the Ontario Building Code, 2006, as amended;

“canopy” means a canopy as defined in the *Building Code Act* and includes a free-standing roof-like structure constructed on lands used for a gas bar or service station;

"City" means The Corporation of the City of Brampton;

“college” has the same meaning as in section 171.1 of the *Education Act*, R.S.O. 1990, ch. E.2;

“Council” means the Council of the Corporation of the City of Brampton;

"development" means the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of increasing the total floor area, and includes redevelopment;

"development charge" means a charge imposed pursuant to this by-law;

“distribution centre” means a building or structure primarily used for the storage and distribution of goods, wares, merchandise, substances, articles or things;

“double duplex” means a separate building that consists of two duplexes attached to each other;

“duplex” means a separate building that is divided horizontally into two separate dwelling units, each of which has a separate entrance either directly or through a common vestibule;

"dwelling unit" means one or more habitable rooms designed or intended to be used together as a single and separate house-keeping unit by one person or jointly by two or more persons, containing its own kitchen and sanitary facilities;

“farm building” means a farm building as defined in the *Building Code Act*;

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

"grade" means the average level of proposed or finished ground adjoining a building or structure at all exterior walls;

“industrial use” means land, buildings or structures used or designed or intended for use for or in connection with manufacturing, producing, or processing of raw goods, warehousing or bulk storage of goods, distribution centre, truck terminal, research or development in connection with manufacturing, producing, or processing of raw goods, storage, and includes office uses and the sale of commodities to the general public where such uses are accessory to an industrial use, but does not include a building used exclusively for office or administrative purposes unless it is attached to an industrial building or structure as defined above, and does not include a retail warehouse;

“land” includes buildings or structures;

“large apartment” means, for the purposes of the Schedules attached: an apartment unit having a floor area of more than 750 square feet;

“local board” means a public utility commission, transportation commission, public library board, board of park management, local board of health, police services board, planning board, or any other board, commission, committee, body or local authority established or exercising any power or authority under any general or special act with respect to any of the affairs or purposes of the City or the Region;

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

“mixed use” means a use or intended use of the same land, building or structure for any two or more uses defined in this by-law;

“mobile temporary sales trailer” means a trailer that is designed to be made mobile, is placed without a foundation on land and is used exclusively for new residential sales, and concrete piers or sono tubes are deemed not to be foundations for the purposes of this definition;

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

“non-industrial use” means the use of land, buildings or structures or parts thereof, used, designed or intended to be used for any use other than for residential use or for industrial use, or for office use, as those terms are defined in this section, and a non-industrial use includes a retail warehouse;

“non-residential use” means the use of land, buildings or structures or portions thereof used, designed or intended to be used for any use other than for residential use as that term is defined in this section;

“office use” means the use of land, buildings or structures used primarily for, or designed or intended for use primarily for or in connection with office or administrative purposes, provided that the building or structure has an office or administrative component equal to or greater than 50 percent of the total gross floor area of the building or structure. For the purposes of this by-law office use excludes office or administrative uses located in a shopping centre or plaza, and excludes office or administrative uses where such uses are accessory to an industrial use;

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

“planned seniors retirement community” means a housing project consisting of ground-related dwelling units in single family, semi-detached, or multiple dwellings and other amenities, all of which are designed, marketed, developed, and constructed to provide living accommodation for and to meet the needs of senior citizens or older

or retired persons on land designated by a resolution of the City Council as a planned seniors retirement community;

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

“public hospital” means a hospital as defined in the *Public Hospitals Act*, R.S.O. 1990, ch. P.40;

“redevelopment” means the construction, erection or placing of one or more buildings or structures on land where all or part of a building or structure has previously been demolished on such land, or changing the use of a building or structure for any of the following:

- i) from residential to non-residential,
- ii) from non-residential to residential,
- iii) from industrial to non-industrial and,
- iv) from office to non-office;

“Region” means The Regional Municipality of Peel;

“Regulation” means Ontario Reg.82/98, under the Act;

“residential use” means land, buildings or structures or portions thereof used, designed, or intended to be used as living accommodation within a dwelling unit, for one or more individuals;

“row house” means a building other than an apartment building, that is vertically divided into a minimum of three dwelling units, each of which has independent entrances at grade to the front and the rear of the building, and each of which shares a common wall adjoining dwelling units above grade;

“semi-detached dwelling” means a building divided vertically, into two separate dwelling units, with at least 50 per cent of the above-grade area of a main wall on one side of each dwelling unit attached to or the same as a main wall on one side of the other dwelling unit;

“services” means services designated in this by-law or in an agreement under section 44 of the Act, or both;

“shelf and rack storage system” means a shelf and rack storage system as defined in the Building Code Act;

“single detached dwelling” means a completely detached residential

building containing only one dwelling unit;

“small apartment”, notwithstanding the definition of an “apartment”, means any residential unit having a total floor area equal to or less than 750 square feet;

“temporary building or structure” means a building or structure constructed or erected or placed on land for a continuous period not exceeding eight months, or an addition or alteration to a building or structure that has the effect of increasing the total floor area thereof for a continuous period not exceeding eight months;

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

- (a) includes the floor area of a mezzanine and air-supported structure and the space occupied by interior walls and partitions; and
- (b) excludes any parts of the building or structure used for mechanical equipment related to the operation or maintenance of the building or structure, stairwells, elevators and washrooms; and
- (c) excludes any part of a building or structure above or below grade, used exclusively for the temporary parking of a motor vehicle or used for the provision of loading spaces; and
- (d) includes any part of a building or structure above or below grade used as a commercial parking garage; and
- (e) where a building or structure does not have any walls, the total floor area shall be the sum total of the area of land directly beneath the roof of the building and the total areas of the floors in the building or structure; and
- (f) excludes the area of any self contained structural shelf and rack storage system as defined in the Building Code Act;

“triplex” means a building or structure that is divided horizontally into three separate dwelling units, each of which has a separate entrance through a common vestibule;

“truck terminal” means a building, structure or place where, for the purpose of a common carrier, trucks or transports are rented, leased, kept for hire, or stored, or parked for remuneration or from which trucks or transports are dispatched.

“university” has the same meaning as is set out in section 171.1 of the *Education Act*;

“use” means the use of land, a building or a structure.

Rules

2. For the purpose of complying with section 6 of the Act:
 - (a) the area to which this by-law applies shall be the area described in section 3 of this by-law;
 - (b) the rules developed under paragraph 9 of subsection 5(1) of the Act for determining if a development charge is payable in any particular case and for determining the amount of the charge are set forth in sections 4 through 17 inclusive;
 - (c) the exemptions provided for by such rules shall be the exemptions set forth in sections 18 through 22 inclusive, of this by-law, the indexing of charges shall be in accordance with section 15 of this by-law, and there shall be no phasing in as provided in subsection 16(1) of this by-law; and
 - (d) the calculation of development charges payable with respect to redevelopment of land shall be in accordance with the rules set forth in section 23 of this by-law.

Lands Affected

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

Designation of Services

4. It is hereby declared by Council that all development of land within the area to which this by-law applies will increase the need for services.
5. The development charge applicable to a development as determined under this by-law shall apply without regard to the services required or used by an individual development.
6. Development charges shall be imposed under this by-law, for the following categories of services to pay for the increased capital costs required because of increased needs for services arising from development:
Recreation Services

Approvals for Development

7. Development charges shall be imposed against all lands, buildings or structures within the area to which this by-law applies, if the development of such lands, buildings or structures requires any of the following approvals:
 - (a) the passing of a zoning by-law or of an amendment thereto under section 34 of the *Planning Act*;
 - (b) the approval of a minor variance under section 45 of the *Planning Act*;
 - (c) a conveyance of land to which a by-law passed under subsection 50(7) of the *Planning Act* applies;
 - (d) the approval of a plan of subdivision under section 51 of the *Planning Act*;
 - (e) a consent under section 53 of the *Planning Act*;
 - (f) the approval of a description under section 9 of the *Condominium Act*; or
 - (g) the issuing of a permit under the *Building Code Act* in relation to a building or structure.
8. No more than one development charge for each service designated in section 6 of this by-law shall be imposed upon any lands, buildings or

structures to which this by-law applies even though two or more of the actions described in section 7 are required before the lands, buildings or structures can be developed.

9. Notwithstanding section 8, if two or more of the actions described in section 7 occur at different times, additional development charges shall be imposed in respect of any increased or additional development permitted by that action.
10. Where a development requires an approval described in section 7 after the issuance of a building permit and no development charge has been paid, then the development charge shall be paid prior to the granting of the approval required under section 7.
11. If a development does not require a building permit but does require one or more of the approvals described in section 7, then the development charge shall nonetheless be payable in respect of any increased or additional development permitted by such approval required for the increased or additional development being granted, and such development charge shall be paid prior to the granting of the approval required.

Calculation of Development Charges

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

Amount of Charge – Residential

13. (1) The development charges described in Schedule A to this by-law shall be imposed on residential uses of lands, buildings or structures, including a dwelling unit accessory to a non-residential use and, in the case of a mixed use building or structure, on the residential component of the mixed use building or structure, according to the type of residential use.

- (2) Despite subsection 13(1), the development charges described in Schedule A to this by-law for dwelling units larger than 750 square feet in apartment dwellings shall be imposed on all dwelling units in single detached dwellings, semi-detached dwellings and multiple-dwellings constructed in a planned seniors retirement community, provided that the zoning by-law in force for the planned seniors retirement community limits the number of bedrooms in any dwelling unit to 2 bedrooms, and the number of dwelling units in the community and the maximum floor area of the dwelling units to amounts determined by Council in the zoning by-law.
- (3) If the development charges required to be paid by subsection 13(1) and subsection 13(2), or any part of them remains unpaid after they are payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes in accordance with subsection 32(1) of the Act.

Amount of Charge – Non-Residential

14. (1) The development charges described in Schedule B to this by-law shall be imposed on non-residential uses of lands, buildings or structures and, in the case of a mixed use building or structure, on the non-residential component of the mixed use building or structure, and calculated with respect to each of the services according to the total floor area of the non-residential use.
- (2) Despite clause (1), development charges shall not be imposed on the mechanical portions of buildings that service residential units and which are situated on the same land as all of the residential units that they service.
- (3) If the development charges required to be paid by subsection 14(1), or if any part of them remains unpaid after they are payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes in accordance with subsection 32(1) of the Act.

Indexing of Development Charges

15. The development charges set out in Schedules A and B, shall be adjusted, without amendment to this by-law, semi-annually on February 1st and August 1st in each year, commencing February 1st, 2010, in accordance with the Statistics Canada Quarterly, Construction Price Statistics (catalogue number 62-007) with the base index value being that in effect on August 1, 2009.

Phasing, Timing of Calculation and Payment

16. (1) The development charges set out in this by-law are not subject to phasing in and are payable in full from the effective date of this by-law, subject to applicable exemptions, credits, and discounts;
- (2) Subject to section 23 of this by-law (with respect to redevelopment) and subsection 16(3) below, the development charge shall be calculated as of, and shall be payable, on the date the first building permit is issued in relation to a building or structure on the land to which the development charge applies;
- (3) Where a development charge applies to land in relation to which a building permit is required, no building permit shall be issued until the development charge has been paid in full;
- (4) Notwithstanding subsection 16(3), the City may, in its sole discretion, require an owner to enter into an agreement, including the provision of security for the owner's obligations under agreement, pursuant to section 27 of the Act, providing for all or part of a development charge to be paid before or after it otherwise would be payable. In that event, the terms of such agreement shall then prevail over the provision of this by-law.

Payment By Money or the Provision of Services

17. (1) Payment of development charges shall be by cash or by certified cheque.
- (2) In the alternative to payment by the means provided in subsection (1), the City may, by an agreement entered into with the owner, accept the provision of services in full or partial satisfaction of the development charge otherwise payable, provided that:

- (a) if the City and the owner cannot agree as to the reasonable cost of doing the work under subsection (2), the dispute shall be referred to Council, whose decision shall be final and binding;
 - (b) if the credit exceeds the amount of the charge for the service to which the work relates,
 - (i) the excess amount shall not be credited against the charge for any other service, unless the City has so agreed in an agreement entered into under section 38 of the Act; and
 - (ii) in no event shall the City be required to make a cash payment to the credit holder.
 - (c) notwithstanding the repeal of By-law 219-2004 and By-Law 220-2004, any credits owing to a landowner, or previous landowner, pursuant to an agreement entered into under section 38 of the Act, prior to the enactment of this by-law, may, at the City's sole discretion, be recognized and used as a credit under this by-law, pursuant to section 41 of the Act; or
 - (d) any credits owing to a landowner, or previous landowner, pursuant to an agreement entered into under section 38 of the Act, either prior to, or after, the enactment of this by-law, which credits do not relate to the category of services covered by this by-law, may, at the City's sole discretion, be recognized and used as a credit under this by-law, pursuant to section 41 of the Act.
- (3) Nothing in this by-law prevents Council from requiring, as a condition of an agreement under sections 51 or 53 of the *Planning Act*, that the owner, at his or her own expense, install such local services related to a plan of subdivision or within the area to which the plan relates, as Council may require, and/or that the owner pay for local connections to storm drainage facilities installed at the owner's expense, and/or administrative, processing, or inspection fees.

Rules with Respect to Exemptions for Intensification of Existing Housing

18. (1) This by-law does not apply with respect to approvals related to the residential development of land, buildings or structures that

would have the effect only,

- (a) of permitting the enlargement of an existing dwelling unit;
 - (b) of creating one or two additional dwelling units in an existing single detached dwelling unit;
 - (c) of creating one additional dwelling unit in an existing semi detached dwelling unit; or
 - (d) of creating one additional dwelling unit for any other existing residential building.
- (2) Notwithstanding clauses (1)(b) to (d), a development charge shall be imposed with respect to the creation of one or two additional dwelling units in a dwelling, if the total floor area of the additional one or two dwelling units exceeds the total floor area of the existing dwelling unit in clause (1)(b) and (1)(c), and the smallest existing dwelling unit in clause (1)(d).

Rules with Respect to Industrial Expansion Exemption

19. (1) If a development includes the enlargement of the gross floor area of an existing industrial building, the amount of the development charge that is payable under this by-law, is the following:
- (a) if the gross floor area is enlarged by 50 per cent or less, the amount of the development charge in respect of the enlargement is zero; and
 - (b) if the gross floor area is enlarged by more than 50 per cent, development charges are payable on the amount by which the enlargement exceeds 50 per cent of the gross floor area before the enlargement.
- (2) For the purpose of this section, the terms “gross floor area” and “existing industrial building” shall have the same meaning as those terms have in the Regulation made under the Act.
- (3) For the purpose of interpreting the definition of “existing industrial building” contained in the Regulation, regard shall be had for the classification of the lands in question pursuant to the Assessment Act, R.S.O. 1990, c.A.31, and in particular:

- (a) whether the lands fall within a tax class such that taxes on the lands are payable at the industrial tax rate; and
 - (b) whether more than fifty per cent (50%) of the gross floor area of the building or structure has an industrial property code for assessment purposes;
- (4) Despite subsection (3), distribution centres, warehousing, the bulk storage of goods and truck terminals shall be considered industrial uses.
- (5) For the purpose of the application of section 4 of the Act to the operation of this by-law:
- (a) the gross floor area of an existing industrial building shall be calculated as it existed prior to the first enlargement in respect of that building for which an exemption under section 4 of the Act is sought; and
 - (b) the enlargement of the gross floor area of the existing building must:
 - (i) be attached to the existing industrial building
 - (ii) not be attached to the existing industrial building by means only of a tunnel, bridge, canopy, corridor or other passageway, shared below-grade connection, foundation, footing, parking facility, service tunnel or service pipe;
 - (iii) be for use or in connection with an industrial purpose as set out in this by-law; and
 - (iv) constitute a bone fide increase in the size of the existing building.

Categories of Exempt Institutions

20. (1) The following categories of institutions are hereby designated as being exempt from the payment of development charges:
- (a) land, buildings or structures used as hospitals governed by the *Public Hospitals Act*, R.S.O. 1990, c. P. 40;

- (b) land, buildings or structures owned by and used for the purposes of the City, the Region, or their local boards as required by the Act;
 - (c) land, buildings or structures owned by a board of education and used only for school purposes as required by the Act;
 - (d) land, buildings or structures owned by and used for the purposes of a college or university;
 - (e) that portion of land, buildings or structures owned by a church or religious organization which is used only as a place of worship; and
 - (f) land, buildings or structures used only for the purpose of a temporary office for new residential sales.
- (2) The exemption referred to in this paragraph 20(1)(b) does not apply to the development for residential uses of lands owned by:
- (a) the Region or any local board thereof, including the Peel Children's Aid Society; or
 - (b) any corporation owned, controlled, or operated by the Region, including Peel Non-Profit Housing Corporation.

Agricultural Uses

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

Temporary Buildings or Structures

22. (1) Temporary buildings or structures shall be exempt from the provisions of this by-law, so long as the status as a temporary building or structure is maintained in accordance with the provisions of this by-law;

- (2) In the event that a temporary building or structure becomes protracted, it shall be deemed not to be, or ever to have been a temporary building or structure, and the development charges required to be paid under this by-law shall become payable on the date the temporary building or structure becomes protracted; and
- (3) Prior to the City issuing a building permit for a temporary building or structure, the City may require an owner to enter into an agreement, including the provision of security for the owner's obligation under the agreement, pursuant to section 27 of the Act, providing for all or part of the development charge required by subsection 22(2) to be paid after it would otherwise be payable. The terms of such agreement shall then prevail over the provisions of this by-law.

Rules with Respect to the Redevelopment of Land

23. (1) Where there is a redevelopment of land on which there is a conversion of space proposed, or on which there was formerly erected a building or structure that has been demolished or will be demolished within a period no longer than 4 months from the date of issuance of a building permit, a credit shall be allowed against the development charge otherwise payable by the owner pursuant to this by-law, for the portion of the previous building or structure still in existence that is being converted or for the portion of the building or structure that has or will be demolished, as the case may be, calculated by multiplying the number and type of dwelling units being converted or demolished or the non-residential total floor area being converted or demolished by the relevant development charge in effect on the date when the development charge is payable in accordance with this by-law.
- (2) If a credit has been allowed against the development charge otherwise payable and a building permit for the redevelopment has been issued, in advance of the occurrence of the demolition, the owner must complete and provide proof of the demolition no later than 4 months after the issuance of the building permit or the amount for which the development charge credit was provided shall become fully payable.
- (3) A credit in respect of any demolition under this section shall not be given unless the demolition permit was issued on or after October 28, 1991.

- (4) The amount of any credit hereunder shall not exceed, in total, the amount of the development charges otherwise payable under this by-law with respect to the redevelopment.
- (5) For the purposes of this section, dwelling units or total floor area accidentally destroyed by fire shall be deemed to have been demolished under a demolition permit issued on the date of the fire.

Interest

- 24. The City shall pay interest on a refund under subsections 17(3), (5) and 24(2) of the Act at a rate equal to the Bank of Canada rate on the date this by-law comes into effect.

Front Ending Agreements

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

Schedules

- 26. The following Schedules to this by-law form an integral part of this by-law:
 - Schedule 'A' Residential Development Charges
 - Schedule 'B' Non-residential Development Charges

By-law Registration

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

Date By-law Effective

- 28. This by-law comes into force and effect on XXXXXX XX, 2009.

Date By-law Expires

29. This by-law expires five years after the date on which it comes into force and effect.

Repeal

30. By-law No. 219-2004 and By-Law No. 220-2004 are hereby repealed, effective on the date this by-law comes into force and effect.

Headings for Reference Only

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

Interpretation

32. All words defined in the Act or the Regulation have the same meaning in this by-law as they have in the Act or the Regulation, unless they are defined differently in this by-law.
33. All references to the provisions of any statute or regulation or to the Ontario Building Code contained in this by-law shall also refer to the same or similar provision in the statute or regulation or code as amended, replaced, revised or consolidated from time to time.

Severability

34. If, for any reason, any provision, section, subsection or paragraph of this by-law is held invalid, it is hereby declared to be the intention of Council that all the remainder of this by-law shall continue in full force and effect until repealed, re-enacted or amended, in whole or in part or dealt with in any other way.

Short Title

35. This by-law may be referred to as the City of Brampton Development Charges By-law for Recreation Services, 2009.

READ A FIRST, SECOND, AND THIRD TIME, AND PASSED IN OPEN
COUNCIL THIS XXth DAY OF AUGUST, 2009.

THE CORPORATION OF THE CITY OF BRAMPTON

Original signed by
Susan Fennell, Mayor

Original Signed by
Peter Fay, City Clerk

Approved as to Content
Original Signed by Maurice Lewis

Approved as to Form
Original Signed by Colin Grant

Schedule A to By-Law xxx-2009
Residential Development Charge

Service Category	Charge for Singles/Semis	Charge for Rows	Charge for Apartment >750 Sq.Ft.	Charge for Apartment <= 750 Sq.Ft.
Recreation Services	\$7,921.92	\$6,535.58	\$5,347.30	\$2,970.72

FIRE SUMMARY

The Brampton Fire Department is responsible for the provision of fire protection services across the City in accordance with the Fire Protection and Prevention Act. This act defines protection services as "...fire suppression, fire prevention, fire safety education, communication, training of persons involved in the provision of fire protection services, rescue and emergency services and the delivery of all those services."

The inventory of the Brampton Fire Department, as well as the service level calculation is shown in the Historical Inventory table contained within this section. Historic inventories for fire stations, land for stations and fire vehicles contribute to the calculation of the 10-year average service level for the provision of fire services of \$530.18/household. Based on this average service level and the forecast development expected in the City over the next 10 years, an additional \$21.16M is the maximum allowable amount that can be included in the development charge calculation for Recreation.

The 2009-2018 growth-related capital budget for Fire Protection is shown in the DC Project Tables in this section. The capital forecast for this program is \$44.32M. Of this amount \$13.57M has been identified as a benefit to the existing population. The Growth Funding Envelope totals \$21.16M included as supporting growth in the 10-year period. \$9.59M in remaining growth-related capital cannot be funded under the funding envelope and has been identified as a benefit beyond the 10-year forecast period. Fire Protection does not have a statutory requirement to deduct 10% and therefore no discount is included.

The growth-related net capital costs associated with this service have been allocated to forecasted residential and non-residential development using the population and employment shares. Based on this split 65% of the growth capital program is supported by residential and 35% is supported by non-residential development. In dollar terms, \$13.75M of the growth capital is charged to forecast residential development and \$7.41M is charged to forecasted non-residential development.

This allocation of growth capital results in the following charge based on development type:

Small Apartment (per unit)	\$264.45
Large Apartment (per unit)	\$476.01
Row (per unit)	\$581.79
Single/Semi (per unit)	\$705.20
Industrial/Office (per m2)	\$2.74
Non-Industrial/Non-Office (per m2)	\$2.74

FIRE SERVICES

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
BUILDINGS (sq.ft.)											
Station #201 Headquarters	13,544	13,544	13,544	13,544	13,544	13,544	13,544	13,544	13,544	13,544	\$279
Station #202	6,745	6,745	6,745	6,745	6,745	6,745	6,745	6,745	6,745	6,745	\$260
Station #203	17,482	17,482	17,482	17,482	17,482	17,482	17,482	17,482	17,482	17,482	\$237
Station #204	5,900	5,900	5,900	5,900	5,900	5,900	5,900	5,900	5,900	5,900	\$251
Station #205	5,900	5,900	5,900	5,900	5,900	5,900	5,900	5,900	5,900	5,900	\$268
Station #206	6,711	6,711	6,711	6,711	6,711	6,711	6,711	6,711	6,711	6,711	\$251
Station #207	7,194	7,194	7,194	7,194	7,194	7,194	7,194	7,194	7,194	7,194	\$304
Station #208	6,747	6,747	6,747	6,747	6,747	6,747	6,747	6,747	6,747	6,747	\$264
Station #209				9,608	9,608	9,608	9,608	9,608	9,608	9,608	\$270
Station #210				9,668	9,668	9,668	9,668	9,668	9,668	9,668	\$266
Station #213				8,919	8,919	8,919	8,919	8,919	8,919	8,919	\$271
Churchville Station #217	962	962	962	962	962	962	962	962	962	962	\$158
Huttonville Station #218	1,269	1,269	1,269	1,269	1,269	1,269	1,269	1,269	1,269	1,269	\$153
Castlemore Station #219	1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626	\$210
Fire Life Safety Centre				10,847	10,847	10,847	10,847	10,847	10,847	10,847	\$228
Total (sq.ft.)	74,080	74,080	74,080	83,688	113,122	113,122	113,122	113,122	113,122	113,122	
Total (\$000)	\$19,078.1	\$19,078.1	\$19,078.1	\$21,672.2	\$29,134.1	\$29,134.1	\$29,134.1	\$29,134.1	\$29,134.1	\$29,134.1	

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
LAND (acres)											
Station #201 Headquarters	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	\$818,000
Station #202	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	\$354,000
Station #203	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	\$464,000
Station #204	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	\$354,000
Station #205	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	\$354,000
Station #206	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	\$818,000
Station #207	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	\$354,000
Station #208	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	\$354,000
Station #209	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	\$354,000
Station #210	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	\$354,000
Station #213	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	\$354,000
Churchville Station #217	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	\$354,000
Huttonville Station #218	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	\$354,000
Castlemore Station #219	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	\$354,000
Fire Life Safety Centre				1.24	1.24	1.24	1.24	1.24	1.24	1.24	\$354,000
Station #212									1.40	1.40	\$505,545
Total (acres)	20.05	20.05	20.05	20.05	21.29	21.29	21.29	21.29	21.29	22.69	
Total (\$000)	\$9,004.6	\$9,004.6	\$9,004.6	\$9,004.6	\$9,443.6	\$9,443.6	\$9,443.6	\$9,443.6	\$10,151.3	\$10,151.3	

FIRE SERVICES

INVENTORY OF CAPITAL ASSETS

VEHICLES (# at all stations & divisions)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Pumpers/Tankers	12	12	13	13	13	13	13	13	13	12	\$650,000
Aerials/Towers	5	5	5	6	6	6	7	7	8	8	\$1,100,000
Pumper/ Rescue	3	3	3	3	3	4	4	4	4	5	\$750,000
Air/Light Vehicle	1	1	1	1	1	1	1	1	1	1	\$238,000
Command Post											\$542,000
Rehabilitation unit											\$177,000
Technical rescue											\$276,000
Fire Prevention cars	11	12	14	14	15	16	16	17	18	19	\$16,000
Hazardous Materials Unit	0	0	0	0	0	0	0	0	1	1	\$599,000
Platoon Chiefs Vehicle	0	0	0	0	0	0	0	0	4	4	\$44,000
Chief/Training Vehicle	1	2	2	5	10	11	13	16	18	18	\$22,000
Flashover											\$87,000
Total (#)	33	35	38	42	51	55	58	63	71	72	
Total (\$000)	\$15,986.0	\$16,024.0	\$16,706.0	\$17,872.0	\$18,993.0	\$19,868.0	\$21,012.0	\$21,693.0	\$23,029.0	\$23,145.0	

EQUIPMENT (excluding computers)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
- Opticom Traffic Controller Pre-Emption Device (# intersections)	216	244	253	269	284	294	326	370	405	429	\$6,000
- Opticom Traffic Controller Pre-Emption Device (\$000)	\$1,296	\$1,464	\$1,518	\$1,614	\$1,704	\$1,764	\$1,956	\$2,220	\$2,430	\$2,574	
- Furniture & Equipment (\$000)	724	724	724	818	1,105	1,105	1,105	1,105	1,105	1,105	\$10
# of Firefighters	228	228	272	276	299	324	334	334	360	361	\$5,000
Total (\$000)	\$3,160.0	\$3,328.0	\$3,602.0	\$3,812.0	\$4,304.0	\$4,489.0	\$4,731.0	\$4,995.0	\$5,335.0	\$5,484.0	

FIRE SERVICES

SERVICE LEVEL ANALYSIS

POPULATION HOUSEHOLDS	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300
	88,544	91,667	94,900	100,420	106,260	112,440	118,980	125,900	130,621	135,627

INVENTORY SUMMARY (\$000)

Buildings	\$19,078	\$19,078	\$19,078	\$21,672	\$29,134	\$29,134	\$29,134	\$29,134	\$29,134	\$29,134
Land	\$9,005	\$9,005	\$9,005	\$9,005	\$9,444	\$9,444	\$9,444	\$9,444	\$10,151	\$10,151
Vehicles	\$15,986	\$16,024	\$16,706	\$17,872	\$18,993	\$19,868	\$21,012	\$21,693	\$23,029	\$23,145
Equipment	\$3,160	\$3,328	\$3,602	\$3,812	\$4,304	\$4,489	\$4,731	\$4,995	\$5,335	\$5,484
Total (\$000)	\$47,229	\$47,435	\$48,391	\$52,361	\$61,875	\$62,935	\$64,321	\$65,266	\$67,649	\$67,914

SERVICE LEVEL (\$/household)

Buildings	\$215.46	\$208.12	\$201.03	\$215.82	\$274.18	\$259.11	\$244.87	\$231.41	\$223.04	\$214.81
Land	\$101.70	\$98.23	\$94.89	\$89.67	\$88.87	\$83.99	\$79.37	\$75.01	\$77.72	\$74.85
Vehicles	\$180.54	\$174.81	\$176.04	\$177.97	\$178.74	\$176.70	\$176.60	\$172.30	\$176.30	\$170.65
Equipment	\$35.69	\$36.31	\$37.96	\$37.96	\$40.50	\$39.92	\$39.76	\$39.67	\$40.84	\$40.43
Total (\$/pop & employ)	\$533.39	\$517.47	\$509.91	\$521.42	\$582.29	\$559.72	\$540.60	\$518.39	\$517.91	\$500.74
										Average Service Level
										\$228.78
										\$86.43
										\$176.07
										\$38.91
										\$530.18

CALCULATION OF MAXIMUM ALLOWABLE FIRE SERVICES

10 Year Average Service Level (1999-2008) \$530.18 / household

135,627

Household Growth 2009-2018

39,910

Household Growth 2009-2031

81,973

Average Service Level

Maximum Allowable
10 Years 2031
(\$000)

Total Fire Services	\$530.18 / household	\$21,159.7	\$43,460.4
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FIRE SERVICES

ASSUMPTIONS

BASE CASE DESCRIPTION:

BASE YEAR : 2009

FINANCIAL ASSUMPTIONS:

Inflation Rate:
Financing
Investment

2.0%
5.5%
3.5%

Source:

Bank of Canada Inflation Band Mid-Point
City of Brampton Target Borrowing Rate
City of Brampton Target Earnings Rate

ALLOCATION ASSUMPTIONS:

Residential Share
Non-Residential Share

65.00%
35.00%

10-year % Population/Employment Growth
10-year % Population/Employment Growth

OPENING BALANCE FOR CASH FLOW:

(\$11,921,828)

DEVELOPMENT CHARGE SUMMARY:

	Persons Per Unit	Unadjusted Development Charge	Adjusted Breakeven Development Charge
SMALL APARTMENT	1.5	\$143.32	\$264.45
LARGE APARTMENT	2.7	\$257.98	\$476.01
Row Residential	3.3	\$315.31	\$581.79
Single/Semi Residential	4.0	\$382.20	\$705.20
NON-RESIDENTIAL CHARGE (PER M2)		\$1.45	\$2.74

PROGRAM SUMMARY

(NOMINAL - YR \$2009)
TOTAL GROSS EXPENDITURES 2009-2018
LESS: BENEFIT BEYOND PERIOD
LESS: BENEFIT TO EXISTING POPULATION (NON-GROWTH)
LESS: PRIOR GROWTH
LESS: 10% DISCOUNT

\$44,324,000
(\$9,595,000)
(\$13,570,000)
\$0
\$0

ELIGIBLE GROWTH EXPENDITURES

\$21,159,000

TOTAL ELIGIBLE GROWTH EXPENDITURES

\$21,159,000

RESIDENTIAL/NON-RESIDENTIAL SHARE:

RESIDENTIAL
RESIDENTIAL SHARE
GROSS POPULATION GROWTH
NET CHARGE PER CAPITA (UNADJUSTED)
NET CHARGE PER CAPITA (ADJUSTED)

@ 65%
143,940
\$95.55
\$176.30

NON-RESIDENTIAL
NON-RESIDENTIAL SHARE
NON-RESIDENTIAL SPACE GROWTH
NET CHARGE PER M2 (UNADJUSTED)
NET CHARGE PER M2 (ADJUSTED)

@ 35%
\$7,405,650
5,102,820
\$1.45
\$2.74

FIRE SERVICES

	TOTAL	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ELIGIBLE GROWTH EXPENDITURES (INFLATED):											
RESIDENTIAL:											
Gross Eligible Growth Capital Cost	\$14,098,582	\$844,350	\$8,814,585	\$4,439,647	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NON-RESIDENTIAL:											
Gross Eligible Growth Capital Cost	\$7,591,544	\$454,650	\$4,746,315	\$2,390,579	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL GROSS ELIGIBLE GROWTH COST	\$21,690,126	\$1,299,000	\$13,560,900	\$6,830,226	\$0	\$0	\$0	\$0	\$0	\$0	\$0

REVENUES (INFLATED):

RESIDENTIAL:											
Charge per Person		\$176	\$180	\$183	\$187	\$191	\$195	\$199	\$203	\$207	\$211
Population Growth	143,940	12,680	7,480	6,400	6,110	14,010	18,930	24,670	21,880	17,070	14,700
TOTAL RESIDENTIAL REVENUE	\$28,210,221	\$2,235,500	\$1,345,098	\$1,173,904	\$1,143,126	\$2,673,567	\$3,684,714	\$4,898,042	\$4,433,016	\$3,526,040	\$3,097,214
NON-RESIDENTIAL:											
Net Charge Per m2		\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3
NON-RESIDENTIAL Area Forecast (m2)	\$5,102,820	\$181,500	\$102,050	\$116,300	\$246,250	\$570,600	\$845,900	\$943,200	\$839,020	\$683,800	\$574,200
TOTAL NON-RESIDENTIAL REVENUE	\$15,708,024	\$497,300	\$285,209	\$331,536	\$716,024	\$1,692,322	\$2,559,001	\$2,910,418	\$2,640,730	\$2,195,235	\$1,880,249
TOTAL REVENUES	\$43,918,245	\$2,732,800	\$1,630,307	\$1,505,440	\$1,859,150	\$4,365,889	\$6,243,715	\$7,808,460	\$7,073,746	\$5,721,275	\$4,977,463

FINANCING CALCULATION:

RESIDENTIAL:											
Beginning of Year Balance											
Net Annual Difference (Total Revenues-Net Expenditures)											
Sub-Total											
Financing/Investment Adjustment In Year		\$24,345	(\$205,411)	(\$89,808)	\$20,005	\$46,787	\$64,482	\$65,716	\$77,578	\$61,706	\$54,201
Financing/Investment Adjustment Opening Balance		(\$426,205)	(\$371,794)	(\$814,362)	(\$1,043,708)	(\$1,037,139)	(\$944,563)	(\$790,308)	(\$559,668)	(\$342,367)	(\$163,871)
Sub-Total		(\$401,860)	(\$577,205)	(\$904,170)	(\$1,023,703)	(\$990,352)	(\$880,080)	(\$704,592)	(\$482,090)	(\$280,661)	(\$109,670)
End of Year Cumulative Balance	\$0	(\$6,759,898)	(\$14,806,591)	(\$18,976,504)	(\$18,857,081)	(\$17,173,866)	(\$14,369,232)	(\$10,175,782)	(\$6,224,856)	(\$2,979,478)	\$0
NON-RESIDENTIAL:											
Beginning of Year Balance											
Net Annual Difference (Total Revenues-Net Expenditures)											
Sub-Total											
Financing/Investment Adjustment In Year		\$4,172,640	(\$4,358,739)	(\$9,182,256)	(\$11,802,946)	(\$11,723,554)	(\$10,646,412)	(\$8,628,181)	(\$6,141,381)	(\$3,792,214)	(\$1,767,134)
Financing/Investment Adjustment Opening Balance		\$42,650	(\$446,106)	(\$2,059,043)	\$716,024	\$1,692,322	\$2,559,001	\$2,910,418	\$2,640,730	\$2,195,235	\$1,880,249
Sub-Total		(\$4,129,990)	(\$8,819,845)	(\$11,241,299)	(\$11,086,922)	(\$10,031,232)	(\$8,087,411)	(\$5,717,763)	(\$3,500,651)	(\$1,596,979)	\$113,115
Financing/Investment Adjustment In Year		\$746	(\$122,680)	(\$56,624)	\$12,530	\$29,616	\$44,783	\$50,932	\$46,213	\$38,417	\$32,904
Financing/Investment Adjustment Opening Balance		(\$229,495)	(\$239,731)	(\$505,024)	(\$649,162)	(\$644,795)	(\$585,553)	(\$474,550)	(\$337,776)	(\$208,572)	(\$97,192)
Sub-Total		(\$228,749)	(\$362,411)	(\$561,648)	(\$636,632)	(\$616,180)	(\$540,770)	(\$423,618)	(\$291,563)	(\$170,155)	(\$64,288)
End of Year Cumulative Balance	\$0	(\$4,358,739)	(\$9,182,256)	(\$11,802,946)	(\$11,723,554)	(\$10,646,412)	(\$8,628,181)	(\$6,141,381)	(\$3,792,214)	(\$1,767,134)	\$0
TOTAL CUMULATIVE BALANCE	\$0	(\$11,118,637)	(\$23,988,846)	(\$30,779,450)	(\$30,580,635)	(\$27,820,278)	(\$22,897,413)	(\$16,317,163)	(\$10,017,070)	(\$4,746,612)	\$0

FIRE SERVICES - GROWTH RELATED CAPITAL PROGRAM

Timing	Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Prior Growth	Benefit Post 2018	Statutory 10% Current Period Non-DC	Current Period DC Contribution
Buildings, Land & Furnishings									
2009	Station 212 Construction	944,000		944,000					944,000
2009	Station 214 Design & Construction	180,000		180,000					180,000
2010	Station 214 Design & Construction	4,600,000		4,600,000					4,600,000
2010	Station 203 & Training - Expansion & Construction	500,000		500,000	200,000				300,000
2011	Station 211 Design & Construction	4,600,000		4,600,000			3,915,000		685,000
2011	Station 203 & Training - Expansion & Construction	8,500,000		8,500,000	3,400,000				5,100,000
2018	Station 215 Design & Construction	180,000		180,000			180,000		
Sub-Total for Buildings, Land & Furnishing		\$19,504,000	\$0	\$19,504,000	\$3,600,000	\$0	\$4,095,000	\$0	\$11,809,000
Equipment									
2009	Dispatch Equipment	350,000		350,000					100,000
2009	Opticom	150,000		150,000					75,000
2010	Dispatch Equipment	350,000		350,000					100,000
2010	Opticom	150,000		150,000					75,000
2010	Station 201 & Apparatus & Maintenance	12,000,000		12,000,000	4,560,000				7,440,000
2011	Dispatch Equipment	350,000		350,000			100,000		
2011	Opticom	150,000		150,000			75,000		
2012	Dispatch Equipment	350,000		350,000			100,000		
2012	Opticom	150,000		150,000			75,000		
2013	Dispatch Equipment	2,610,000		2,610,000	2,360,000				
2013	Opticom	150,000		150,000			75,000		
2014	Opticom	150,000		150,000			75,000		
2014	Dispatch Equipment	350,000		350,000			100,000		
2015	Dispatch Equipment	350,000		350,000			100,000		
2015	Opticom	150,000		150,000			75,000		
2016	Dispatch Equipment	350,000		350,000			100,000		

Timing	Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Prior Growth	Benefit Post 2018	Statutory 10%	
								Current Period Non-DC	Current Period DC Contribution
2016	Opticom	150,000		150,000	75,000		75,000		
2017	Dispatch Equipment	350,000		350,000	250,000		100,000		
2017	Opticom	200,000		200,000	100,000		100,000		
2018	Dispatch Equipment	350,000		350,000	250,000		100,000		
2018	Opticom	200,000		200,000	100,000		100,000		
Sub-Total for Equipment		\$19,360,000	\$0	\$19,360,000	\$9,970,000	\$0	\$1,600,000	\$0	\$7,790,000
Vehicles									
2010	New Vehicle (P-214)	780,000		780,000					780,000
2011	New Vehicles SQ-211, (Fire Prevention Car, Station 214)	780,000		780,000					780,000
2012	New Vehicle (A-209)	1,100,000		1,100,000			1,100,000		
2014	New Vehicle (SQ-212)	800,000		800,000			800,000		
2015	New Vehicle (A-214)	1,200,000		1,200,000			1,200,000		
2016	New Vehicle (P-210)	800,000		800,000			800,000		
Sub-Total for Vehicles		\$5,460,000	\$0	\$5,460,000	\$0	\$0	\$3,900,000	\$0	\$1,560,000
Total for FIRE SERVICES		\$44,324,000	\$0	\$44,324,000	\$13,570,000	\$0	\$9,595,000	\$0	\$21,159,000



DRAFT XXX-2009

Development Charges

To establish development charges for the City of Brampton pertaining to Fire Services, and to repeal By-law 221-2004

WHEREAS subsection 2(1) of the Act provides that the Council of a municipality may by by-law impose development charges against land to pay for increased capital costs required because of increased needs for services arising from the development of the area to which the by-law applies;

AND WHEREAS the City has completed and has considered a report entitled "2009 Development Charge Background Study", the City of Brampton, dated JuneXX, 2009 (the "Study"), as required by section 10 of the Act;

AND WHEREAS the Study was made available to the public, and Council gave notice to the public of a public meeting, pursuant to section 12 of the Act, which was held on June 22, 2009, and at which the Study was again provided to the public, along with the proposed development charge by-laws, and Council heard representations from all persons who applied to be heard (the "Public Meeting");

AND WHEREAS Council held X further Public Meetings on XXXXX XX, XXXX and XXXXX XX, XXXX, and Council heard representations from all persons who applied to be heard;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council approved the Study, as amended by the matters identified in the staff report dated July 27, 2009;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council indicated that it intends to ensure that the increase in the need for services attributable to the anticipated development identified in the Study, as amended, will be met;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council indicated its intent that future excess capacity identified in the Study shall be paid for by development charges or other similar charges;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council determined that no further public meetings were required, under section 12 of the Act.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE CITY OF BRAMPTON ENACTS AS FOLLOWS:

Definitions

1. In this by-law,

“accessory” means, where used to describe a use, building or structure, that the use, building or structure is naturally and normally incidental to and exclusively devoted to a principal use, building or structure;

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

"agricultural use" means a bona fide farming operation, including sod farms, the breeding and boarding of horses, and greenhouses;

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

"apartment dwelling" means a building containing six or more dwelling units which have a common entrance from the street level, and the occupants of which have the right to use common elements;

“apartment” means a dwelling unit in a duplex, triplex, double duplex or in a mixed use building not exceeding three stories in height and a dwelling unit in a building where such dwelling unit is served by a principal entrance from the street level common to three or more other dwelling units;

“board of education” has the same meaning as “board” under the *Education Act*, R.S.O. 1990, ch. E.2;

"building or structure" means a structure occupying an area greater than 10 square metres consisting of a wall, roof, and floor or any of them or a structural system serving the function thereof, and includes an air-supported structure, mezzanine, and an exterior storage tank, but does not include: a farm building, or a canopy, or an exterior storage tank where such exterior storage tank constitutes an accessory use;

“*Building Code Act*” means the *Building Code Act*, S.O. 1992, chapter 23, as amended, and all Regulations thereto including the Ontario Building Code, 2006, as amended;

“canopy” means a canopy as defined in the *Building Code Act* and includes a free-standing roof-like structure constructed on lands used for a gas bar or service station;

"City" means The Corporation of the City of Brampton;

“college” has the same meaning as in section 171.1 of the *Education Act*, R.S.O. 1990, ch. E.2;

“Council” means the Council of the Corporation of the City of Brampton;

"development" means the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of increasing the total floor area, and includes redevelopment;

"development charge" means a charge imposed pursuant to this by-law;

“distribution centre” means a building or structure primarily used for the storage and distribution of goods, wares, merchandise, substances, articles or things;

“double duplex” means a separate building that consists of two duplexes attached to each other;

“duplex” means a separate building that is divided horizontally into two separate dwelling units, each of which has a separate entrance either directly or through a common vestibule;

"dwelling unit" means one or more habitable rooms designed or intended to be used together as a single and separate house-keeping unit by one person or jointly by two or more persons, containing its own kitchen and sanitary facilities;

“farm building” means a farm building as defined in the *Building Code Act*;

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

"grade" means the average level of proposed or finished ground adjoining a building or structure at all exterior walls;

“industrial use” means land, buildings or structures used or designed or intended for use for or in connection with manufacturing, producing, or processing of raw goods, warehousing or bulk storage of goods, distribution centre, truck terminal, research or development in connection with manufacturing, producing, or processing of raw goods, storage, and includes office uses and the sale of commodities to the general public where such uses are accessory to an industrial use, but does not include a building used exclusively for office or administrative purposes unless it is attached to an industrial building or structure as defined above, and does not include a retail warehouse;

“land” includes buildings or structures;

“large apartment” means, for the purposes of the Schedules attached: an apartment unit having a floor area of more than 750 square feet;

“local board” means a public utility commission, transportation commission, public library board, board of park management, local board of health, police services board, planning board, or any other board, commission, committee, body or local authority established or exercising any power or authority under any general or special act with respect to any of the affairs or purposes of the City or the Region;

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

“mixed use” means a use or intended use of the same land, building or structure for any two or more uses defined in this by-law;

“mobile temporary sales trailer” means a trailer that is designed to be made mobile, is placed without a foundation on land and is used exclusively for new residential sales, and concrete piers or sono tubes are deemed not to be foundations for the purposes of this definition;

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

“non-industrial use” means the use of land, buildings or structures or parts thereof, used, designed or intended to be used for any use other than for residential use or for industrial use, or for office use, as those terms are defined in this section, and a non-industrial use includes a retail warehouse;

“non-residential use” means the use of land, buildings or structures or portions thereof used, designed or intended to be used for any use other than for residential use as that term is defined in this section;

“office use” means the use of land, buildings or structures used primarily for, or designed or intended for use primarily for or in connection with office or administrative purposes, provided that the building or structure has an office or administrative component equal to or greater than 50 percent of the total gross floor area of the building or structure. For the purposes of this by-law office use excludes office or administrative uses located in a shopping centre or plaza, and excludes office or administrative uses where such uses are accessory to an industrial use;

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

“planned seniors retirement community” means a housing project consisting of ground-related dwelling units in single family, semi-detached, or multiple dwellings and other amenities, all of which are designed, marketed, developed, and constructed to provide living accommodation for and to meet the needs of senior citizens or older or retired persons on land designated by a resolution of the City Council as a planned seniors retirement community;

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

“public hospital” means a hospital as defined in the *Public Hospitals Act*, R.S.O. 1990, ch. P.40;

“redevelopment” means the construction, erection or placing of one or more buildings or structures on land where all or part of a building or structure has previously been demolished on such land, or changing the use of a building or structure for any of the following:

- i) from residential to non-residential,
- ii) from non-residential to residential,
- iii) from industrial to non-industrial and,
- iv) from office to non-office;

“Region” means The Regional Municipality of Peel;

“Regulation” means Ontario Reg.82/98, under the Act;

“residential use” means land, buildings or structures or portions thereof used, designed, or intended to be used as living accommodation within a dwelling unit, for one or more individuals;

“row house” means a building other than an apartment building, that is vertically divided into a minimum of three dwelling units, each of which has independent entrances at grade to the front and the rear of the building, and each of which shares a common wall adjoining dwelling units above grade;

“semi-detached dwelling” means a building divided vertically, into two separate dwelling units, with at least 50 per cent of the above-grade area of a main wall on one side of each dwelling unit attached to or the same as a main wall on one side of the other dwelling unit;

“services” means services designated in this by-law or in an agreement under section 44 of the Act, or both;

“shelf and rack storage system” means a shelf and rack storage system as defined in the Building Code Act;

“single detached dwelling” means a completely detached residential building containing only one dwelling unit;

“small apartment”, notwithstanding the definition of an “apartment”, means any residential unit having a total floor area equal to or less than 750 square Feet;

“temporary building or structure” means a building or structure constructed or erected or placed on land for a continuous period not exceeding eight months, or an addition or alteration to a building or structure that has the effect of increasing the total floor area thereof for a continuous period not exceeding eight months;

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

- (a) includes the floor area of a mezzanine and air-supported structure and the space occupied by interior walls and partitions; and
- (b) excludes any parts of the building or structure used for mechanical equipment related to the operation or maintenance of the building or structure, stairwells, elevators and washrooms; and
- (c) excludes any part of a building or structure above or below grade, used exclusively for the temporary parking of a motor vehicle or used for the provision of loading spaces; and
- (d) includes any part of a building or structure above or below grade used as a commercial parking garage; and
- (e) where a building or structure does not have any walls, the total floor area shall be the sum total of the area of land directly beneath the roof of the building and the total areas of the floors in the building or structure; and
- (f) excludes the area of any self contained structural shelf and rack storage system as defined in the Building Code Act;

“triplex” means a building or structure that is divided horizontally into three separate dwelling units, each of which has a separate entrance through a common vestibule;

“truck terminal” means a building, structure or place where, for the purpose of a common carrier, trucks or transports are rented, leased, kept for hire, or stored, or parked for remuneration or from which trucks or transports are dispatched.

“university” has the same meaning as is set out in section 171.1 of the *Education Act*;

“use” means the use of land, a building or a structure.

Rules

2. For the purpose of complying with section 6 of the Act:
 - (a) the area to which this by-law applies shall be the area described in section 3 of this by-law;
 - (b) the rules developed under paragraph 9 of subsection 5(1) of the Act for determining if a development charge is payable in any particular case and for determining the amount of the charge are set forth in sections 4 through 17 inclusive;
 - (c) the exemptions provided for by such rules shall be the exemptions set forth in sections 18 through 22 inclusive, of this by-law, the indexing of charges shall be in accordance with section 15 of this by-law, and there shall be no phasing in as provided in subsection 16(1) of this by-law; and
 - (d) the calculation of development charges payable with respect to redevelopment of land shall be in accordance with the rules set forth in section 23 of this by-law.

Lands Affected

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

Designation of Services

4. It is hereby declared by Council that all development of land within the area to which this by-law applies will increase the need for services.
5. The development charge applicable to a development as determined under this by-law shall apply without regard to the services required or used by an individual development.
6. Development charges shall be imposed under this by-law, for the following categories of services to pay for the increased capital costs required because of increased needs for services arising from development:
Fire Services

Approvals for Development

7. Development charges shall be imposed against all lands, buildings or structures within the area to which this by-law applies, if the development of such lands, buildings or structures requires any of the following approvals:
 - (a) the passing of a zoning by-law or of an amendment thereto under section 34 of the *Planning Act*;
 - (b) the approval of a minor variance under section 45 of the *Planning Act*;
 - (c) a conveyance of land to which a by-law passed under subsection 50(7) of the *Planning Act* applies;
 - (d) the approval of a plan of subdivision under section 51 of the *Planning Act*;
 - (e) a consent under section 53 of the *Planning Act*;
 - (f) the approval of a description under section 9 of the *Condominium Act*; or
 - (g) the issuing of a permit under the *Building Code Act* in relation to a building or structure.
8. No more than one development charge for each service designated in section 6 of this by-law shall be imposed upon any lands, buildings or structures to which this by-law applies even though two or more of the

actions described in section 7 are required before the lands, buildings or structures can be developed.

9. Notwithstanding section 8, if two or more of the actions described in section 7 occur at different times, additional development charges shall be imposed in respect of any increased or additional development permitted by that action.
10. Where a development requires an approval described in section 7 after the issuance of a building permit and no development charge has been paid, then the development charge shall be paid prior to the granting of the approval required under section 7.
11. If a development does not require a building permit but does require one or more of the approvals described in section 7, then the development charge shall nonetheless be payable in respect of any increased or additional development permitted by such approval required for the increased or additional development being granted, and such development charge shall be paid prior to the granting of the approval required.

Calculation of Development Charges

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

Amount of Charge – Residential

13. (1) The development charges described in Schedule A to this by-law shall be imposed on residential uses of lands, buildings or structures, including a dwelling unit accessory to a non-residential use and, in the case of a mixed use building or structure, on the residential component of the mixed use building or structure, according to the type of residential use.

- (2) Despite subsection 13(1), the development charges described in Schedule A to this by-law for dwelling units larger than 750 square feet in apartment dwellings shall be imposed on all dwelling units in single detached dwellings, semi-detached dwellings and multiple-dwellings constructed in a planned seniors retirement community, provided that the zoning by-law in force for the planned seniors retirement community limits the number of bedrooms in any dwelling unit to 2 bedrooms, and the number of dwelling units in the community and the maximum floor area of the dwelling units to amounts determined by Council in the zoning by-law.
- (3) If the development charges required to be paid by subsection 13(1) and subsection 13(2), or any part of them remains unpaid after they are payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes in accordance with subsection 32(1) of the Act.

Amount of Charge – Non-Residential

14. (1) The development charges described in Schedule B to this by-law shall be imposed on non-residential uses of lands, buildings or structures and, in the case of a mixed use building or structure, on the non-residential component of the mixed use building or structure, and calculated with respect to each of the services according to the total floor area of the non-residential use.
- (2) Despite clause (1), development charges shall not be imposed on the mechanical portions of buildings that service residential units and which are situated on the same land as all of the residential units that they service.
- (3) If the development charges required to be paid by subsection 14(1), or if any part of them remains unpaid after they are payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes in accordance with subsection 32(1) of the Act.

Indexing of Development Charges

15. The development charges set out in Schedules A and B, shall be adjusted, without amendment to this by-law, semi-annually on February 1st and August 1st in each year, commencing February 1st, 2010, in accordance with the Statistics Canada Quarterly, Construction Price Statistics (catalogue number 62-007) with the base index value being that in effect on August 1, 2009.

Phasing, Timing of Calculation and Payment

16. (1) The development charges set out in this by-law are not subject to phasing in and are payable in full from the effective date of this by-law, subject to applicable exemptions, credits, and discounts;
- (2) Subject to section 23 of this by-law (with respect to redevelopment) and subsection 16(3) below, the development charge shall be calculated as of, and shall be payable, on the date the first building permit is issued in relation to a building or structure on the land to which the development charge applies;
- (3) Where a development charge applies to land in relation to which a building permit is required, no building permit shall be issued until the development charge has been paid in full;
- (4) Notwithstanding subsection 16(3), the City may, in its sole discretion, require an owner to enter into an agreement, including the provision of security for the owner's obligations under agreement, pursuant to section 27 of the Act, providing for all or part of a development charge to be paid before or after it otherwise would be payable. In that event, the terms of such agreement shall then prevail over the provision of this by-law.

Payment By Money or the Provision of Services

17. (1) Payment of development charges shall be by cash or by certified cheque.
- (2) In the alternative to payment by the means provided in subsection (1), the City may, by an agreement entered into with the owner, accept the provision of services in full or partial satisfaction of the development charge otherwise payable, provided that:

- (a) if the City and the owner cannot agree as to the reasonable cost of doing the work under subsection (2), the dispute shall be referred to Council, whose decision shall be final and binding;
 - (b) if the credit exceeds the amount of the charge for the service to which the work relates,
 - (i) the excess amount shall not be credited against the charge for any other service, unless the City has so agreed in an agreement entered into under section 38 of the Act; and
 - (ii) in no event shall the City be required to make a cash payment to the credit holder.
 - (c) notwithstanding the repeal of [By-law 221-2004](#), any credits owing to a landowner, or previous landowner, pursuant to an agreement entered into under section 38 of the Act, prior to the enactment of this by-law, may, at the City's sole discretion, be recognized and used as a credit under this by-law, pursuant to section 41 of the Act; or
 - (d) any credits owing to a landowner, or previous landowner, pursuant to an agreement entered into under section 38 of the Act, either prior to, or after, the enactment of this by-law, which credits do not relate to the category of services covered by this by-law, may, at the City's sole discretion, be recognized and used as a credit under this by-law, pursuant to section 41 of the Act.
- (3) Nothing in this by-law prevents Council from requiring, as a condition of an agreement under sections 51 or 53 of the *Planning Act*, that the owner, at his or her own expense, install such local services related to a plan of subdivision or within the area to which the plan relates, as Council may require, and/or that the owner pay for local connections to storm drainage facilities installed at the owner's expense, and/or administrative, processing, or inspection fees.

Rules with Respect to Exemptions for Intensification of Existing Housing

18. (1) This by-law does not apply with respect to approvals related to the residential development of land, buildings or structures that would have the effect only,

- (a) of permitting the enlargement of an existing dwelling unit;
 - (b) of creating one or two additional dwelling units in an existing single detached dwelling unit;
 - (c) of creating one additional dwelling unit in an existing semi detached dwelling unit; or
 - (d) of creating one additional dwelling unit for any other existing residential building.
- (2) Notwithstanding clauses (1)(b) to (d), a development charge shall be imposed with respect to the creation of one or two additional dwelling units in a dwelling, if the total floor area of the additional one or two dwelling units exceeds the total floor area of the existing dwelling unit in clause (1)(b) and (1)(c), and the smallest existing dwelling unit in clause (1)(d).

Rules with Respect to Industrial Expansion Exemption

19. (1) If a development includes the enlargement of the gross floor area of an existing industrial building, the amount of the development charge that is payable under this by-law, is the following:
- (a) if the gross floor area is enlarged by 50 per cent or less, the amount of the development charge in respect of the enlargement is zero; and
 - (b) if the gross floor area is enlarged by more than 50 per cent, development charges are payable on the amount by which the enlargement exceeds 50 per cent of the gross floor area before the enlargement
- (2) For the purpose of this section, the terms “gross floor area” and “existing industrial building” shall have the same meaning as those terms have in the Regulation made under the Act.
- (3) For the purpose of interpreting the definition of “existing industrial building” contained in the Regulation, regard shall be had for the classification of the lands in question pursuant to the *Assessment Act*, R.S.O. 1990, c.A.31, and in particular:

- (a) whether the lands fall within a tax class such that taxes on the lands are payable at the industrial tax rate; and
 - (b) whether more than fifty per cent (50%) of the gross floor area of the building or structure has an industrial property code for assessment purposes;
- (4) Despite subsection (3), distribution centres, warehousing, the bulk storage of goods and truck terminals shall be considered industrial uses.
- (5) For the purpose of the application of section 4 of the Act to the operation of this by-law:
- (a) the gross floor area of an existing industrial building shall be calculated as it existed prior to the first enlargement in respect of that building for which an exemption under section 4 of the Act is sought; and
 - (b) the enlargement of the gross floor area of the existing building must:
 - (i) be attached to the existing industrial building
 - (ii) not be attached to the existing industrial building by means only of a tunnel, bridge, canopy, corridor or other passageway, shared below-grade connection, foundation, footing, parking facility, service tunnel or service pipe;
 - (iii) be for use or in connection with an industrial purpose as set out in this by-law; and
 - (iv) constitute a bone fide increase in the size of the existing building.

Categories of Exempt Institutions

20. (1) The following categories of institutions are hereby designated as being exempt from the payment of development charges:
- (a) land, buildings or structures used as hospitals governed by the *Public Hospitals Act*, R.S.O. 1990, c. P. 40;

- (b) land, buildings or structures owned by and used for the purposes of the City, the Region, or their local boards as required by the Act;
 - (c) land, buildings or structures owned by a board of education and used only for school purposes as required by the Act;
 - (d) land, buildings or structures owned by and used for the purposes of a college or university;
 - (e) that portion of land, buildings or structures owned by a church or religious organization which is used only as a place of worship; and
 - (f) land, buildings or structures used only for the purpose of a temporary office for new residential sales.
- (2) The exemption referred to in this paragraph 20(1)(b) does not apply to the development for residential uses of lands owned by:
- (a) the Region or any local board thereof, including the Peel Children's Aid Society; or
 - (b) any corporation owned, controlled, or operated by the Region, including Peel Non-Profit Housing Corporation.

Agricultural Uses

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

Temporary Buildings or Structures

22. (1) Temporary buildings or structures shall be exempt from the provisions of this by-law, so long as the status as a temporary building or structure is maintained in accordance with the provisions of this by-law;
- (2) In the event that a temporary building or structure becomes protracted, it shall be deemed not to be, or ever to have been a

temporary building or structure, and the development charges required to be paid under this by-law shall become payable on the date the temporary building or structure becomes protracted; and

- (3) Prior to the City issuing a building permit for a temporary building or structure, the City may require an owner to enter into an agreement, including the provision of security for the owner's obligation under the agreement, pursuant to section 27 of the Act, providing for all or part of the development charge required by subsection 22(2) to be paid after it would otherwise be payable. The terms of such agreement shall then prevail over the provisions of this by-law.

Rules with Respect to the Redevelopment of Land

23. (1) Where there is a redevelopment of land on which there is a conversion of space proposed, or on which there was formerly erected a building or structure that has been demolished or will be demolished within a period no longer than 4 months from the date of issuance of a building permit, a credit shall be allowed against the development charge otherwise payable by the owner pursuant to this by-law, for the portion of the previous building or structure still in existence that is being converted or for the portion of the building or structure that has or will be demolished, as the case may be, calculated by multiplying the number and type of dwelling units being converted or demolished or the non-residential total floor area being converted or demolished by the relevant development charge in effect on the date when the development charge is payable in accordance with this by-law.
- (2) If a credit has been allowed against the development charge otherwise payable and a building permit for the redevelopment has been issued, in advance of the occurrence of the demolition, the owner must complete and provide proof of the demolition no later than 4 months after the issuance of the building permit or the amount for which the development charge credit was provided shall become fully payable.
- (3) A credit in respect of any demolition under this section shall not be given unless the demolition permit was issued on or after October 28, 1991.

- (4) The amount of any credit hereunder shall not exceed, in total, the amount of the development charges otherwise payable under this by-law with respect to the redevelopment.
- (5) For the purposes of this section, dwelling units or total floor area accidentally destroyed by fire shall be deemed to have been demolished under a demolition permit issued on the date of the fire.

Interest

24. The City shall pay interest on a refund under subsections 17(3), (5) and 24(2) of the Act at a rate equal to the Bank of Canada rate on the date this by-law comes into effect.

Front Ending Agreements

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

Schedules

26. The following Schedules to this by-law form an integral part of this by-law:

- Schedule 'A' Residential Development Charges
- Schedule 'B' Non-residential Development Charges

By-law Registration

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

Date By-law Effective

28. This by-law comes into force and effect on XXXXXX XX, 2009.

Date By-law Expires

29. This by-law expires five years after the date on which it comes into force and effect.

Repeal

30. By-law No. 221-2004 is hereby repealed, effective on the date this by-law comes into force and effect.

Headings for Reference Only

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

Interpretation

32. All words defined in the Act or the Regulation have the same meaning in this by-law as they have in the Act or the Regulation, unless they are defined differently in this by-law.
33. All references to the provisions of any statute or regulation or to the Ontario Building Code contained in this by-law shall also refer to the same or similar provision in the statute or regulation or code as amended, replaced, revised or consolidated from time to time.

Severability

34. If, for any reason, any provision, section, subsection or paragraph of this by-law is held invalid, it is hereby declared to be the intention of Council that all the remainder of this by-law shall continue in full force and effect until repealed, re-enacted or amended, in whole or in part or dealt with in any other way.

Short Title

35. This by-law may be referred to as the City of Brampton Development Charges By-law for Fire Services, 2009.

READ A FIRST, SECOND, AND THIRD TIME, AND PASSED IN OPEN
COUNCIL THIS XXth DAY OF AUGUST, 2009.

THE CORPORATION OF THE CITY OF BRAMPTON

Original signed by
Susan Fennell, Mayor

Original Signed by
Peter Fay, City Clerk

Approved as to Content
Original Signed by Maurice Lewis

Approved as to Form
Original Signed by Colin Grant

Schedule A to By-Law xxx-2009
Residential Development Charge

Service Category	Charge for Singles/Semis	Charge for Rows	Charge for Apartment >750 Sq.Ft.	Charge for Apartment <= 750 Sq.Ft.
Fire Services	\$705.20	\$581.79	\$476.01	\$264.45

Schedule B to By-Law xxx-2009
Non-Residential Development Charge

Service Category	Non-Residential Charge per Sq.M.
Fire Services	\$2.74

LIBRARY SERVICES SUMMARY

The Library Board is responsible for the provision of library services in the City. In 2009, the Board is operating 6 libraries (including two temporary locations) in various locations throughout the City. The 2009 gross floor area of these facilities is 127,933 sq.ft. on approximately 6.80 acres of land.

Consistent with s.5. (1)7 of the DCA, the eligible growth-related capital costs for the provision of Library services have been reduced by 10% in calculating the development charges.

The inventory of the Library Board, as well as the service level calculation is shown in the Historical Inventory table contained within this section. The calculation of a development charge for library services is based on the average existing value of inventories. Inventories for Library buildings, land, circulation materials (books, periodicals, CDs videos, etc) and furniture and equipment combine to determine a 10-year average service level for the provision of library services.

The 10-year average service level for the provision of library service is calculated to be \$174.02/capita. Based on the average service level, an additional \$25.05M for library services is the maximum allowable capital program that can be included in the development charge calculation.

The 2009-2018 growth-related capital budget for Library Services is shown in the DC Project Tables in this section. The capital budget for this program is \$63.32M. Of this amount \$24.30M has been identified as a benefit to the existing population. The Growth Funding Envelope totals \$33.31M and consists of \$8.26M included as a benefit to prior growth and \$25.05M included as supporting growth in the 10-year period. The benefit beyond period has been calculated to be \$5.71M. The 10% non-DC requirement of \$2.51M has been deducted from the \$25.05M of growth-related capital on which the development charge is based leaving \$22.54M as the amount on which the development charge is calculated.

The growth-related cost is allocated fully to residential development as these facilities are largely utilized by residents with only negligible non-residential corporate use.

This allocation of growth capital results in the following charge based on development type:

Small Apartment (per unit)	\$255.45
Large Apartment (per unit)	\$459.81
Row (per unit)	\$561.99
Single/Semi (per unit)	\$681.20

LIBRARY BOARD

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST	
BUILDINGS (sq. ft.)												
Four Corners	41,468	41,468	41,468	41,468	41,468	41,468	41,468	41,468	41,468	41,468	41,468	\$332
Chinguaousy	50,283	50,283	50,283	50,283	50,283	50,283	50,283	50,283	50,283	50,283	50,283	\$332
Cyril Clark	17,650	17,650	17,650	17,650	17,650	17,650	17,650	17,650	17,650	17,650	17,650	\$332
South Fletcher's Branch	12,900	12,900	12,900	12,900	12,900	12,900	12,900	12,900	12,900	12,900	12,900	\$332
Springdale												
Temporary Locations:												
North West Interim Branch (Creditview)							3,000	3,000	3,000	3,000	3,000	\$315
North East Interim Branch (Mountainash)								2,632	2,632	2,632	2,632	\$57
Total (sq. ft.)	122,301	122,301	122,301	122,301	122,301	122,301	125,301	127,933	127,933	127,933	127,933	
Total (\$000)	\$40,603.9	\$40,603.9	\$40,603.9	\$40,603.9	\$40,603.9	\$40,603.9	\$41,548.9	\$41,699.0	\$41,699.0	\$41,699.0	\$41,699.0	

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST	
LAND (acres)												
Four Corners	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	\$818,000
Chinguaousy	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	\$818,000
Cyril Clark	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	\$354,000
South Fletcher's Branch	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	\$354,000
Springdale												
Temporary Locations:												
North West Interim Branch (Creditview)							1.26	1.26	1.26	1.26	1.26	\$354,000
North East Interim Branch (Mountainash)								0.05	0.05	0.05	0.05	\$354,000
Total (acres)	5.49	5.49	5.49	5.49	5.49	5.49	6.75	6.80	6.80	6.80	6.80	
Total (\$000)	\$3,799.3	\$3,799.3	\$3,799.3	\$3,799.3	\$3,799.3	\$3,799.3	\$4,245.4	\$4,263.1	\$4,263.1	\$4,263.1	\$4,263.1	

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
MATERIALS (#)											
Material Inventory	594,669	606,900	589,415	589,415	614,041	607,094	577,094	581,608	585,343	554,354	\$26.30
Total All Materials (#)	594,669	606,900	589,415	589,415	614,041	607,094	577,094	581,608	585,343	554,354	
Total (\$000)	\$15,639.8	\$15,961.5	\$15,501.6	\$15,501.6	\$16,149.3	\$15,966.6	\$15,177.6	\$15,296.3	\$15,394.5	\$14,579.5	

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
FURNITURE AND EQUIPMENT (\$000)											
Four Corners	\$1,367	\$1,367	\$1,367	\$1,367	\$1,367	\$1,367	\$1,367	\$1,367	\$1,367	\$1,367	\$1,367
Chinguaousy	\$1,669	\$1,669	\$1,669	\$1,669	\$1,669	\$1,669	\$1,669	\$1,669	\$1,669	\$1,669	\$1,669
Cyril Clark	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586
South Fletcher's Branch	\$428	\$428	\$428	\$428	\$428	\$428	\$428	\$428	\$428	\$428	\$428
Springdale											
Temporary Locations:											
North West Interim Branch (Creditview)	\$0	\$0	\$0	\$0	\$0	\$0	\$109	\$109	\$109	\$109	\$109
North East Interim Branch (Mountainash)	\$0	\$0	\$0	\$0	\$0	\$0	\$84	\$84	\$84	\$84	\$84
Total (\$000)	\$4,050.0	\$4,050.0	\$4,050.0	\$4,050.0	\$4,050.0	\$4,050.0	\$4,243.0	\$4,243.0	\$4,243.0	\$4,243.0	

LIBRARY BOARD

SERVICE LEVEL ANALYSIS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
POPULATION	300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300

INVENTORY SUMMARY (\$000)

Buildings	\$40,603.9	\$40,603.9	\$40,603.9	\$40,603.9	\$40,603.9	\$40,603.9	\$41,548.9	\$41,699.0	\$41,699.0	\$41,699.0
Land	\$3,799.3	\$3,799.3	\$3,799.3	\$3,799.3	\$3,799.3	\$3,799.3	\$4,245.4	\$4,263.1	\$4,263.1	\$4,263.1
Materials	\$15,639.8	\$15,961.5	\$15,501.6	\$15,501.6	\$16,149.3	\$15,966.6	\$15,177.6	\$15,296.3	\$15,394.5	\$14,579.5
Furniture and Equipment	\$4,050.0	\$4,050.0	\$4,050.0	\$4,050.0	\$4,050.0	\$4,050.0	\$4,243.0	\$4,243.0	\$4,243.0	\$4,243.0
Total (\$000)	\$64,093.0	\$64,414.7	\$63,954.9	\$63,954.9	\$64,602.5	\$64,419.8	\$65,214.9	\$65,501.3	\$65,599.5	\$64,784.5

SERVICE LEVEL (\$/capita)

Buildings	\$134.95	\$129.85	\$124.94	\$117.91	\$111.29	\$105.03	\$101.44	\$96.08	\$92.73	\$89.43
Land	\$12.63	\$12.15	\$11.69	\$11.03	\$10.41	\$9.83	\$9.36	\$9.82	\$9.48	\$9.14
Materials	\$51.98	\$51.04	\$47.70	\$45.02	\$44.26	\$41.30	\$37.05	\$35.24	\$34.23	\$31.27
Furniture and Equipment	\$13.46	\$12.95	\$12.46	\$11.76	\$11.10	\$10.48	\$9.78	\$9.78	\$9.44	\$9.10
Total (\$/capita)	\$199.56	\$193.04	\$184.33	\$173.96	\$165.96	\$156.16	\$148.85	\$141.14	\$136.44	\$129.84

Average Service Level

CALCULATION OF MAXIMUM ALLOWABLE LIBRARY BOARD

10 Year Average Service Level (1999-2008) \$174.02 per capita

2008 Population 466,300
 Population in New Units 2009-2018 143,940
 Population in New Units 2009-2031 287,140

Average Service Level

Maximum Allowable Level
 10 Years 2031 (\$000)

Total Library Board	\$174.02 per capita	\$25,048.4	\$49,968.1
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LIBRARY BOARD

ASSUMPTIONS

BASE CASE DESCRIPTION:

BASE YEAR : 2009

FINANCIAL ASSUMPTIONS:

Inflation Rate:
Financing
Investment

2.0%
5.5%
3.5%

Source:

Bank of Canada Inflation Band Mid-Point
City of Brampton Target Borrowing Rate
City of Brampton Target Earnings Rate

ALLOCATION ASSUMPTIONS:

Residential Share
Non-Residential Share

100.00%
0.00%

10-year % Population Growth
10-year % Population Growth

OPENING BALANCE FOR CASH FLOW:

\$0

DEVELOPMENT CHARGE SUMMARY:

	Persons Per Unit	Unadjusted Development Charge	Adjusted Breakeven Development Charge
SMALL APARTMENT	1.5	\$234.92	\$255.45
LARGE APARTMENT	2.7	\$422.86	\$459.81
Row Residential	3.3	\$516.83	\$561.99
Single/Semi Residential	4.0	\$626.46	\$681.20
NON-RESIDENTIAL CHARGE (PER M2)		\$0.00	\$0.00

PROGRAM SUMMARY

(NOMINAL - YR \$2009)
TOTAL GROSS EXPENDITURES 2009-2018

\$63,320,000

LESS: BENEFIT BEYOND PERIOD
LESS: BENEFIT TO EXISTING POPULATION (NON-GROWTH)
LESS: PRIOR GROWTH
LESS: 10% DISCOUNT

(\$5,710,739)
(\$24,300,000)
(\$8,261,261)
(\$2,594,800)

ELIGIBLE GROWTH EXPENDITURES

\$22,543,200

TOTAL ELIGIBLE GROWTH EXPENDITURES

\$22,543,200

RESIDENTIAL/NON-RESIDENTIAL SHARE:

RESIDENTIAL
RESIDENTIAL SHARE
GROSS POPULATION GROWTH
NET CHARGE PER CAPITA (UNADJUSTED)
NET CHARGE PER CAPITA (ADJUSTED)

@ 100%

NON-RESIDENTIAL
NON-RESIDENTIAL SHARE
NON-RESIDENTIAL SPACE GROWTH
NET CHARGE PER M2 (UNADJUSTED)
NET CHARGE PER M2 (ADJUSTED)

\$22,543,200
143,940
\$156.62
\$170.30

@ 0%
5,102,820
\$0
\$0.00
\$0.00

LIBRARY BOARD

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ELIGIBLE GROWTH EXPENDITURES (INFLATED):										
RESIDENTIAL:										
Gross Eligible Growth Capital Cost	\$7,776,665	\$828,036	\$844,597	\$861,489	\$8,954,025	\$896,293	\$914,219	\$932,503	\$951,153	\$970,176
TOTAL GROSS ELIGIBLE GROWTH COST	\$7,776,665	\$828,036	\$844,597	\$861,489	\$8,954,025	\$896,293	\$914,219	\$932,503	\$951,153	\$970,176

REVENUES (INFLATED):

RESIDENTIAL:										
Charge per Person	\$170	\$174	\$177	\$181	\$184	\$188	\$192	\$196	\$200	\$204
Population Growth	12,680	7,480	6,400	6,110	14,010	18,930	24,670	21,890	17,070	14,700
TOTAL RESIDENTIAL REVENUE	\$2,159,404	\$1,299,321	\$1,133,953	\$1,104,222	\$2,582,578	\$3,559,313	\$4,751,347	\$4,282,147	\$3,406,038	\$2,991,807
TOTAL REVENUES	\$2,159,404	\$1,299,321	\$1,133,953	\$1,104,222	\$2,582,578	\$3,559,313	\$4,731,347	\$4,282,147	\$3,406,038	\$2,991,807

FINANCING CALCULATION:

RESIDENTIAL:										
Beginning of Year Balance	\$0	(\$5,771,736)	(\$5,609,649)	(\$5,623,759)	(\$5,686,085)	(\$12,545,481)	(\$10,525,860)	(\$7,220,854)	(\$4,209,738)	(\$1,943,428)
Net Annual Difference (Total Revenues-Net Expenditures)	(\$5,617,261)	\$471,285	\$289,356	\$242,733	(\$6,371,447)	\$2,663,020	\$3,817,128	\$3,349,644	\$2,454,885	\$2,021,631
Sub-Total	(\$5,617,261)	(\$5,300,451)	(\$5,320,292)	(\$5,381,026)	(\$12,057,532)	(\$9,882,461)	(\$6,708,731)	(\$3,871,210)	(\$1,754,853)	\$76,203
Financing/Investment Adjustment In Year	(\$154,475)	\$8,247	\$5,064	\$4,248	(\$175,215)	\$46,603	\$66,800	\$58,619	\$42,960	\$35,379
Financing/Investment Adjustment Opening Balance	\$0	(\$3,17,445)	(\$308,531)	(\$309,307)	(\$312,735)	(\$690,001)	(\$578,922)	(\$397,147)	(\$231,536)	(\$106,889)
Sub-Total	(\$154,475)	(\$309,198)	(\$303,467)	(\$305,059)	(\$487,949)	(\$843,398)	(\$512,123)	(\$338,528)	(\$188,575)	(\$71,510)
End of Year Cumulative Balance	(\$5,771,736)	(\$5,609,649)	(\$5,623,759)	(\$5,686,085)	(\$12,545,481)	(\$10,525,860)	(\$7,220,854)	(\$4,209,738)	(\$1,943,428)	\$0

LIBRARY - GROWTH RELATED CAPITAL PROGRAM

Timing	Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Prior Growth	Benefit Post 2018	Statutory 10%	
								Current Period Non-DC	Current Period DC Contribution
Buildings, Land & Furnishings									
2009	District Library 1	15,000,000		15,000,000		8,261,261		673,874	6,064,865
2009	District Library 2	1,000,000		1,000,000				100,000	900,000
2013	District Library 2	14,000,000		14,000,000			5,710,739	828,926	7,460,335
	Various Automation Software Upgrades	250,000		250,000				25,000	225,000
Sub-Total for Buildings, Land & Furnishing		\$30,250,000	\$0	\$30,250,000	\$0	\$8,261,261	\$5,710,739	\$1,627,800	\$14,650,200
Material Acquisitions									
2009	Additional Collection Materials	2,427,000		2,427,000	1,550,000			87,700	789,300
2010	Additional Collection Materials	2,627,000		2,627,000	1,750,000			87,700	789,300
2011	Additional Collection Materials	2,827,000		2,827,000	1,950,000			87,700	789,300
2012	Additional Collection Materials	3,027,000		3,027,000	2,150,000			87,700	789,300
2013	Additional Collection Materials	3,227,000		3,227,000	2,350,000			87,700	789,300
2014	Additional Collection Materials	3,427,000		3,427,000	2,550,000			87,700	789,300
2015	Additional Collection Materials	3,627,000		3,627,000	2,750,000			87,700	789,300
2016	Additional Collection Materials	3,827,000		3,827,000	2,950,000			87,700	789,300
2017	Additional Collection Materials	4,027,000		4,027,000	3,150,000			87,700	789,300
2018	Additional Collection Materials	4,027,000		4,027,000	3,150,000			87,700	789,300
Sub-Total for Material Acquisitions		\$33,070,000	\$0	\$33,070,000	\$24,300,000	\$0	\$0	\$877,000	\$7,893,000
Total for LIBRARY		\$63,320,000	\$0	\$63,320,000	\$24,300,000	\$8,261,261	\$5,710,739	\$2,504,800	\$22,543,200



DRAFT XXX-2009

Development Charges

To establish development charges for the City of Brampton pertaining to Library Services, and to repeal By-law 222-2004

WHEREAS subsection 2(1) of the Act provides that the Council of a municipality may by by-law impose development charges against land to pay for increased capital costs required because of increased needs for services arising from the development of the area to which the by-law applies;

AND WHEREAS the City has completed and has considered a report entitled "2009 Development Charge Background Study", the City of Brampton, dated JuneXX, 2009 (the "Study"), as required by section 10 of the Act;

AND WHEREAS the Study was made available to the public, and Council gave notice to the public of a public meeting, pursuant to section 12 of the Act, which was held on June 22, 2009, and at which the Study was again provided to the public, along with the proposed development charge by-laws, and Council heard representations from all persons who applied to be heard (the "Public Meeting");

AND WHEREAS Council held X further Public Meetings on XXXXX XX, XXXX and XXXXX XX, XXXX, and Council heard representations from all persons who applied to be heard;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council approved the Study, as amended by the matters identified in the staff report dated July 27, 2009;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council indicated that it intends to ensure that the increase in the need for services attributable to the anticipated development identified in the Study, as amended, will be met;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council indicated its intent that future excess capacity identified in the Study shall be paid for by development charges or other similar charges;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council determined that no further public meetings were required, under section 12 of the Act.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE CITY OF BRAMPTON ENACTS AS FOLLOWS:

Definitions

1. In this by-law,

“accessory” means, where used to describe a use, building or structure, that the use, building or structure is naturally and normally incidental to and exclusively devoted to a principal use, building or structure;

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

"agricultural use" means a bona fide farming operation, including sod farms, the breeding and boarding of horses, and greenhouses;

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

"apartment dwelling" means a building containing six or more dwelling units which have a common entrance from the street level, and the occupants of which have the right to use common elements;

“apartment” means a dwelling unit in a duplex, triplex, double duplex or in a mixed use building not exceeding three stories in height and a

dwelling unit in a building where such dwelling unit is served by a principal entrance from the street level common to three or more other dwelling units;

“board of education” has the same meaning as “board” under the *Education Act*, R.S.O. 1990, ch. E.2;

"building or structure" means a structure occupying an area greater than 10 square metres consisting of a wall, roof, and floor or any of them or a structural system serving the function thereof, and includes an air-supported structure, mezzanine, and an exterior storage tank, but does not include: a farm building, or a canopy, or an exterior storage tank where such exterior storage tank constitutes an accessory use;

“*Building Code Act*” means the *Building Code Act*, S.O. 1992, chapter 23, as amended, and all Regulations thereto including the Ontario Building Code, 2006, as amended;

“canopy” means a canopy as defined in the *Building Code Act* and includes a free-standing roof-like structure constructed on lands used for a gas bar or service station;

"City" means The Corporation of the City of Brampton;

“college” has the same meaning as in section 171.1 of the *Education Act*, R.S.O. 1990, ch. E.2;

“Council” means the Council of the Corporation of the City of Brampton;

"development" means the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of increasing the total floor area, and includes redevelopment;

"development charge" means a charge imposed pursuant to this by-law;

“distribution centre” means a building or structure primarily used for the storage and distribution of goods, wares, merchandise, substances, articles or things;

“double duplex” means a separate building that consists of two duplexes attached to each other;

“duplex” means a separate building that is divided horizontally into two separate dwelling units, each of which has a separate entrance either directly or through a common vestibule;

"dwelling unit" means one or more habitable rooms designed or intended to be used together as a single and separate house-keeping unit by one person or jointly by two or more persons, containing its own kitchen and sanitary facilities;

“farm building” means a farm building as defined in the *Building Code Act*;

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

"grade" means the average level of proposed or finished ground adjoining a building or structure at all exterior walls;

“industrial use” means land, buildings or structures used or designed or intended for use for or in connection with manufacturing, producing, or processing of raw goods, warehousing or bulk storage of goods, distribution centre, truck terminal, research or development in connection with manufacturing, producing, or processing of raw goods, storage, and includes office uses and the sale of commodities to the general public where such uses are accessory to an industrial use, but does not include a building used exclusively for office or administrative purposes unless it is attached to an industrial building or structure as defined above, and does not include a retail warehouse;

“land” includes buildings or structures;

“large apartment” means, for the purposes of the Schedules attached: an apartment unit having a floor area of more than 750 square feet;

“local board” means a public utility commission, transportation commission, public library board, board of park management, local board of health, police services board, planning board, or any other board, commission, committee, body or local authority established or exercising any power or authority under any general or special act with respect to any of the affairs or purposes of the City or the Region;

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

“mixed use” means a use or intended use of the same land, building or structure for any two or more uses defined in this by-law;

“mobile temporary sales trailer” means a trailer that is designed to be made mobile, is placed without a foundation on land and is used exclusively for new residential sales, and concrete piers or sono tubes are deemed not to be foundations for the purposes of this definition;

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

“non-industrial use” means the use of land, buildings or structures or parts thereof, used, designed or intended to be used for any use other than for residential use or for industrial use, or for office use, as those terms are defined in this section, and a non-industrial use includes a retail warehouse;

“non-residential use” means the use of land, buildings or structures or portions thereof used, designed or intended to be used for any use other than for residential use as that term is defined in this section;

“office use” means the use of land, buildings or structures used primarily for, or designed or intended for use primarily for or in connection with office or administrative purposes, provided that the building or structure has an office or administrative component equal to or greater than 50 percent of the total gross floor area of the building or structure. For the purposes of this by-law office use excludes office or administrative uses located in a shopping centre or plaza, and excludes office or administrative uses where such uses are accessory to an industrial use;

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

“planned seniors retirement community” means a housing project consisting of ground-related dwelling units in single family, semi-detached, or multiple dwellings and other amenities, all of which are designed, marketed, developed, and constructed to provide living accommodation for and to meet the needs of senior citizens or older

or retired persons on land designated by a resolution of the City Council as a planned seniors retirement community;

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

“public hospital” means a hospital as defined in the *Public Hospitals Act*, R.S.O. 1990, ch. P.40;

“redevelopment” means the construction, erection or placing of one or more buildings or structures on land where all or part of a building or structure has previously been demolished on such land, or changing the use of a building or structure for any of the following:

- i) from residential to non-residential,
- ii) from non-residential to residential,
- iii) from industrial to non-industrial and,
- iv) from office to non-office;

“Region” means The Regional Municipality of Peel;

“Regulation” means Ontario Reg.82/98, under the Act;

“residential use” means land, buildings or structures or portions thereof used, designed, or intended to be used as living accommodation within a dwelling unit, for one or more individuals;

“row house” means a building other than an apartment building, that is vertically divided into a minimum of three dwelling units, each of which has independent entrances at grade to the front and the rear of the building, and each of which shares a common wall adjoining dwelling units above grade;

“semi-detached dwelling” means a building divided vertically, into two separate dwelling units, with at least 50 per cent of the above-grade area of a main wall on one side of each dwelling unit attached to or the same as a main wall on one side of the other dwelling unit;

“services” means services designated in this by-law or in an agreement under section 44 of the Act, or both;

“single detached dwelling” means a completely detached residential building containing only one dwelling unit;

“shelf and rack storage system” means a shelf and rack storage system as defined in the Building Code Act;

“small apartment”, notwithstanding the definition of an “apartment”, means any residential unit having a total floor area equal to or less than 750 square feet;

“temporary building or structure” means a building or structure constructed or erected or placed on land for a continuous period not exceeding eight months, or an addition or alteration to a building or structure that has the effect of increasing the total floor area thereof for a continuous period not exceeding eight months;

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

- (a) includes the floor area of a mezzanine and air-supported structure and the space occupied by interior walls and partitions; and
- (b) excludes any parts of the building or structure used for mechanical equipment related to the operation or maintenance of the building or structure, stairwells, elevators and washrooms; and
- (c) excludes any part of a building or structure above or below grade, used exclusively for the temporary parking of a motor vehicle or used for the provision of loading spaces; and
- (d) includes any part of a building or structure above or below grade used as a commercial parking garage; and
- (e) where a building or structure does not have any walls, the total floor area shall be the sum total of the area of land directly beneath the roof of the building and the total areas of the floors in the building or structure; and
- (f) excludes the area of any self contained structural shelf and rack storage system as defined in the Building Code Act;

“triplex” means a building or structure that is divided horizontally into three separate dwelling units, each of which has a separate entrance through a common vestibule;

“truck terminal” means a building, structure or place where, for the purpose of a common carrier, trucks or transports are rented, leased, kept for hire, or stored, or parked for remuneration or from which trucks or transports are dispatched.

“university” has the same meaning as is set out in section 171.1 of the *Education Act*;

“use” means the use of land, a building or a structure.

Rules

2. For the purpose of complying with section 6 of the Act:
 - (a) the area to which this by-law applies shall be the area described in section 3 of this by-law;
 - (b) the rules developed under paragraph 9 of subsection 5(1) of the Act for determining if a development charge is payable in any particular case and for determining the amount of the charge are set forth in sections 4 through 17 inclusive;
 - (c) the exemptions provided for by such rules shall be the exemptions set forth in sections 18 through 22 inclusive, of this by-law, the indexing of charges shall be in accordance with section 15 of this by-law, and there shall be no phasing in as provided in subsection 16(1) of this by-law; and
 - (d) the calculation of development charges payable with respect to redevelopment of land shall be in accordance with the rules set forth in section 23 of this by-law.

Lands Affected

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

Designation of Services

4. It is hereby declared by Council that all development of land within the area to which this by-law applies will increase the need for services.
5. The development charge applicable to a development as determined under this by-law shall apply without regard to the services required or used by an individual development.
6. Development charges shall be imposed under this by-law, for the following categories of services to pay for the increased capital costs required because of increased needs for services arising from development:
Library Services

Approvals for Development

7. Development charges shall be imposed against all lands, buildings or structures within the area to which this by-law applies, if the development of such lands, buildings or structures requires any of the following approvals:
 - (a) the passing of a zoning by-law or of an amendment thereto under section 34 of the *Planning Act*;
 - (b) the approval of a minor variance under section 45 of the *Planning Act*;
 - (c) a conveyance of land to which a by-law passed under subsection 50(7) of the *Planning Act* applies;
 - (d) the approval of a plan of subdivision under section 51 of the *Planning Act*;
 - (e) a consent under section 53 of the *Planning Act*;
 - (f) the approval of a description under section 9 of the *Condominium Act*; or
 - (g) the issuing of a permit under the *Building Code Act* in relation to a building or structure.
8. No more than one development charge for each service designated in

section 6 of this by-law shall be imposed upon any lands, buildings or structures to which this by-law applies even though two or more of the actions described in section 7 are required before the lands, buildings or structures can be developed.

9. Notwithstanding section 8, if two or more of the actions described in section 7 occur at different times, additional development charges shall be imposed in respect of any increased or additional development permitted by that action.
10. Where a development requires an approval described in section 7 after the issuance of a building permit and no development charge has been paid, then the development charge shall be paid prior to the granting of the approval required under section 7.
11. If a development does not require a building permit but does require one or more of the approvals described in section 7, then the development charge shall nonetheless be payable in respect of any increased or additional development permitted by such approval required for the increased or additional development being granted, and such development charge shall be paid prior to the granting of the approval required.

Calculation of Development Charges

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

Amount of Charge – Residential

13. (1) The development charges described in Schedule A to this by-law shall be imposed on residential uses of lands, buildings or structures, including a dwelling unit accessory to a non-residential use and, in the case of a mixed use building or structure, on the

residential component of the mixed use building or structure, according to the type of residential use.

- (2) Despite subsection 13(1), the development charges described in Schedule A to this by-law for dwelling units larger than 750 square feet in apartment dwellings shall be imposed on all dwelling units in single detached dwellings, semi-detached dwellings and multiple-dwellings constructed in a planned seniors retirement community, provided that the zoning by-law in force for the planned seniors retirement community limits the number of bedrooms in any dwelling unit to 2 bedrooms, and the number of dwelling units in the community and the maximum floor area of the dwelling units to amounts determined by Council in the zoning by-law.
- (3) If the development charges required to be paid by subsection 13(1) and subsection 13(2), or any part of them remains unpaid after they are payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes in accordance with subsection 32(1) of the Act.

Amount of Charge – Non-Residential

14. (1) The development charges described in Schedule B to this by-law shall be imposed on non-residential uses of lands, buildings or structures and, in the case of a mixed use building or structure, on the non-residential component of the mixed use building or structure, and calculated with respect to each of the services according to the total floor area of the non-residential use.
- (2) Despite clause (1), development charges shall not be imposed on the mechanical portions of buildings that service residential units and which are situated on the same land as all of the residential units that they service.
- (3) If the development charges required to be paid by subsection 14(1), or if any part of them remains unpaid after they are payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes in accordance with subsection 32(1) of the Act.

Indexing of Development Charges

15. The development charges set out in Schedules A and B, shall be adjusted, without amendment to this by-law, semi-annually on February 1st and August 1st in each year, commencing February 1st, 2010, in accordance with the Statistics Canada Quarterly, Construction Price Statistics (catalogue number 62-007) with the base index value being that in effect on August 1, 2009.

Phasing, Timing of Calculation and Payment

16. (1) The development charges set out in this by-law are not subject to phasing in and are payable in full from the effective date of this by-law, subject to applicable exemptions, credits, and discounts;
- (2) Subject to section 23 of this by-law (with respect to redevelopment) and subsection 16(3) below, the development charge shall be calculated as of, and shall be payable, on the date the first building permit is issued in relation to a building or structure on the land to which the development charge applies;
- (3) Where a development charge applies to land in relation to which a building permit is required, no building permit shall be issued until the development charge has been paid in full;
- (4) Notwithstanding subsection 16(3), the City may, in its sole discretion, require an owner to enter into an agreement, including the provision of security for the owner's obligations under agreement, pursuant to section 27 of the Act, providing for all or part of a development charge to be paid before or after it otherwise would be payable. In that event, the terms of such agreement shall then prevail over the provision of this by-law.

Payment By Money or the Provision of Services

17. (1) Payment of development charges shall be by cash or by certified cheque.
- (2) In the alternative to payment by the means provided in subsection (1), the City may, by an agreement entered into with the owner, accept the provision of services in full or partial satisfaction of the development charge otherwise payable, provided that:

- (a) if the City and the owner cannot agree as to the reasonable cost of doing the work under subsection (2), the dispute shall be referred to Council, whose decision shall be final and binding;
 - (b) if the credit exceeds the amount of the charge for the service to which the work relates,
 - (i) the excess amount shall not be credited against the charge for any other service, unless the City has so agreed in an agreement entered into under section 38 of the Act; and
 - (ii) in no event shall the City be required to make a cash payment to the credit holder.
 - (c) notwithstanding the repeal of [By-law 222-2004](#), any credits owing to a landowner, or previous landowner, pursuant to an agreement entered into under section 38 of the Act, prior to the enactment of this by-law, may, at the City's sole discretion, be recognized and used as a credit under this by-law, pursuant to section 41 of the Act; or
 - (d) any credits owing to a landowner, or previous landowner, pursuant to an agreement entered into under section 38 of the Act, either prior to, or after, the enactment of this by-law, which credits do not relate to the category of services covered by this by-law, may, at the City's sole discretion, be recognized and used as a credit under this by-law, pursuant to section 41 of the Act.
- (3) Nothing in this by-law prevents Council from requiring, as a condition of an agreement under sections 51 or 53 of the *Planning Act*, that the owner, at his or her own expense, install such local services related to a plan of subdivision or within the area to which the plan relates, as Council may require, and/or that the owner pay for local connections to storm drainage facilities installed at the owner's expense, and/or administrative, processing, or inspection fees.

Rules with Respect to Exemptions for Intensification of Existing Housing

18. (1) This by-law does not apply with respect to approvals related to the residential development of land, buildings or structures that

would have the effect only,

- (a) of permitting the enlargement of an existing dwelling unit;
 - (b) of creating one or two additional dwelling units in an existing single detached dwelling unit;
 - (c) of creating one additional dwelling unit in an existing semi detached dwelling unit; or
 - (d) of creating one additional dwelling unit for any other existing residential building.
- (2) Notwithstanding clauses (1)(b) to (d), a development charge shall be imposed with respect to the creation of one or two additional dwelling units in a dwelling, if the total floor area of the additional one or two dwelling units exceeds the total floor area of the existing dwelling unit in clause (1)(b) and (1)(c), and the smallest existing dwelling unit in clause (1)(d).

Rules with Respect to Industrial Expansion Exemption

19. (1) If a development includes the enlargement of the gross floor area of an existing industrial building, the amount of the development charge that is payable under this by-law, is the following:
- (a) if the gross floor area is enlarged by 50 per cent or less, the amount of the development charge in respect of the enlargement is zero; and
 - (b) if the gross floor area is enlarged by more than 50 per cent, development charges are payable on the amount by which the enlargement exceeds 50 per cent of the gross floor area before the enlargement
- (2) For the purpose of this section, the terms “gross floor area” and “existing industrial building” shall have the same meaning as those terms have in the Regulation made under the Act.
- (3) For the purpose of interpreting the definition of “existing industrial building” contained in the Regulation, regard shall be had for the classification of the lands in question pursuant to the *Assessment Act*, R.S.O. 1990, c.A.31, and in particular:

- (a) whether the lands fall within a tax class such that taxes on the lands are payable at the industrial tax rate; and
 - (b) whether more than fifty per cent (50%) of the gross floor area of the building or structure has an industrial property code for assessment purposes;
- (4) Despite subsection (3), distribution centres, warehousing, the bulk storage of goods and truck terminals shall be considered industrial uses.
- (5) For the purpose of the application of section 4 of the Act to the operation of this by-law:
- (a) the gross floor area of an existing industrial building shall be calculated as it existed prior to the first enlargement in respect of that building for which an exemption under section 4 of the Act is sought; and
 - (b) the enlargement of the gross floor area of the existing building must:
 - (i) be attached to the existing industrial building
 - (ii) not be attached to the existing industrial building by means only of a tunnel, bridge, canopy, corridor or other passageway, shared below-grade connection, foundation, footing, parking facility, service tunnel or service pipe;
 - (iii) be for use or in connection with an industrial purpose as set out in this by-law; and
 - (iv) constitute a bone fide increase in the size of the existing building.

Categories of Exempt Institutions

20. (1) The following categories of institutions are hereby designated as being exempt from the payment of development charges:

- (a) land, buildings or structures used as hospitals governed by the *Public Hospitals Act*, R.S.O. 1990, c. P. 40;
 - (b) land, buildings or structures owned by and used for the purposes of the City, the Region, or their local boards as required by the Act;
 - (c) land, buildings or structures owned by a board of education and used only for school purposes as required by the Act;
 - (d) land, buildings or structures owned by and used for the purposes of a college or university;
 - (e) that portion of land, buildings or structures owned by a church or religious organization which is used only as a place of worship; and
 - (f) land, buildings or structures used only for the purpose of a temporary office for new residential sales.
- (2) The exemption referred to in this paragraph 20(1)(b) does not apply to the development for residential uses of lands owned by:
- (a) the Region or any local board thereof, including the Peel Children's Aid Society; or
 - (b) any corporation owned, controlled, or operated by the Region, including Peel Non-Profit Housing Corporation.

Agricultural Uses

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

Temporary Buildings or Structures

22. (1) Temporary buildings or structures shall be exempt from the provisions of this by-law, so long as the status as a temporary building or structure is maintained in accordance with the provisions of this by-law;

- (2) In the event that a temporary building or structure becomes protracted, it shall be deemed not to be, or ever to have been a temporary building or structure, and the development charges required to be paid under this by-law shall become payable on the date the temporary building or structure becomes protracted; and
- (3) Prior to the City issuing a building permit for a temporary building or structure, the City may require an owner to enter into an agreement, including the provision of security for the owner's obligation under the agreement, pursuant to section 27 of the Act, providing for all or part of the development charge required by subsection 22(2) to be paid after it would otherwise be payable. The terms of such agreement shall then prevail over the provisions of this by-law.

Rules with Respect to the Redevelopment of Land

23. (1) Where there is a redevelopment of land on which there is a conversion of space proposed, or on which there was formerly erected a building or structure that has been demolished or will be demolished within a period no longer than 4 months from the date of issuance of a building permit, a credit shall be allowed against the development charge otherwise payable by the owner pursuant to this by-law, for the portion of the previous building or structure still in existence that is being converted or for the portion of the building or structure that has or will be demolished, as the case may be, calculated by multiplying the number and type of dwelling units being converted or demolished or the non-residential total floor area being converted or demolished by the relevant development charge in effect on the date when the development charge is payable in accordance with this by-law.
- (2) If a credit has been allowed against the development charge otherwise payable and a building permit for the redevelopment has been issued, in advance of the occurrence of the demolition, the owner must complete and provide proof of the demolition no later than 4 months after the issuance of the building permit or the amount for which the development charge credit was provided shall become fully payable.

- (3) A credit in respect of any demolition under this section shall not be given unless the demolition permit was issued on or after October 28, 1991.
- (4) The amount of any credit hereunder shall not exceed, in total, the amount of the development charges otherwise payable under this by-law with respect to the redevelopment.
- (5) For the purposes of this section, dwelling units or total floor area accidentally destroyed by fire shall be deemed to have been demolished under a demolition permit issued on the date of the fire.

Interest

24. The City shall pay interest on a refund under subsections 17(3), (5) and 24(2) of the Act at a rate equal to the Bank of Canada rate on the date this by-law comes into effect.

Front Ending Agreements

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

Schedules

26. The following Schedules to this by-law form an integral part of this by-law:

- Schedule 'A' Residential Development Charges
- Schedule 'B' Non-residential Development Charges

By-law Registration

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

Date By-law Effective

28. This by-law comes into force and effect on XXXXXX XX, 2009.

Date By-law Expires

29. This by-law expires five years after the date on which it comes into force and effect.

Repeal

30. By-law No. 222-2004 is hereby repealed, effective on the date this by-law comes into force and effect.

Headings for Reference Only

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

Interpretation

32. All words defined in the Act or the Regulation have the same meaning in this by-law as they have in the Act or the Regulation, unless they are defined differently in this by-law.

33. All references to the provisions of any statute or regulation or to the Ontario Building Code contained in this by-law shall also refer to the same or similar provision in the statute or regulation or code as amended, replaced, revised or consolidated from time to time.

Severability

34. If, for any reason, any provision, section, subsection or paragraph of this by-law is held invalid, it is hereby declared to be the intention of Council that all the remainder of this by-law shall continue in full force and effect until repealed, re-enacted or amended, in whole or in part or dealt with in any other way.

Short Title

35. This by-law may be referred to as the City of Brampton Development Charges By-law for Library Services, 2009.

READ A FIRST, SECOND, AND THIRD TIME, AND PASSED IN OPEN
COUNCIL THIS XXth DAY OF AUGUST, 2009.

THE CORPORATION OF THE CITY OF BRAMPTON

Original signed by
Susan Fennell, Mayor

Original Signed by
Peter Fay, City Clerk

Approved as to Content
Original Signed by Maurice Lewis

Approved as to Form
Original Signed by Colin Grant

Schedule A to By-Law xxx-2009
Residential Development Charge

Service Category	Charge for Singles/Semis	Charge for Rows	Charge for Apartment >750 Sq.Ft.	Charge for Apartment <= 750 Sq.Ft.
Library Services	\$681.20	\$561.99	\$459.81	\$255.45

TRANSIT SERVICES SUMMARY

The City of Brampton provides transit services using conventional buses. Presently, transit services are provided by a conventional fleet of buses and two storage and maintenance facilities.

The inventory for Transit Services, as well as the service level calculation is shown in Historical Inventory table contained within this section. The 10-year average service level for Transit is calculated to be \$285.02/population and employment. Based on this average service level and the forecast development expected in the City over the next 10 years, an additional \$62.43M is the maximum allowable amount that can be included in the development charge calculation for Transit.

In order to place the historical transit service standard in context with the current road facilities available to transit, the City's transit consultant has calculated a congestion factor, which identifies the additional capital assets that would have been required in order to provide the transit service given the existing transportation network. This approach has identified that a 20% increase in the historical inventory would have been required to provide an equivalent level of transit service. Based on this adjusted 10-year average service level and gross population and employment growth forecast over the next 10 years, \$74.92M less the 10% non-DC requirement is the maximum allowable amount that can be included in the development charge calculation for Transit.

The 2009-2018 growth-related capital forecast for Transit is shown in the DC Project Tables in this section. The capital forecast for this program is \$111.25M (Net of grants and subsidies in the amount of \$118.24M). Of this amount \$27.81M has been identified as a benefit to the existing population. The Growth Funding Envelope totals \$74.92M included as supporting growth in the 10-year period. \$8.52M in remaining growth-related capital cannot be funded under the funding envelope and has been identified as a benefit beyond the 10-year forecast period. The 10% non-DC requirement of \$7.49M has been deducted from the \$74.92M of growth-related capital on which the development charge is based leaving \$67.43M as the amount on which the development charge is calculated.

Included in the growth related capital forecast is the City's Züm program at a total 10 year cost of \$185.23M. This program has received direct subsidies from both the Federal and Provincial governments. While the intended funding split between Federal, Provincial and Municipal is 1/3 contribution from each, this may not be evident in the growth-related capital forecast. The reason for this is two fold: 1) Some of the subsidies will be received and used beyond the 10 year period considered in this analysis and 2) Some of the funds will be received and used in future years within the 10 year period. Since the DC background study is

completed in constant 2009 dollars these future expenditures and related subsidies that are still within the 10 year period were brought back to present value for DC purposes. As per the DCA, all subsidies received on the identified expenditures in this 10 year Capital forecast were netted off the “Total Project Cost”, therefore arriving at a “Municipal Cost”, which is then used for DC calculations.

The DC funded portion of the 2009 – 2018 transit capital program is only sufficient to maintain 1999-2008 service levels with respect to the anticipated increment in population and employment. The overall program involves some oversizing and benefit to subsequent development post 2018 and this cost is not incorporated in the DC calculations. The TTMP has identified that a higher modal split will be required in the future to meet the transportation needs of the city. Since Roads and Transit cannot be combined under the current DC legislation, there is no mechanism for funding this change in modal split through development charges as transportation (i.e. roads and transit together) cannot be identified as a DC program.

The growth-related net capital costs have been allocated to residential and non-residential development based on the forecast future population and employment growth split for 2009-2018 of 65% and 35%. In dollar terms, \$43.83M of the growth capital is charged to forecasted residential development and \$23.60M is charged to forecasted non-residential development.

This allocation of growth capital results in the following charge based on development type:

Small Apartment (per unit)	\$537.84
Large Apartment (per unit)	\$968.11
Row (per unit)	\$1,183.25
Single/Semi (per unit)	\$1,434.24
Industrial/Office (per m2)	\$5.56
Non-Industrial/Non-Office (per m2)	\$5.56

TRANSIT

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Transit Facilities											
Terminals (Sq. Ft.)-Floor area	106,905	123,039	123,039	123,039	123,039	123,039	123,039	123,039	123,039	123,039	\$150
Service Centers (Sq. Ft.) - Floor Area	114,000	122,000	122,000	122,000	122,000	122,000	122,000	122,000	122,000	287,000	\$173
Terminals / Service Center (\$000)	\$35,757.8	\$39,561.9	\$39,561.9	\$39,561.9	\$39,561.9	\$39,561.9	\$39,561.9	\$39,561.9	\$39,561.9	\$68,106.9	
Terminals (Ha.) - Land	2.45	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	\$2,900,000
Service Centers (Ha.) - Land	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	29.65	\$2,900,000
Terminals / Service Center (\$000)	\$24,360.0	\$25,433.0	\$25,433.0	\$25,433.0	\$25,433.0	\$25,433.0	\$25,433.0	\$25,433.0	\$25,433.0	\$94,163.0	
Bus Shelters / Pads (#)	212	219	233	245	247	259	277	310	335	366	\$8,856
Pads Only (#)	172	200	240	285	325	383	445	541	645	767	\$2,789
Shelters / Pads (\$000)	\$2,357.2	\$2,497.3	\$2,732.8	\$2,964.6	\$3,093.9	\$3,361.9	\$3,694.2	\$4,254.2	\$4,765.7	\$5,380.5	
Bus Stops (Signs)	1,332	1,332	1,332	1,442	1,492	1,530	1,709	1,812	1,889	1,958	\$156
Bus Bays	23	30	30	30	31	46	56	67	75	84	
Bus Loops (#)	-	-	-	-	-	-	-	-	-	-	
Stops/Loops (\$000)	\$207.8	\$207.8	\$207.8	\$225.0	\$232.8	\$238.7	\$266.6	\$282.7	\$294.7	\$305.4	
Fare boxes	104	112	123	133	142	159	176	194	206	211	\$11,899
Receiver	1	1	1	1	1	1	1	1	1	4	\$56,000
Counter	1	1	1	1	1	1	1	1	1	2	\$27,995
Wrapper	1	1	1	1	1	1	1	1	1	2	\$18,995
Radios	109	119	130	140	149	159	176	194	206	211	\$2,100
Base Station (Communications)	1	1	1	1	1	1	1	1	5	5	\$5,000
Collection / Communication Equipment (\$000)	\$1,574.4	\$1,690.6	\$1,844.6	\$1,984.6	\$2,110.5	\$2,333.8	\$2,571.8	\$2,823.8	\$3,011.8	\$3,296.8	
Furniture / Equipment (\$000)	\$0.2	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	
Sub-total (\$000)	\$64,257	\$69,391	\$69,780	\$70,169	\$70,432	\$70,930	\$71,528	\$72,356	\$73,067	\$171,253	

TRANSIT

INVENTORY OF CAPITAL ASSETS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Vehicles											
Buses	112	112	123	133	142	159	176	194	206	211	450,605
Mfice Trucks	3	3	3	3	4	4	4	4	4	5	63,936
Sander	1	1	1	1	1	1	1	1	1	2	8,325
Fork Lift	1	1	1	1	1	1	1	1	2	3	46,620
Trailer	1	1	1	1	1	1	1	1	1	1	7,215
Bobcat	1	1	1	1	1	1	1	1	1	1	61,050
Washer	1	1	1	1	1	1	1	1	1	1	16,650
Sweeper	1	1	1	1	1	1	1	1	1	2	72,150
Sub-total (#)	121	121	132	142	152	169	186	204	217	226	
Sub-total (\$000)	\$50,871.6	\$50,871.6	\$55,828.2	\$60,334.3	\$64,453.7	\$72,113.9	\$79,774.2	\$87,885.1	\$93,339.0	\$95,783.1	

SERVICE LEVEL ANALYSIS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
POPULATION	300,873	312,704	325,000	344,354	364,860	386,587	409,608	434,000	449,700	466,300
EMPLOYMENT	121,081	127,377	134,000	138,137	142,401	146,797	151,328	156,000	167,140	177,510
POPULATION & EMPLOYMENT	421,955	440,081	459,000	482,490	507,261	533,384	560,936	590,000	616,840	643,810

	2001	2002	2003	2004	2005	2006	2007	2008
Transit Facilities	\$69,780.3	\$70,169.2	\$70,432.3	\$70,929.5	\$71,527.8	\$72,355.8	\$73,067.3	\$71,252.8
Vehicles	\$55,828.2	\$60,334.3	\$64,453.7	\$72,113.9	\$79,774.2	\$87,885.1	\$93,339.0	\$95,783.1
Total Transit (\$000)	\$125,608.5	\$130,503.5	\$134,885.9	\$143,043.5	\$151,302.0	\$160,240.9	\$166,406.3	\$267,035.9

SERVICE LEVEL (\$/pop & employ)

Total Transit (\$/pop & employ)	\$272.85	\$273.27	\$273.66	\$270.48	\$265.91	\$268.18	\$269.73	\$271.59	\$269.77	\$414.77	\$285.02
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CALCULATION OF MAXIMUM ALLOWABLE

10 Year Average Service Level (1999-2008) \$285.02 / pop & employ

2008 Population & Employment 643,810
 Population in New Units & Employment 2009-2018 219,040
 Population in New Units & Employment 2009-2031 428,430

	Average Service Level	Maximum Allowable 10 Years (\$000)
Total Transit	\$285.02 / pop & employ	\$62,430.8
Transit Service Level Cap (\$000):		\$122,111.1

Transit Service Level Cap (\$000):
 \$62,430.8 x 1.2 congestion factor = \$74,916.9

TRANSIT

ASSUMPTIONS

BASE CASE DESCRIPTION:

BASE YEAR : 2009

FINANCIAL ASSUMPTIONS:

Inflation Rate: 2.0%
 Financing 5.5%
 Investment 3.5%

Source:

Bank of Canada Inflation Band Mid-Point
 City of Brampton Target Borrowing Rate
 City of Brampton Target Earnings Rate

ALLOCATION ASSUMPTIONS:

Residential Share 65.00%
 Non-Residential Share 35.00%

10-year % Population/Employment Growth
 10-year % Population/Employment Growth

OPENING BALANCE FOR CASH FLOW: (\$7,436,848)

DEVELOPMENT CHARGE SUMMARY:

	Persons Per Unit	Unadjusted Development Charge	Adjusted Breakeven Development Charge
SMALL APARTMENT	1.5	\$456.72	\$537.84
LARGE APARTMENT	2.7	\$822.09	\$968.11
Row Residential	3.3	\$1,004.77	\$1,183.25
Single/Semi Residential	4.0	\$1,217.91	\$1,434.24
NON-RESIDENTIAL CHARGE (PER M2)		\$4.62	\$5.56

PROGRAM SUMMARY

(NOMINAL - YR \$2009)			
TOTAL GROSS EXPENDITURES 2009-2018		\$229,488,848	
LESS: GRANTS/SUBSIDIES		(\$118,236,995)	
LESS: BENEFIT BEYOND PERIOD		(\$6,521,953)	
LESS: BENEFIT TO EXISTING POPULATION (NON-GROWTH)		(\$27,812,963)	
LESS: PRIOR GROWTH		\$0	
LESS: 10% DISCOUNT		(\$7,491,694)	
ELIGIBLE GROWTH EXPENDITURES		\$67,425,243	
TOTAL ELIGIBLE GROWTH EXPENDITURES		\$67,425,243	

RESIDENTIAL/NON-RESIDENTIAL SHARE:

RESIDENTIAL	NON-RESIDENTIAL
RESIDENTIAL SHARE @ 65%	NON-RESIDENTIAL SHARE @ 35%
GROSS POPULATION GROWTH 143,940	NON-RESIDENTIAL SPACE GROWTH 5,102,820
NET CHARGE PER CAPITA (UNADJUSTED) \$304.48	NET CHARGE PER M2 (UNADJUSTED) \$4.62
NET CHARGE PER CAPITA (ADJUSTED) \$358.56	NET CHARGE PER M2 (ADJUSTED) \$5.56

TRANSIT

	TOTAL	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ELIGIBLE GROWTH EXPENDITURES (INFLATED):											
RESIDENTIAL:											
Gross Eligible Growth Capital Cost	\$47,645,793	\$6,605,564	\$5,588,611	\$2,337,123	\$4,589,223	\$4,764,016	\$5,098,948	\$3,858,328	\$6,509,718	\$3,009,538	\$3,284,724
NON-RESIDENTIAL:											
Gross Eligible Growth Capital Cost	\$25,655,427	\$3,556,842	\$3,009,252	\$1,258,451	\$2,471,120	\$2,565,239	\$2,745,587	\$2,077,561	\$4,582,156	\$1,620,520	\$1,768,698
TOTAL GROSS ELIGIBLE GROWTH COST	\$73,301,220	\$10,162,406	\$8,597,863	\$3,595,574	\$7,060,343	\$7,329,255	\$7,844,536	\$5,935,889	\$13,091,874	\$4,630,058	\$5,053,422

REVENUES (INFLATED):

RESIDENTIAL:											
Charge per Person		\$359	\$366	\$373	\$381	\$388	\$396	\$404	\$412	\$420	\$429
Population Growth	143,940	12,680	7,480	6,400	6,110	14,010	18,930	24,670	21,890	17,070	14,700
TOTAL RESIDENTIAL REVENUE	\$57,374,042	\$4,546,500	\$2,735,669	\$2,387,493	\$2,324,896	\$5,437,517	\$7,493,993	\$9,961,667	\$9,015,894	\$7,171,281	\$6,299,132
NON-RESIDENTIAL:											
Net Charge Per m2		\$6	\$6	\$6	\$6	\$6	\$6	\$6	\$6	\$6	\$7
NON-RESIDENTIAL Area Forecast (m2)	\$5,102,820	\$181,500	\$102,050	\$116,300	\$246,250	\$570,600	\$845,900	\$943,200	\$839,020	\$683,800	\$574,200
TOTAL NON-RESIDENTIAL REVENUE	\$31,890,147	\$1,009,600	\$579,027	\$673,078	\$1,453,659	\$3,435,723	\$5,195,239	\$5,908,680	\$5,361,165	\$4,456,728	\$3,817,248
TOTAL REVENUES	\$89,264,189	\$5,556,100	\$3,314,696	\$3,060,571	\$3,778,555	\$8,873,240	\$12,689,232	\$15,870,347	\$14,377,059	\$11,628,009	\$10,116,380

FINANCING CALCULATION:

RESIDENTIAL:											
Beginning of Year Balance											
Net Annual Difference (Total Revenues-Net Expenditures)											
Sub-Total											
Financing/Investment Adjustment In Year											
Financing/Investment Adjustment Opening Balance											
Sub-Total											
End of Year Cumulative Balance	\$0	\$7,215,507	(\$10,543,758)	(\$11,072,413)	(\$14,007,992)	(\$14,093,144)	(\$12,431,309)	(\$6,904,863)	(\$6,769,618)	(\$2,907,373)	(\$2,907,373)
NON-RESIDENTIAL:											
Beginning of Year Balance											
Net Annual Difference (Total Revenues-Net Expenditures)											
Sub-Total											
Financing/Investment Adjustment In Year											
Financing/Investment Adjustment Opening Balance											
Sub-Total											
End of Year Cumulative Balance	\$0	(\$2,602,897)	(\$5,363,347)	(\$8,155,388)	(\$9,205,405)	(\$10,757,143)	(\$10,463,069)	(\$8,546,018)	(\$5,117,885)	(\$4,606,727)	(\$1,974,256)
TOTAL CUMULATIVE BALANCE	\$0	(\$5,150,139)	(\$18,699,146)	(\$20,277,818)	(\$24,765,135)	(\$24,556,213)	(\$20,977,326)	(\$11,376,345)	(\$11,376,345)	(\$4,881,629)	(\$4,881,629)

TRANSIT - GROWTH RELATED CAPITAL PROGRAM

Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit to existing	Prior Growth	Benefit Post 2018	Statutory 10%	
							Current Period Non-DC	Current Period DC Contribution
2009								
Zúm - Other Elements: Such as Dispatch/Scheduling Control, Communication Infrastructure, Licence Fees, Indirect Fees	4,000,000	2,666,000	1,334,000	333,500		102,185	89,831	808,483
Zúm - Property	3,500,000		3,500,000	875,000		268,102	235,690	2,121,208
Zúm - Stations/Stops	3,396,000	2,264,000	1,132,000	283,000		86,712	76,229	686,059
Zúm - Surveillance System	450,000	300,000	150,000	37,500		11,490	10,101	90,909
Zúm - Terminal & Loops	9,305,000	4,652,000	4,653,000	1,163,250		356,422	313,333	2,819,995
Zúm - Vehicles: BRT Corridor	11,645,000	7,763,333	3,881,667	970,417		297,338	261,391	2,352,521
Zúm - Vehicles: Local Corridor	2,350,000	1,566,667	783,333	195,833		60,004	52,750	474,747
Zúm - XXX WiFi	4,000,000	2,666,000	1,334,000	333,500		102,185	89,831	808,483
Sub-Total for 2009	\$38,646,000	\$21,878,000	\$16,768,000	\$4,192,000	\$0	\$1,284,438	\$1,129,156	\$10,162,406
2010								
Bus Purchases - 3 Low-Floor Buses	1,410,000		1,410,000	352,500		108,007	94,949	854,544
Bus Shelters/Pads/Stops - Shelters, Pads and Stops	416,000		416,000	104,000		31,866	28,013	252,121
Zúm - Other Elements: Such as Dispatch/Scheduling Control, Communication Infrastructure, Licence Fees, Indirect Fees	5,000,000	3,334,000	1,666,000	416,500		127,617	112,188	1,009,695
Zúm - Stations/Stops	3,111,000	2,074,000	1,037,000	259,250		79,435	69,832	628,484
Zúm - Terminal & Loops	6,323,000	3,162,000	3,161,000	790,250		242,134	212,862	1,915,754
Zúm - Vehicles: BRT Corridor	13,015,000	8,676,667	4,338,333	1,084,583		332,319	292,143	2,629,288
Zúm - Vehicles: Local Corridor	4,230,000	2,820,000	1,410,000	352,500		108,007	94,949	854,544
Zúm - Vehicles: Support Corridor	1,410,000	940,000	470,000	117,500		36,002	31,650	284,848
Sub-Total for 2010	\$34,915,000	\$21,006,667	\$13,908,333	\$3,477,083	\$0	\$1,065,386	\$936,586	\$8,429,278

Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit to existing	Prior Growth	Benefit Post 2018	Statutory 10%	
							Current Period Non-DC	Current Period DC Contribution
2011								
Bus Shelters/Pads/Stops - Shelters, Pads and Stops	416,000		416,000	104,000		31,866	28,013	252,121
Züm - Other Elements: Such as Dispatch/Scheduling Control, Communication Infrastructure, Licence Fees, Indirect Fees	5,000,000	3,334,000	1,666,000	416,500		127,617	112,188	1,009,695
Züm - Stations/Stops	2,358,000	1,572,000	786,000	196,500		60,208	52,929	476,363
Züm - Terminal & Loops	343,000	172,000	171,000	42,750		13,099	11,515	103,636
Züm - Vehicles: Local Corridor	7,990,000	5,326,667	2,663,333	665,833		204,013	179,349	1,614,138
Sub-Total for 2011	\$16,107,000	\$10,404,667	\$5,702,333	\$1,425,583	\$0	\$436,802	\$383,995	\$3,455,953
2012								
Bus Purchases - 15 Low-Floor Buses	7,050,000		7,050,000	1,762,500		540,034	474,747	4,272,720
Bus Shelters/Pads/Stops - Shelters, Pads and Stops	416,000		416,000	104,000		31,866	28,013	252,121
Züm - Other Elements: Such as Dispatch/Scheduling Control, Communication Infrastructure, Licence Fees, Indirect Fees	3,000,000	2,000,000	1,000,000	250,000		76,601	67,340	606,060
Züm - Vehicles: BRT Corridor	7,535,000	5,023,333	2,511,667	627,917		192,395	169,135	1,522,219
Sub-Total for 2012	\$18,001,000	\$7,023,333	\$10,977,667	\$2,744,417	\$0	\$840,895	\$739,235	\$6,653,119

Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit to existing	Prior Growth	Benefit Post 2018	Statutory 10%		
							Current Period Non-DC	Current Period DC Contribution	
2013									
Bus Purchases - 8 Low-Floor Buses	3,760,000		3,760,000	940,000		288,018	253,198	2,278,784	
Bus Shelters/Pads/Stops - Shelters, Pads and Stops	416,000		416,000	104,000		31,866	28,013	252,121	
Terminal in Northwest End - Transit Terminal in the Northwest End	750,000		750,000	187,500		57,450	50,505	454,545	
Züm - Control Centre	233,000	156,000	77,000	19,250		5,898	5,185	46,667	
Züm - Other Elements: Such as Dispatch/Scheduling Control, Communication Infrastructure, Licence Fees, Indirect Fees	517,000	344,000	173,000	43,250		13,252	11,650	104,848	
Züm - Stations/Stops	2,272,000	1,515,000	757,000	189,250		57,987	50,976	458,787	
Züm - Surveillance System	146,000	98,000	48,000	12,000		3,677	3,232	29,091	
Züm - Terminal & Loops	1,456,000	728,000	728,000	182,000		55,765	49,023	441,211	
Züm - Vehicles: BRT Corridor	8,220,000	5,480,000	2,740,000	685,000		209,886	184,511	1,660,603	
Züm - Vehicles: Local Corridor	5,170,000	3,446,667	1,723,333	430,833		132,008	116,049	1,044,443	
Sub-Total for 2013	\$22,940,000	\$11,767,667	\$11,172,333	\$2,793,083	\$0	\$855,807	\$752,344	\$6,771,099	
2014									
Bus Purchases - 9 Low-Floor Buses	4,230,000		4,230,000	1,057,500		324,020	284,848	2,563,632	
Bus Shelters/Pads/Stops - Shelters, Pads and Stops	416,000		416,000	104,000		31,866	28,013	252,121	
Züm - Control Centre	240,000	160,000	80,000	20,000		6,128	5,387	48,485	
Züm - Maintenance Facility	10,000,000	6,666,000	3,334,000	833,500		255,386	224,511	2,020,602	
Züm - Other Elements: Such as Dispatch/Scheduling Control, Communication Infrastructure, Licence Fees, Indirect Fees	4,796,000	3,198,000	1,598,000	399,500		122,408	107,609	968,483	
Züm - Stations/Stops	1,660,000	1,107,000	553,000	138,250		42,360	37,239	335,151	
Züm - Surveillance System	1,799,000	1,200,000	599,000	149,750		45,884	40,337	363,030	
Züm - Vehicles: BRT Corridor	2,740,000	1,826,667	913,333	228,333		69,962	61,504	553,534	
Sub-Total for 2014	\$25,881,000	\$14,157,667	\$11,723,333	\$2,930,833	\$0	\$898,014	\$789,449	\$7,105,038	

Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit to existing	Prior Growth	Benefit Post 2018	Statutory 10%	
							Current Period Non-DC	Current Period DC Contribution
2015								
Bus Purchases - 13 Low-Floor Buses	6,110,000		6,110,000	1,527,500	468,029	411,447	3,703,024	
Bus Shelters/Pads/Stops - Shelters, Pads and Stops	416,000		416,000	104,000	31,866	28,013	252,121	
Terminal in Northeast End - Transit Terminal in the Northeast End	750,000		750,000	187,500	57,450	50,505	454,545	
Züm - Stations/Stops	866,000	577,000	289,000	72,250	22,138	19,461	175,151	
Züm - Surveillance System	1,169,000	780,000	389,000	97,250	29,798	26,195	235,757	
Züm - Terminal & Loops	116,000	58,000	58,000	14,500	4,443	3,906	35,151	
Züm - Vehicles: BRT Corridor	2,055,000	1,370,000	685,000	171,250	52,471	46,128	415,151	
Sub-Total for 2015	\$11,482,000	\$2,785,000	\$8,697,000	\$2,174,250	\$0	\$666,195	\$585,656	\$5,270,900
2016								
Bus Purchases - 13 Low-Floor Buses	6,110,000		6,110,000	1,527,500	468,029	411,447	3,703,024	
Bus Shelters/Pads/Stops - Shelters, Pads and Stops	416,000		416,000	104,000	31,866	28,013	252,121	
Züm - Surveillance System	471,000	314,000	157,000	39,250	12,026	10,572	95,151	
Züm - Vehicles: BRT Corridor	4,088,848	2,725,899	1,362,949	340,737	104,403	91,781	826,028	
Züm - Vehicles: BRT Corridor	3,425,000	2,283,333	1,141,667	285,417	87,452	76,880	691,918	
Züm - Vehicles: BRT Corridor	28,854,000	19,236,096	9,617,904	2,404,476	736,737	647,669	5,829,022	
Sub-Total for 2016	\$43,364,848	\$24,559,328	\$18,805,520	\$4,701,380	\$0	\$1,440,513	\$1,266,363	\$11,397,264
2017								
Bus Purchases - 11 Low-Floor Buses	5,170,000		5,170,000	1,292,500	396,025	348,148	3,133,328	
Bus Shelters/Pads/Stops - Shelters, Pads and Stops	416,000		416,000	104,000	31,866	28,013	252,121	
Züm - Surveillance System	65,000	44,000	21,000	5,250	1,609	1,414	12,727	
Züm - Vehicles: BRT Corridor	2,740,000	1,826,667	913,333	228,333	69,962	61,504	553,534	
Sub-Total for 2017	\$8,391,000	\$1,870,667	\$6,520,333	\$1,630,083	\$0	\$499,461	\$439,079	\$3,951,710

Project Description	Total Project Cost	Less Grants/ Subsidies	Total Municipal Cost	Replacement and Benefit to existing	Prior Growth	Benefit Post 2018	Statutory 10%	
							Current Period Non-DC	Current Period DC Contribution
2018								
Bus Purchases - 11 Low-Floor Buses	5,170,000		5,170,000	1,292,500		396,025	348,148	3,133,328
Bus Shelters/Pads/Stops - Shelters, Pads and Stops	416,000		416,000	104,000		31,866	28,013	252,121
Züm - Surveillance System	65,000	44,000	21,000	5,250		1,609	1,414	12,727
Züm - Vehicles: BRT Corridor	4,110,000	2,740,000	1,370,000	342,500		104,943	92,256	830,302
Sub-Total for 2018	\$9,761,000	\$2,784,000	\$6,977,000	\$1,744,250	\$0	\$534,442	\$469,831	\$4,228,477
Grand Total	\$229,488,848	\$118,236,995	\$111,251,853	\$27,812,963	\$0	\$8,521,953	\$7,491,694	\$67,425,243



DRAFT XXX-2009

Development Charges

To establish development charges for the City of Brampton pertaining to Transit Services, and to repeal By-law 223-2004

WHEREAS subsection 2(1) of the Act provides that the Council of a municipality may by by-law impose development charges against land to pay for increased capital costs required because of increased needs for services arising from the development of the area to which the by-law applies;

AND WHEREAS the City has completed and has considered a report entitled "2009 Development Charge Background Study", the City of Brampton, dated JuneXX, 2009 (the "Study"), as required by section 10 of the Act;

AND WHEREAS the Study was made available to the public, and Council gave notice to the public of a public meeting, pursuant to section 12 of the Act, which was held on June 22, 2009, and at which the Study was again provided to the public, along with the proposed development charge by-laws, and Council heard representations from all persons who applied to be heard (the "Public Meeting");

AND WHEREAS Council held X further Public Meetings on XXXXX XX,2009 and XXXXX XX,2009, and Council heard representations from all persons who applied to be heard;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council approved the Study, as amended by the matters identified in the staff report dated August 5, 2009;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council indicated that it intends to ensure that the increase in the need for services attributable to the anticipated development identified in the Study, as amended, will be met;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council indicated its intent that future excess capacity identified in the Study shall be paid for by development charges or other similar charges;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council determined that no further public meetings were required, under section 12 of the Act.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE CITY OF BRAMPTON ENACTS AS FOLLOWS:

Definitions

1. In this by-law,

“accessory” means, where used to describe a use, building or structure, that the use, building or structure is naturally and normally incidental to and exclusively devoted to a principal use, building or structure;

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

"agricultural use" means a bona fide farming operation, including sod farms, the breeding and boarding of horses, and greenhouses;

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

"apartment dwelling" means a building containing six or more dwelling units which have a common entrance from the street level, and the occupants of which have the right to use common elements;

“apartment” means a dwelling unit in a duplex, triplex, double duplex or in a mixed use building not exceeding three stories in height and a

dwelling unit in a building where such dwelling unit is served by a principal entrance from the street level common to three or more other dwelling units;

“board of education” has the same meaning as “board” under the *Education Act*, R.S.O. 1990, ch. E.2;

"building or structure" means a structure occupying an area greater than 10 square metres consisting of a wall, roof, and floor or any of them or a structural system serving the function thereof, and includes an air-supported structure, mezzanine, and an exterior storage tank, but does not include: a farm building, or a canopy, or an exterior storage tank where such exterior storage tank constitutes an accessory use;

“*Building Code Act*” means the *Building Code Act*, S.O. 1992, chapter 23, as amended, and all Regulations thereto including the Ontario Building Code, 2006, as amended;

“canopy” means a canopy as defined in the *Building Code Act* and includes a free-standing roof-like structure constructed on lands used for a gas bar or service station;

"City" means The Corporation of the City of Brampton;

“college” has the same meaning as in section 171.1 of the *Education Act*, R.S.O. 1990, ch. E.2;

“Council” means the Council of the Corporation of the City of Brampton;

"development" means the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of increasing the total floor area, and includes redevelopment;

"development charge" means a charge imposed pursuant to this by-law;

“distribution centre” means a building or structure primarily used for the storage and distribution of goods, wares, merchandise, substances, articles or things;

“double duplex” means a separate building that consists of two duplexes attached to each other;

“duplex” means a separate building that is divided horizontally into two separate dwelling units, each of which has a separate entrance either directly or through a common vestibule;

"dwelling unit" means one or more habitable rooms designed or intended to be used together as a single and separate house-keeping unit by one person or jointly by two or more persons, containing its own kitchen and sanitary facilities;

“farm building” means a farm building as defined in the *Building Code Act*;

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

"grade" means the average level of proposed or finished ground adjoining a building or structure at all exterior walls;

“industrial use” means land, buildings or structures used or designed or intended for use for or in connection with manufacturing, producing, or processing of raw goods, warehousing or bulk storage of goods, distribution centre, truck terminal, research or development in connection with manufacturing, producing, or processing of raw goods, storage, and includes office uses and the sale of commodities to the general public where such uses are accessory to an industrial use, but does not include a building used exclusively for office or administrative purposes unless it is attached to an industrial building or structure as defined above, and does not include a retail warehouse;

“land” includes buildings or structures;

“large apartment” means, for the purposes of the Schedules attached: an apartment unit having a floor area of more than 750 square feet;

“local board” means a public utility commission, transportation commission, public library board, board of park management, local board of health, police services board, planning board, or any other board, commission, committee, body or local authority established or exercising any power or authority under any general or special act with respect to any of the affairs or purposes of the City or the Region;

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

“mixed use” means a use or intended use of the same land, building or structure for any two or more uses defined in this by-law;

“mobile temporary sales trailer” means a trailer that is designed to be made mobile, is placed without a foundation on land and is used exclusively for new residential sales, and concrete piers or sono tubes are deemed not to be foundations for the purposes of this definition;

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

“non-industrial use” means the use of land, buildings or structures or parts thereof, used, designed or intended to be used for any use other than for residential use or for industrial use, or for office use, as those terms are defined in this section, and a non-industrial use includes a retail warehouse;

“non-residential use” means the use of land, buildings or structures or portions thereof used, designed or intended to be used for any use other than for residential use as that term is defined in this section;

“office use” means the use of land, buildings or structures used primarily for, or designed or intended for use primarily for or in connection with office or administrative purposes, provided that the building or structure has an office or administrative component equal to or greater than 50 percent of the total gross floor area of the building or structure. For the purposes of this by-law office use excludes office or administrative uses located in a shopping centre or plaza, and excludes office or administrative uses where such uses are accessory to an industrial use;

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

“planned seniors retirement community” means a housing project consisting of ground-related dwelling units in single family, semi-detached, or multiple dwellings and other amenities, all of which are designed, marketed, developed, and constructed to provide living accommodation for and to meet the needs of senior citizens or older or retired persons on land designated by a resolution of the City Council as a planned seniors retirement community;

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

“public hospital” means a hospital as defined in the *Public Hospitals Act*, R.S.O. 1990, ch. P.40;

“redevelopment” means the construction, erection or placing of one or more buildings or structures on land where all or part of a building or structure has previously been demolished on such land, or changing the use of a building or structure for any of the following:

- i) from residential to non-residential,
- ii) from non-residential to residential,
- iii) from industrial to non-industrial and,
- iv) from office to non-office;

“Region” means The Regional Municipality of Peel;

“Regulation” means Ontario Reg.82/98, under the Act;

“residential use” means land, buildings or structures or portions thereof used, designed, or intended to be used as living accommodation within a dwelling unit, for one or more individuals;

“row house” means a building other than an apartment building, that is vertically divided into a minimum of three dwelling units, each of which has independent entrances at grade to the front and the rear of the building, and each of which shares a common wall adjoining dwelling units above grade;

“semi-detached dwelling” means a building divided vertically, into two separate dwelling units, with at least 50 per cent of the above-grade area of a main wall on one side of each dwelling unit attached to or the same as a main wall on one side of the other dwelling unit;

“services” means services designated in this by-law or in an agreement under section 44 of the Act, or both;

“shelf and rack storage system” means a shelf and rack storage system as defined in the Building Code Act;

“single detached dwelling” means a completely detached residential building containing only one dwelling unit;

“small apartment”, notwithstanding the definition of an “apartment”, means any residential unit having a total floor area equal to or less than 750 square feet;

“temporary building or structure” means a building or structure constructed or erected or placed on land for a continuous period not exceeding eight months, or an addition or alteration to a building or structure that has the effect of increasing the total floor area thereof for a continuous period not exceeding eight months;

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

- (a) includes the floor area of a mezzanine and air-supported structure and the space occupied by interior walls and partitions; and
- (b) excludes any parts of the building or structure used for mechanical equipment related to the operation or maintenance of the building or structure, stairwells, elevators and washrooms; and
- (c) excludes any part of a building or structure above or below grade, used exclusively for the temporary parking of a motor vehicle or used for the provision of loading spaces; and
- (d) includes any part of a building or structure above or below grade used as a commercial parking garage; and
- (e) where a building or structure does not have any walls, the total floor area shall be the sum total of the area of land directly beneath the roof of the building and the total areas of the floors in the building or structure; and
- (f) excludes the area of any self contained structural shelf and rack storage system as defined in the Building Code Act;

“triplex” means a building or structure that is divided horizontally into three separate dwelling units, each of which has a separate entrance through a common vestibule;

“truck terminal” means a building, structure or place where, for the purpose of a common carrier, trucks or transports are rented, leased, kept for hire, or stored, or parked for remuneration or from which trucks or transports are dispatched.

“university” has the same meaning as is set out in section 171.1 of the *Education Act*;

“use” means the use of land, a building or a structure.

Rules

2. For the purpose of complying with section 6 of the Act:
 - (a) the area to which this by-law applies shall be the area described in section 3 of this by-law;
 - (b) the rules developed under paragraph 9 of subsection 5(1) of the Act for determining if a development charge is payable in any particular case and for determining the amount of the charge are set forth in sections 4 through 17 inclusive;
 - (c) the exemptions provided for by such rules shall be the exemptions set forth in sections 18 through 22 inclusive, of this by-law, the indexing of charges shall be in accordance with section 15 of this by-law, and there shall be no phasing in as provided in subsection 16(1) of this by-law; and
 - (d) the calculation of development charges payable with respect to redevelopment of land shall be in accordance with the rules set forth in section 23 of this by-law.

Lands Affected

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

Designation of Services

4. It is hereby declared by Council that all development of land within the area to which this by-law applies will increase the need for services.
5. The development charge applicable to a development as determined under this by-law shall apply without regard to the services required or used by an individual development.
6. Development charges shall be imposed under this by-law, for the following categories of services to pay for the increased capital costs required because of increased needs for services arising from development:
Transit Services

Approvals for Development

7. Development charges shall be imposed against all lands, buildings or structures within the area to which this by-law applies, if the development of such lands, buildings or structures requires any of the following approvals:
 - (a) the passing of a zoning by-law or of an amendment thereto under section 34 of the *Planning Act*;
 - (b) the approval of a minor variance under section 45 of the *Planning Act*;
 - (c) a conveyance of land to which a by-law passed under subsection 50(7) of the *Planning Act* applies;
 - (d) the approval of a plan of subdivision under section 51 of the *Planning Act*;
 - (e) a consent under section 53 of the *Planning Act*;
 - (f) the approval of a description under section 9 of the *Condominium Act*; or
 - (g) the issuing of a permit under the *Building Code Act* in relation to a building or structure.
8. No more than one development charge for each service designated in section 6 of this by-law shall be imposed upon any lands, buildings or structures to which this by-law applies even though two or more of the

actions described in section 7 are required before the lands, buildings or structures can be developed.

9. Notwithstanding section 8, if two or more of the actions described in section 7 occur at different times, additional development charges shall be imposed in respect of any increased or additional development permitted by that action.
10. Where a development requires an approval described in section 7 after the issuance of a building permit and no development charge has been paid, then the development charge shall be paid prior to the granting of the approval required under section 7.
11. If a development does not require a building permit but does require one or more of the approvals described in section 7, then the development charge shall nonetheless be payable in respect of any increased or additional development permitted by such approval required for the increased or additional development being granted, and such development charge shall be paid prior to the granting of the approval required.

Calculation of Development Charges

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

Amount of Charge – Residential

13. (1) The development charges described in Schedule A to this by-law shall be imposed on residential uses of lands, buildings or structures, including a dwelling unit accessory to a non-residential use and, in the case of a mixed use building or structure, on the residential component of the mixed use building or structure, according to the type of residential use.

- (2) Despite subsection 13(1), the development charges described in Schedule A to this by-law for dwelling units larger than 750 square feet in apartment dwellings shall be imposed on all dwelling units in single detached dwellings, semi-detached dwellings and multiple-dwellings constructed in a planned seniors retirement community, provided that the zoning by-law in force for the planned seniors retirement community limits the number of bedrooms in any dwelling unit to 2 bedrooms, and the number of dwelling units in the community and the maximum floor area of the dwelling units to amounts determined by Council in the zoning by-law.
- (3) If the development charges required to be paid by subsection 13(1) and subsection 13(2), or any part of them remains unpaid after they are payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes in accordance with subsection 32(1) of the Act.

Amount of Charge – Non-Residential

14. (1) The development charges described in Schedule B to this by-law shall be imposed on non-residential uses of lands, buildings or structures and, in the case of a mixed use building or structure, on the non-residential component of the mixed use building or structure, and calculated with respect to each of the services according to the total floor area of the non-residential use.
- (2) Despite clause (1), development charges shall not be imposed on the mechanical portions of buildings that service residential units and which are situated on the same land as all of the residential units that they service.
- (3) If the development charges required to be paid by subsection 14(1), or if any part of them remains unpaid after they are payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes in accordance with subsection 32(1) of the Act.

Indexing of Development Charges

15. The development charges set out in Schedules A and B, shall be adjusted, without amendment to this by-law, semi-annually on

February 1st and August 1st in each year, commencing February 1st, 2010, in accordance with the Statistics Canada Quarterly, Construction Price Statistics (catalogue number 62-007) with the base index value being that in effect on August 1, 2009.

Phasing, Timing of Calculation and Payment

16. (1) The development charges set out in this by-law are not subject to phasing in and are payable in full from the effective date of this by-law, subject to applicable exemptions, credits, and discounts;
- (2) Subject to section 23 of this by-law (with respect to redevelopment) and subsection 16(3) below, the development charge shall be calculated as of, and shall be payable, on the date the first building permit is issued in relation to a building or structure on the land to which the development charge applies;
- (3) Where a development charge applies to land in relation to which a building permit is required, no building permit shall be issued until the development charge has been paid in full;
- (4) Notwithstanding subsection 16(3), the City may, in its sole discretion, require an owner to enter into an agreement, including the provision of security for the owner's obligations under agreement, pursuant to section 27 of the Act, providing for all or part of a development charge to be paid before or after it otherwise would be payable. In that event, the terms of such agreement shall then prevail over the provision of this by-law.

Payment By Money or the Provision of Services

17. (1) Payment of development charges shall be by cash or by certified cheque.
- (2) In the alternative to payment by the means provided in subsection (1), the City may, by an agreement entered into with the owner, accept the provision of services in full or partial satisfaction of the development charge otherwise payable, provided that:
 - (a) if the City and the owner cannot agree as to the reasonable cost of doing the work under subsection (2), the dispute

shall be referred to Council, whose decision shall be final and binding;

- (b) if the credit exceeds the amount of the charge for the service to which the work relates,
 - (i) the excess amount shall not be credited against the charge for any other service, unless the City has so agreed in an agreement entered into under section 38 of the Act; and
 - (ii) in no event shall the City be required to make a cash payment to the credit holder.
 - (c) notwithstanding the repeal of [By-law 223-2004](#), any credits owing to a landowner, or previous landowner, pursuant to an agreement entered into under section 38 of the Act, prior to the enactment of this by-law, may, at the City's sole discretion, be recognized and used as a credit under this by-law, pursuant to section 41 of the Act; or
 - (d) any credits owing to a landowner, or previous landowner, pursuant to an agreement entered into under section 38 of the Act, either prior to, or after, the enactment of this by-law, which credits do not relate to the category of services covered by this by-law, may, at the City's sole discretion, be recognized and used as a credit under this by-law, pursuant to section 41 of the Act.
- (3) Nothing in this by-law prevents Council from requiring, as a condition of an agreement under sections 51 or 53 of the *Planning Act*, that the owner, at his or her own expense, install such local services related to a plan of subdivision or within the area to which the plan relates, as Council may require, and/or that the owner pay for local connections to storm drainage facilities installed at the owner's expense, and/or administrative, processing, or inspection fees.

Rules with Respect to Exemptions for Intensification of Existing Housing

18. (1) This by-law does not apply with respect to approvals related to the residential development of land, buildings or structures that would have the effect only,
- (a) of permitting the enlargement of an existing dwelling unit;

- (b) of creating one or two additional dwelling units in an existing single detached dwelling unit;
 - (c) of creating one additional dwelling unit in an existing semi detached dwelling unit; or
 - (d) of creating one additional dwelling unit for any other existing residential building.
- (2) Notwithstanding clauses (1)(b) to (d), a development charge shall be imposed with respect to the creation of one or two additional dwelling units in a dwelling, if the total floor area of the additional one or two dwelling units exceeds the total floor area of the existing dwelling unit in clause (1)(b) and (1)(c), and the smallest existing dwelling unit in clause (1)(d).

Rules with Respect to Industrial Expansion Exemption

19. (1) If a development includes the enlargement of the gross floor area of an existing industrial building, the amount of the development charge that is payable under this by-law, is the following:
- (a) if the gross floor area is enlarged by 50 per cent or less, the amount of the development charge in respect of the enlargement is zero; and
 - (b) if the gross floor area is enlarged by more than 50 per cent, development charges are payable on the amount by which the enlargement exceeds 50 per cent of the gross floor area before the enlargement.
- (2) For the purpose of this section, the terms “gross floor area” and “existing industrial building” shall have the same meaning as those terms have in the Regulation made under the Act.
- (3) For the purpose of interpreting the definition of “existing industrial building” contained in the Regulation, regard shall be had for the classification of the lands in question pursuant to the *Assessment Act*, R.S.O. 1990, c.A.31, and in particular:

- (a) whether the lands fall within a tax class such that taxes on the lands are payable at the industrial tax rate; and
 - (b) whether more than fifty per cent (50%) of the gross floor area of the building or structure has an industrial property code for assessment purposes;
- (4) Despite subsection (3), distribution centres, warehousing, the bulk storage of goods and truck terminals shall be considered industrial uses.
- (5) For the purpose of the application of section 4 of the Act to the operation of this by-law:
- (a) the gross floor area of an existing industrial building shall be calculated as it existed prior to the first enlargement in respect of that building for which an exemption under section 4 of the Act is sought; and
 - (b) the enlargement of the gross floor area of the existing building must:
 - (i) be attached to the existing industrial building
 - (ii) not be attached to the existing industrial building by means only of a tunnel, bridge, canopy, corridor or other passageway, shared below-grade connection, foundation, footing, parking facility, service tunnel or service pipe;
 - (iii) be for use or in connection with an industrial purpose as set out in this by-law; and
 - (iv) constitute a bone fide increase in the size of the existing building.

Categories of Exempt Institutions

20. (1) The following categories of institutions are hereby designated as being exempt from the payment of development charges:

- (a) land, buildings or structures used as hospitals governed by the *Public Hospitals Act*, R.S.O. 1990, c. P. 40;
 - (b) land, buildings or structures owned by and used for the purposes of the City, the Region, or their local boards as required by the Act;
 - (c) land, buildings or structures owned by a board of education and used only for school purposes as required by the Act;
 - (d) land, buildings or structures owned by and used for the purposes of a college or university;
 - (e) that portion of land, buildings or structures owned by a church or religious organization which is used only as a place of worship; and
 - (f) land, buildings or structures used only for the purpose of a temporary office for new residential sales.
- (2) The exemption referred to in this paragraph 20(1)(b) does not apply to the development for residential uses of lands owned by:
- (a) the Region or any local board thereof, including the Peel Children's Aid Society; or
 - (b) any corporation owned, controlled, or operated by the Region, including Peel Non-Profit Housing Corporation.

Agricultural Uses

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

Temporary Buildings or Structures

22. (1) Temporary buildings or structures shall be exempt from the provisions of this by-law, so long as the status as a temporary building or structure is maintained in accordance with the provisions of this by-law;

- (2) In the event that a temporary building or structure becomes protracted, it shall be deemed not to be, or ever to have been a temporary building or structure, and the development charges required to be paid under this by-law shall become payable on the date the temporary building or structure becomes protracted; and
- (3) Prior to the City issuing a building permit for a temporary building or structure, the City may require an owner to enter into an agreement, including the provision of security for the owner's obligation under the agreement, pursuant to section 27 of the Act, providing for all or part of the development charge required by subsection 22(2) to be paid after it would otherwise be payable. The terms of such agreement shall then prevail over the provisions of this by-law.

Rules with Respect to the Redevelopment of Land

23. (1) Where there is a redevelopment of land on which there is a conversion of space proposed, or on which there was formerly erected a building or structure that has been demolished or will be demolished within a period no longer than 4 months from the date of issuance of a building permit, a credit shall be allowed against the development charge otherwise payable by the owner pursuant to this by-law, for the portion of the previous building or structure still in existence that is being converted or for the portion of the building or structure that has or will be demolished, as the case may be, calculated by multiplying the number and type of dwelling units being converted or demolished or the non-residential total floor area being converted or demolished by the relevant development charge in effect on the date when the development charge is payable in accordance with this by-law.
- (2) If a credit has been allowed against the development charge otherwise payable and a building permit for the redevelopment has been issued, in advance of the occurrence of the demolition, the owner must complete and provide proof of the demolition no later than 4 months after the issuance of the building permit or the amount for which the development charge credit was provided shall become fully payable.

- (3) A credit in respect of any demolition under this section shall not be given unless the demolition permit was issued on or after October 28, 1991.
- (4) The amount of any credit hereunder shall not exceed, in total, the amount of the development charges otherwise payable under this by-law with respect to the redevelopment.
- (5) For the purposes of this section, dwelling units or total floor area accidentally destroyed by fire shall be deemed to have been demolished under a demolition permit issued on the date of the fire.

Interest

- 24. The City shall pay interest on a refund under subsections 17(3), (5) and 24(2) of the Act at a rate equal to the Bank of Canada rate on the date this by-law comes into effect.

Front Ending Agreements

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

Schedules

- 26. The following Schedules to this by-law form an integral part of this by-law:

Schedule 'A'	Residential Development Charges
Schedule 'B'	Non-residential Development Charges

By-law Registration

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

Date By-law Effective

28. This by-law comes into force and effect on XXXXXX XX, 2009.

Date By-law Expires

29. This by-law expires five years after the date on which it comes into force and effect.

Repeal

30. By-law No. 223-2004 is hereby repealed, effective on the date this by-law comes into force and effect.

Headings for Reference Only

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

Interpretation

32. All words defined in the Act or the Regulation have the same meaning in this by-law as they have in the Act or the Regulation, unless they are defined differently in this by-law.

33. All references to the provisions of any statute or regulation or to the Ontario Building Code contained in this by-law shall also refer to the same or similar provision in the statute or regulation or code as amended, replaced, revised or consolidated from time to time.

Severability

34. If, for any reason, any provision, section, subsection or paragraph of this by-law is held invalid, it is hereby declared to be the intention of Council that all the remainder of this by-law shall continue in full force and effect until repealed, re-enacted or amended, in whole or in part or dealt with in any other way.

Short Title

35. This by-law may be referred to as the City of Brampton Development

Charges By-law for Transit Services, 2009.

READ A FIRST, SECOND, AND THIRD TIME, AND PASSED IN OPEN
COUNCIL THIS XXth DAY OF AUGUST, 2009.

THE CORPORATION OF THE CITY OF BRAMPTON

Original signed by
Susan Fennell, Mayor

Original Signed by
Peter Fay, City Clerk

Approved as to Content
Original Signed by Maurice Lewis

Approved as to Form
Original Signed by Colin Grant

Schedule A to By-Law xxx-2009
Residential Development Charge

Service Category	Charge for Singles/Semis	Charge for Rows	Charge for Apartment >750 Sq.Ft.	Charge for Apartment <= 750 Sq.Ft.
Transit Services	\$1,434.24	\$1,183.25	\$968.11	\$537.84

Schedule B to By-Law xxx-2009
Non-Residential Development Charge

Service Category	Non-Residential Charge per Sq.M.
Transit Services	\$5.56

ROADS SUMMARY

The Works and Transportation Department is responsible for the design, construction and maintenance of the City's extensive network of public roads.

This section provides a brief outline of the Engineering services which include roads, structures, sidewalks, streetlights, intersection improvements, landscaping, traffic signals, and so on. The results are based on work completed by iTrans Consulting who are currently working on the City's TTMP update. A "Roads – Supplementary" section can be found subsequent to this section that provides specific justification for the TTMP results based on a needs assessment of the current network (Source: TTMP Update Appendix F – iTrans Consulting Inc.). Watson and Associates Economists Ltd. provided specific input into the Development Charge review of Roads in addition to the input received from Hemson Consulting Ltd. on the overall DC program. A substantial portion of the commentary on service level analysis was provided by Watson and Associates Economists Ltd.

The first four subsections below describe service level analysis, growth/non-growth cost sharing assumptions, costing assumptions and cost estimates that were determined by iTrans. This work formed an integral part of the Transit and Transportation Master Plan update. The final two subsections address the issue of cash flow assumptions and the adjusted timing of the roads program as well as the resultant financial outcomes of these adjustments.

A. SERVICE LEVEL ANALYSIS

The City's 2004 DC Background Study measured the roads level of service using a screenline analysis for the period 1994-2003. This analysis indicated that the City had experienced deterioration in the roads level of service over that period. It further indicated that additional deterioration in average service levels for roads was expected by 2013, despite the significant capital program that was proposed.

Paragraph 4 of subsection 5(1) of the DCA, 1997 states that the estimate of the increase in the need for service attributable to the anticipated development, made under paragraph 2 must not include an increase that would result in the level of service exceeding the average level provided in the City over the 10 year period preceding the preparation of the background study.

s.s. 4(3) of O.Reg. 82/98 provides for an exception, such that:

"If the average level of service determined is lower than the standard level of service required under another Act, the standard level of service

required under the other Act may be deemed ... to be the average level of service.”

Section 4 of the Regulation also provides that:

- Both the quantity and quality of a service shall be taken in to account in determining the average level of service.
- A geographic area of the municipality may be excluded in determining the average level of service, if the service is not provided there and the area is identified in the by-law. However, the average level of service so determined, cannot exceed that which would be determined if the by-law applied to the whole municipality.

A commonly-used quantity measure is units per capita (e.g. lane kms, square feet, m³ capacity, hectares, etc.), while quality can be measured in terms of cost per unit, engineering standards or recognized performance measurement systems, depending on circumstances.

In the case of the 2009 – 2031 Brampton roads program, the two levels of service measures being used are:

- Quality – volume over capacity (V/C) for the Brampton road network, based on screenline volumes, excluding freeways, but including both Brampton and Peel roads;
- Quantity – lane km/population and employment

V/C data for 2006 has been compared with data for 2031 based on traffic model simulation with the following results:

<u>Simulated 2006 LOS</u>		<u>Forecast 2021 LOS</u>	
Peak Dir volume (pc/hr)	129,800	Peak Dir volume (pc/hr)	204,000
Peak Dir Capacity (pc/hr)	173,500	Peak Dir Capacity (pc/hr)	247,800
V/C	0.75	V/C	0.82

<u>Forecast 2031 LOS</u>	
Peak Dir volume (pc/hr)	215,300
Peak Dir Capacity (pc/hr)	265,600
V/C	0.81

Thus, based on this measure, the 2031 level of service is expected to be less favourable than the 2006 level (which is generally reflective of 1999-2008).

The lane km/capita measure completed by ITrans and Watson and Associates Economists Ltd. indicated that the City could add 606 additional lane kms 2009 – 2031 without exceeding its historical average level of service. By 2031, the City’s overall lane kms are expected to increase by approximately 545. Once again,

the City's roads level of service is expected to deteriorate over the planning period.

Consistent with section 5(1)4 of the DCA, since the forecast average service level for the 2009-2031 period service level is worse than the historical level of service, it is determined that all roads and related projects are 100% growth-related.

B. GROWTH/NON-GROWTH COST SHARING

Even though all roads and related projects have been determined to be 100% growth related in the service level analysis, certain portions of future projects have a non-growth component representing benefits to existing residents. The following table outlines these growth/non-growth splits and associated rationale.

Type of Road-related Capital Improvement	Benefit to Existing Development Treatment and Rationale
1. Road Widening	Approx. 5% deduction to cover the estimated rehabilitation cost of the existing asset. The deduction relates to the varying net extension of the functional life thereof and the provision of a smoother road surface. The same deduction was made for BRT and primary corridors.
2. New Road Alignment	No deduction (with limited exceptions), based on the fact that the level of service in the overall road network is deteriorating, even with construction of the 2009 – 2031 capital program.
3. Provincial Freeway Interchanges	These improvements create new access points and reduce congestion at upstream and downstream interchanges; however, these benefits are largely offset, in most cases, by the increased traffic congestion created by growth. As a result, no deduction was made.
4. Railway Grade Separations / Flyovers	These projects are designed to address capacity deficiencies in the road network resulting from growth in traffic. Where there is a level crossing in place currently, there is an existing benefit in the form of a limited safety improvement and the elimination of delays due to train movements. A 5% deduction has been made in order to address these considerations.
5. Road Reconstruction	A major reconstruction without lane expansion typically serves to increase road capacity relating to improvements in alignment, road reconfiguration and pavement structure, and in some cases, to address road damage caused by heavy construction traffic. An 80% deduction has been made, in order to appropriately address growth-related needs.
6. Intersection Improvements	Where they form part of a roadway widening or new road alignment project, the same deduction has been applied as in the case of the road itself (e.g. 5% and 0%). A 5% deduction is applicable in the case of signalization of the unspecified intersection projects/year, in order to recognize that traffic management projects may produce geometric improvements and updated signal technology.
7. Noise Walls	An average 25% BTE deduction has been made to account for both fully growth-related new noise walls and replacement noise walls which are partially growth-related.
8. Sidewalks	Where they form part of a road widening or new road alignment project, the same deduction has been applied as in the case of the road itself. Where missing sidewalks links are being added as a result of growth, no deduction was made.

C. COST ASSUMPTIONS

The costing of future road related needs is based on the costing assumptions on the following pages.

Table 1: Road Treatments

ROAD TREATMENT	Unit	Unit Price
2-4UC-WR	per km	\$2,935,961
2-4UMA-WR	per km	\$3,006,179
2-4UA-WR	per km	\$3,008,590
2-6UA-WR	per km	\$3,510,008
4-6UA-WR	per km	\$3,545,372
2-4UAO-WR	per km	\$3,186,700
2-4UC-WS	per km	\$2,448,653
2-4UMA-WS	per km	\$2,608,593
2-4UA-WS	per km	\$2,608,593
4-6UA-WS	per km	\$2,643,702
2-6UA-WS	per km	\$3,135,224
4-6UAI-WS	per km	\$1,320,418
6-8UAI-WS	per km	\$1,320,418
2UC-NC	per km	\$2,605,439
4UC-NC	per km	\$3,031,624
4UMA-NC	per km	\$3,009,112
4UA-NC	per km	\$3,104,288
6UA-NC	per km	\$3,623,632
8UA-NC	per km	\$4,132,275
2RU-PAVE	per km	\$595,597
4RU-PAVE	per km	\$955,941
2RUC-RR	per km	\$706,987
2UUC-RR	per km	\$639,989
2UUMA-RR	per km	\$546,497
2RUMA-RR	per km	\$717,714
4RUA-RR	per km	\$1,395,861
4RUA-RR	per km	\$1,395,861

Table 2: Construction Items

CONSTRUCTION ITEM	UNIT	UNIT PRICE
Excavation	m3	\$15
Remove Asphalt (full and Partial Depth)	m2	\$4
Remove Curb and Gutter	m	\$8
Remove and Dispose of existing Manintenance Holes or Catchbasins	each	\$420
Remove Culverts, Sewer, Catchbasin Leads all sizes	m	\$40
Hot Mix HL1	tonne	\$113
Hot Mix HL3	tonne	\$73
Hot Mix HL8	tonne	\$83
Granular A Base (all depths)	tonne	\$19
Granular B Subbase (all depths)	tonne	\$20

Cold Plane (grind) (all depths)	m2	\$12
Install Concrete Curb & Gutter (all types)	m	\$52
Supply and Install Asphalt Pad (all depths)	m2	\$31
Supply and Install Concrete Islands	m2	\$70
Supply and Install Catchbasin Leads including appropriate fittings, Class 'B' bedding and Granular Backfill	m	\$216
Supply and Install Storm, Sewer Pipes (all sizes and type)	m	\$453
Supply and Install Manhole, Maintenance Holes (all sizes)	each	\$5,468
Adjust existing Maintenance Holes, Catchbasins, Valve Chambers & Ditch Inlets	each	\$944
Supply and Install Catchbasins (all types and sizes)	each	\$1,920
Stormceptors (all sizes)	km	\$48,291
Pavement Markings and Symbols (all types)	m	\$5

Table 3: Other Items

OTHER ITEMS	UNIT	UNIT PRICE
Street Lighting	\$/km	\$254,636
Reinstall Street Lighting	\$/km	\$199,661
Landscaping	\$/km	\$82,701
Relocate Sidewalk	\$/km	\$166,510
New Sidewalk	\$/km	\$136,854
Bikepath (offroad)	\$/km	\$124,832
Queue Jump Lane	per intersection	\$192,930
Concrete Bus Bay	per intersection	\$76,520
New Traffic Signal Installation	per intersection	\$170,625
Temporary Traffic Signal Relocation	per intersection	\$74,233
New Intersection	per intersection	\$206,279
Intersection Improvement	per intersection	\$230,236
Transit Signal Priority	per intersection	\$31,108
HOV Pavement Markings	\$/km	\$42,800
Utility Relocation	\$/km	\$336,287
Patterned Concrete	per intersection	\$39,546
Supply and Install Concrete Noise Wall	\$/km	\$1,212,000
Noise wall retrofit	\$/km	\$1,212,000
EA Study	\$/km	\$350,000
EA Study	\$/km	\$500,000
EA Study - large study from \$600,000	\$/km	\$600,000
NEW STRUCTURAL CULVERTS	\$/m2	\$3,407
STRUCTURAL CULVERTS REPLACEMENT (Including removal)	\$/m2	\$4,014
NEW BRIDGE CONSTRUCTION	\$/m2	\$3,152
BRIDGE RECONSTRUCTION (INCLUDING REMOVAL)	\$/m2	\$4,160
Supply and Install CSP Culverts 300mm (Non Structural)	\$/m	\$123
Culvert Removal (Non Structural)	\$/m	\$30
Supply and Install Culverts (450mm) (Non Structural)	\$/m	\$168

Table 4: New Intersections

NEW INTERSECTIONS	UNIT	UNIT PRICE
2 LANES WITH NEW CONSTRUCTION (2UC-NC)	per intersection	\$412,308
4 LANES WITH NEW CONSTRUCTION (4UC-NC)	per intersection	\$739,755
4 LANES WITH NEW CONSTRUCTION (4UA-NC)	per intersection	\$1,251,011
6 LANES WITH NEW CONSTRUCTION (6UA-NC)	per intersection	\$1,548,527
2-4 LANES RECONSTRUCTION- FULL BASE RECONSTRUCTION (2-4UC-WR)	per intersection	\$905,508
2-4 LANES RECONSTRUCTION- SALVAGED BASE (2-4UC-WS)	per intersection	\$726,697
2-4 LANES RECONSTRUCTION- FULL BASE RECONSTRUCTION (2-4UMA-WR)	per intersection	\$1,223,311
4-6 LANES RECONSTRUCTION- SALVAGED BASE (4-6UAI-WS)	per intersection	\$1,023,876
4-6 LANES RECONSTRUCTION- FULL BASE RECONSTRUCTION (4-6UA-WR)	per intersection	\$1,418,415
4-6 LANES RECONSTRUCTION- SALVAGED BASE (4-6UA-WS)	per intersection	\$1,023,876

D. COST ESTIMATES

The proposed DC roads program as identified from the TTMP study is presented at the back of this section.

E. CASH FLOW ASSUMPTIONS AND ADJUSTMENT TO THE TIMING OF THE ROADS PROGRAM

Although the roads program is presented in the back of this section with relevant timing as per the draft TTMP output, the DC cash flow calculation contained in this section is not congruent with this same timing. As discussed in the covering report to this study, attention was given to the affordability of the DC program and the ability of the City to internally finance the deficits associated with this program. The City identified \$300 million as an overall DC deficit position that was sustainable, that could be internally financed and that would limit financial risk to the City. As such, the roads program as presented in the TTMP was re-timed to be spread evenly over the 23 year period for the purposes of program affordability. This version of the program forms the basis for the cash flow calculations that were performed to arrive at the rates stated in the final subsection. At the time of publishing this study, the roads program has only been spread quantitatively (e.g. the total cost of the program / 23 years = \$68.1 million/year). It is anticipated that between the release of this study and the approval of a new roads DC by-law that a new program will emerge that will contemplate the actual timing of roads to be constructed within the 23 year period while keeping within the \$68.1 million / year constraint.

F. ROADS PROJECTS TOTAL \$1.679 BILLION

The growth-related capital program totals \$1.679 billion of which \$112.5 million is identified as a benefit to the existing population. There is no identified benefit beyond the current 23-year forecast period. There is no requirement to deduct 10% of the capital costs relating to the roads program as per the DCA. When the benefit to existing population is taken into account a DC eligible capital program of \$1.566 billion remains. An opening reserve balance of negative \$21.9 million has been included in the calculation of the development charge.

Based on population/employment growth split and a further split of employment growth into industrial and non-industrial types, 67% of the program is supported by residential development, 23% is supported by industrial development and 10% is supported by non-industrial development. In dollar terms, \$1.049 billion of the growth capital is charged to forecasted residential development, \$362 million is charged to forecasted industrial development and \$155 million is charged to forecasted non-industrial development.

This allocation of growth capital results in the following charge based on development type:

Small Apartment (per unit)	\$5,570.25
Large Apartment (per unit)	\$10,026.45
Row (per unit)	\$12,254.55
Single/Semi (per unit)	\$14,853.99
Industrial/Office (per m2)	\$48.03
Non-Industrial/Non-Office (per m2)	\$97.41

ROADS

ASSUMPTIONS

BASE CASE DESCRIPTION:

BASE YEAR : 2009

FINANCIAL ASSUMPTIONS:

Inflation Rate:
Financing
Investment

2.0%
5.5%
3.5%

Source:

Bank of Canada Inflation Band Mid-Point
City of Brampton Target Borrowing Rate
City of Brampton Target Earnings Rate

ALLOCATION ASSUMPTIONS:

Residential Share
Non-Residential Share

67.00% 23-year % Population/Employment Growth
33.00% 23-year % Population/Employment Growth

OPENING BALANCE FOR CASH FLOW:

(\$21,886,959)

DEVELOPMENT CHARGE SUMMARY:

	Persons Per Unit	Unadjusted Development Charge	Adjusted Breakeven Development Charge
SMALL APARTMENT	1.5	\$5,482.45	\$5,570.25
LARGE APARTMENT	2.7	\$9,868.41	\$10,026.45
Row Residential	3.3	\$12,061.39	\$12,254.55
Single/Semi Residential	4.0	\$14,619.87	\$14,853.99
INDUSTRIAL CHARGE (PER M2)		\$46.99	\$48.03
NON-RESIDENTIAL CHARGE (PER M2)		\$96.99	\$97.41

PROGRAM SUMMARY

(NOMINAL - YR \$2009)
TOTAL GROSS EXPENDITURES 2009-2018

\$1,676,874,365

LESS: BENEFIT BEYOND PERIOD

\$0

LESS: BENEFIT TO EXISTING POPULATION (NON-GROWTH)

(\$112,475,183)

LESS: PRIOR GROWTH

\$0

LESS: 10% DISCOUNT

\$0

ELIGIBLE GROWTH EXPENDITURES

\$1,566,399,183

TOTAL ELIGIBLE GROWTH EXPENDITURES

\$1,566,399,183

RESIDENTIAL/NON-RESIDENTIAL SHARE:

RESIDENTIAL

RESIDENTIAL SHARE

\$1,049,487,452

INDUSTRIAL SHARE @

23%

NON-INDUSTRIAL

\$155,073,519

GROSS POPULATION GROWTH

287,140

INDUSTRIAL SPACE GROWTH

7,699,650

NON-INDUSTRIAL SHARE @

10%

1,598,800

NET CHARGE PER CAPITA (UNADJUSTED)

\$3,654.97

NET CHARGE PER M2 (UNADJUSTED)

\$46.99

NET CHARGE PER M2 (UNADJUSTED)

\$96.99

NET CHARGE PER CAPITA (ADJUSTED)

\$3,713.50

NET CHARGE PER M2 (ADJUSTED)

\$48.03

NET CHARGE PER M2 (ADJUSTED)

\$97.41

ROADS

ELIGIBLE GROWTH EXPENDITURES (INFLATED):	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL											
RESIDENTIAL:											
Gross Eligible Growth Capital Cost	\$45,629,889	\$46,542,487	\$47,473,337	\$48,422,803	\$49,391,260	\$50,379,085	\$51,386,666	\$52,414,400	\$53,462,688	\$54,531,942	\$55,622,580
INDUSTRIAL:											
Gross Eligible Growth Capital Cost	\$15,732,096	\$16,046,738	\$16,367,673	\$16,695,026	\$17,028,927	\$17,369,505	\$17,716,895	\$18,071,233	\$18,432,658	\$18,801,311	\$19,177,337
NON-INDUSTRIAL:											
Gross Eligible Growth Capital Cost	\$6,742,327	\$6,877,173	\$7,014,717	\$7,155,011	\$7,298,111	\$7,444,074	\$7,592,955	\$7,744,814	\$7,898,711	\$8,057,705	\$8,218,859
TOTAL GROSS ELIGIBLE GROWTH COST	\$68,104,312	\$69,466,399	\$70,855,727	\$72,272,841	\$73,718,298	\$75,192,664	\$76,696,517	\$78,230,447	\$79,795,056	\$81,390,958	\$83,018,777
REVENUES (INFLATED):											
RESIDENTIAL:											
Charge per Person	\$3,713	\$3,788	\$3,864	\$3,941	\$4,020	\$4,100	\$4,182	\$4,266	\$4,351	\$4,438	\$4,527
Population Growth	12,680	7,480	6,400	6,110	14,010	18,930	24,670	21,890	17,070	14,700	13,740
TOTAL RESIDENTIAL REVENUE	\$47,087,200	\$28,332,590	\$24,726,600	\$24,078,300	\$56,314,700	\$77,613,000	\$103,170,000	\$93,374,900	\$74,270,800	\$65,238,200	\$62,197,300
INDUSTRIAL:											
Net Charge Per m ²	\$48.03	\$48.99	\$49.97	\$50.97	\$51.99	\$53.03	\$54.09	\$55.17	\$56.28	\$57.40	\$58.55
INDUSTRIAL Area Forecast (m ²)	110,000	57,050	80,000	211,850	477,000	712,800	768,600	686,520	588,600	493,200	442,800
TOTAL INDUSTRIAL REVENUE	\$5,283,300	\$2,794,900	\$3,997,700	\$10,798,000	\$24,795,000	\$37,799,200	\$41,573,400	\$37,876,400	\$33,123,500	\$28,310,000	\$25,925,300
NON-INDUSTRIAL:											
Net Charge Per m ²	\$97.41	\$99.36	\$101.35	\$103.38	\$105.44	\$107.55	\$111.14	\$114.14	\$116.42	\$118.75	\$121.10
NON-INDUSTRIAL Area Forecast (m ²)	71,500	45,000	36,300	34,400	93,800	133,100	174,600	152,500	96,200	81,000	75,100
TOTAL NON-INDUSTRIAL REVENUE	\$6,965,000	\$4,471,300	\$3,679,000	\$3,556,100	\$9,869,500	\$14,315,200	\$19,154,200	\$17,064,300	\$10,865,700	\$9,429,800	\$8,917,800
TOTAL REVENUES	\$59,335,500	\$35,598,700	\$32,403,300	\$38,432,400	\$90,983,200	\$129,727,400	\$163,897,600	\$148,315,600	\$118,260,000	\$102,978,000	\$97,040,400
FINANCING CALCULATION:											
RESIDENTIAL:											
Beginning of Year Balance	(\$14,664,263)	(\$13,987,983)	(\$33,468,084)	(\$58,681,101)	(\$86,922,539)	(\$84,658,678)	(\$61,604,396)	(\$12,303,096)	\$28,697,543	\$50,874,211	\$63,548,426
Net Annual Difference (Total Revenues-Net Expenditures)	\$1,467,311	(\$18,209,987)	(\$22,746,737)	(\$24,344,503)	\$6,923,440	\$27,233,915	\$51,783,334	\$40,960,500	\$20,808,112	\$10,706,258	\$6,574,720
Financing/Investment Adjustment In Year	\$25,503	(\$500,775)	(\$625,535)	(\$669,474)	\$121,160	\$476,594	\$906,208	\$716,809	\$364,142	\$187,360	\$115,058
Financing/Investment Adjustment Opening Balance	(\$806,534)	(\$769,339)	(\$1,840,745)	(\$3,227,461)	(\$4,780,740)	(\$4,656,227)	(\$3,388,242)	(\$1,004,414)	(\$1,780,597)	\$2,224,195	\$2,339,253
Sub-Total	(\$781,032)	(\$1,270,114)	(\$2,466,280)	(\$3,896,934)	(\$4,659,579)	(\$4,179,634)	(\$2,482,033)	\$40,138	\$1,368,556	\$1,967,957	\$2,339,253
End of Year Cumulative Balance	(\$13,987,983)	(\$33,468,084)	(\$58,681,101)	(\$86,922,539)	(\$84,658,678)	(\$61,604,396)	(\$12,303,096)	\$28,697,543	\$50,874,211	\$63,548,426	\$72,462,398
INDUSTRIAL:											
Beginning of Year Balance	(\$5,055,888)	(\$16,070,099)	(\$30,570,218)	(\$44,961,728)	(\$53,493,817)	(\$48,529,928)	(\$30,411,859)	(\$7,810,518)	\$11,911,660	\$27,276,500	\$37,906,269
Net Annual Difference (Total Revenues-Net Expenditures)	(\$10,448,796)	(\$13,251,839)	(\$12,369,973)	(\$5,897,026)	\$7,770,073	\$20,429,695	\$23,856,505	\$19,805,167	\$14,890,842	\$9,508,689	\$6,747,963
Financing/Investment Adjustment In Year	(\$287,342)	(\$364,426)	(\$340,174)	(\$162,168)	\$135,976	\$357,520	\$417,489	\$346,590	\$257,090	\$166,402	\$118,089
Financing/Investment Adjustment Opening Balance	(\$278,074)	(\$883,855)	(\$1,681,362)	(\$2,472,895)	(\$2,942,160)	(\$2,669,146)	(\$1,672,652)	(\$416,908)	\$416,908	\$954,678	\$1,326,719
Sub-Total	(\$565,416)	(\$1,248,281)	(\$2,021,536)	(\$2,635,063)	(\$2,806,184)	(\$2,311,626)	(\$1,255,163)	(\$82,988)	\$673,998	\$1,121,080	\$1,444,809
End of Year Cumulative Balance	(\$16,070,099)	(\$30,570,218)	(\$44,961,728)	(\$53,493,817)	(\$48,529,928)	(\$30,411,859)	(\$7,810,518)	\$11,911,660	\$27,276,500	\$37,906,269	\$46,099,040
NON-INDUSTRIAL:											
Beginning of Year Balance	(\$2,165,809)	(\$2,059,414)	(\$4,644,716)	(\$8,327,625)	(\$12,483,526)	(\$10,553,732)	(\$4,142,816)	\$7,392,896	\$17,134,224	\$20,751,816	\$22,874,236
Net Annual Difference (Total Revenues-Net Expenditures)	\$222,673	(\$2,405,873)	(\$5,335,717)	(\$3,598,911)	\$2,571,389	\$6,871,126	\$11,561,245	\$9,319,486	\$2,965,989	\$1,372,095	\$698,941
Financing/Investment Adjustment In Year	\$3,897	(\$86,162)	(\$91,732)	(\$98,970)	\$44,999	\$120,245	\$202,322	\$163,091	\$51,905	\$24,012	\$12,231
Financing/Investment Adjustment Opening Balance	(\$119,174)	(\$113,268)	(\$255,459)	(\$458,019)	(\$696,594)	(\$927,855)	(\$227,855)	\$258,751	\$599,698	\$726,314	\$800,598
Sub-Total	(\$115,278)	(\$179,428)	(\$347,192)	(\$556,969)	(\$841,595)	(\$460,211)	(\$25,633)	\$421,842	\$651,603	\$750,325	\$812,830
End of Year Cumulative Balance	(\$2,059,414)	(\$4,644,716)	(\$9,327,625)	(\$12,483,526)	(\$10,553,732)	(\$4,142,816)	\$7,392,896	\$17,134,224	\$20,751,816	\$22,874,236	\$24,386,007
TOTAL CUMULATIVE BALANCE	(\$32,117,496)	(\$68,683,019)	(\$111,970,453)	(\$152,899,861)	(\$143,742,337)	(\$96,159,071)	(\$12,720,719)	\$57,743,427	\$98,502,527	\$124,328,931	\$142,947,446

ROADS

ELIGIBLE GROWTH EXPENDITURES (INFLATED):	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
RESIDENTIAL:												
Gross Eligible Growth Capital Cost	\$56,735,032	\$57,869,733	\$59,027,127	\$60,207,670	\$61,411,823	\$62,640,060	\$63,892,861	\$65,170,718	\$66,474,132	\$67,803,615	\$69,159,687	\$70,542,881
INDUSTRIAL:												
Gross Eligible Growth Capital Cost	\$19,560,884	\$19,952,102	\$20,351,144	\$20,758,167	\$21,173,330	\$21,596,797	\$22,028,733	\$22,469,307	\$22,918,693	\$23,377,067	\$23,844,609	\$24,321,501
NON-INDUSTRIAL:												
Gross Eligible Growth Capital Cost	\$8,383,236	\$8,550,901	\$8,721,919	\$8,896,357	\$9,074,284	\$9,255,770	\$9,440,885	\$9,629,703	\$9,822,297	\$10,016,743	\$10,219,118	\$10,423,500
TOTAL GROSS ELIGIBLE GROWTH COST	\$84,679,152	\$86,372,735	\$88,100,190	\$89,862,194	\$91,659,438	\$93,492,626	\$95,362,479	\$97,269,728	\$99,215,123	\$101,199,426	\$103,223,414	\$105,287,882

REVENUES (INFLATED):

RESIDENTIAL:												
Charge per Person	\$4,617	\$4,710	\$4,804	\$4,900	\$4,998	\$5,098	\$5,200	\$5,304	\$5,410	\$5,518	\$5,628	\$5,741
Population Growth	12,610	12,380	11,650	11,720	11,770	11,680	11,570	11,090	10,270	9,250	8,250	7,220
TOTAL RESIDENTIAL REVENUE	\$58,223,800	\$58,305,000	\$55,964,300	\$57,426,600	\$58,825,100	\$59,542,700	\$60,161,600	\$58,819,000	\$55,559,300	\$51,042,100	\$46,434,500	\$41,450,000
INDUSTRIAL:												
Net Charge Per m ²	\$59.72	\$60.91	\$62.13	\$63.37	\$64.64	\$65.94	\$67.25	\$68.60	\$69.97	\$71.37	\$72.80	\$74.25
INDUSTRIAL Area Forecast (m ²)	392,400	354,780	267,300	222,300	204,300	207,000	206,910	218,700	245,700	256,050	248,400	247,590
TOTAL INDUSTRIAL REVENUE	\$23,433,900	\$21,611,000	\$16,607,900	\$14,088,200	\$13,206,400	\$13,648,600	\$13,915,500	\$15,002,600	\$17,191,900	\$18,274,400	\$18,083,000	\$18,364,900
NON-INDUSTRIAL:												
Net Charge per m ²	\$121.12	\$123.54	\$126.01	\$128.53	\$131.11	\$133.73	\$136.40	\$139.13	\$141.91	\$144.75	\$147.65	\$150.60
NON-INDUSTRIAL Area Forecast (m ²)	67,500	65,200	50,200	50,600	50,600	50,200	48,600	55,300	50,200	44,200	39,900	34,000
TOTAL NON-INDUSTRIAL REVENUE	\$8,175,700	\$8,055,000	\$6,325,900	\$6,503,900	\$6,633,900	\$6,715,100	\$6,629,100	\$7,693,900	\$7,124,000	\$6,396,000	\$5,891,100	\$5,120,400
TOTAL REVENUES	\$89,833,400	\$87,971,000	\$78,898,100	\$78,018,700	\$78,665,400	\$79,904,400	\$80,706,200	\$81,515,500	\$79,675,200	\$75,714,500	\$70,408,600	\$64,954,900

FINANCING CALCULATION:

RESIDENTIAL:												
Beginning of Year Balance	\$72,462,398	\$76,513,404	\$79,634,258	\$79,274,402	\$79,191,456	\$79,305,299	\$78,898,448	\$77,826,023	\$74,023,543	\$65,399,377	\$50,465,898	\$28,882,075
Net Annual Difference (Total Revenues-Net Expenditures)	\$1,488,768	\$435,267	(\$3,062,827)	(\$2,781,070)	(\$2,586,723)	(\$3,097,360)	(\$3,731,261)	(\$6,351,719)	(\$10,914,832)	(\$16,761,515)	(\$22,725,187)	(\$29,092,881)
Financing/Investment Adjustment In Year	\$26,053	\$7,617	(\$84,228)	(\$76,479)	(\$71,135)	(\$85,177)	(\$102,610)	(\$174,672)	(\$300,158)	(\$460,942)	(\$624,943)	(\$800,054)
Financing/Investment Adjustment Opening Balance	\$2,536,184	\$2,677,969	\$2,787,199	\$2,774,604	\$2,771,701	\$2,775,685	\$2,761,446	\$2,723,911	\$2,590,824	\$2,288,978	\$1,766,306	\$1,010,873
Sub-Total	\$2,562,237	\$2,685,586	\$2,702,971	\$2,698,125	\$2,700,566	\$2,680,508	\$2,658,836	\$2,549,239	\$2,290,666	\$1,828,037	\$1,141,364	\$270,818
End of Year Cumulative Balance	\$76,513,404	\$79,634,258	\$79,274,402	\$79,191,456	\$79,305,299	\$78,898,448	\$77,826,023	\$74,023,543	\$65,399,377	\$50,465,898	\$28,882,075	\$0
INDUSTRIAL												
Beginning of Year Balance	\$46,099,040	\$51,653,300	\$55,149,094	\$53,233,130	\$48,242,898	\$41,745,379	\$35,039,695	\$27,929,738	\$21,235,237	\$16,094,190	\$11,414,496	\$5,893,951
Net Annual Difference (Total Revenues-Net Expenditures)	\$3,873,016	\$1,659,898	(\$3,743,244)	(\$6,669,967)	(\$7,948,197)	(\$7,948,197)	(\$8,113,233)	(\$7,466,707)	(\$5,726,793)	(\$5,102,667)	(\$5,761,609)	(\$5,937,001)
Financing/Investment Adjustment In Year	\$67,778	\$29,031	(\$102,939)	(\$183,424)	(\$219,091)	(\$218,575)	(\$223,114)	(\$205,334)	(\$157,487)	(\$140,323)	(\$158,444)	(\$163,268)
Financing/Investment Adjustment Opening Balance	\$1,613,466	\$1,807,865	\$1,990,218	\$1,863,160	\$1,688,501	\$1,461,088	\$1,226,989	\$977,541	\$743,233	\$563,297	\$399,507	\$206,288
Sub-Total	\$1,681,244	\$1,836,896	\$1,887,279	\$1,679,735	\$1,469,411	\$1,242,513	\$1,003,275	\$772,206	\$585,746	\$422,973	\$241,063	\$43,021
End of Year Cumulative Balance	\$51,653,300	\$55,149,094	\$53,233,130	\$48,242,898	\$41,745,379	\$35,039,695	\$27,929,738	\$21,235,237	\$16,094,190	\$11,414,496	\$5,893,951	\$0
NON-INDUSTRIAL:												
Beginning of Year Balance	\$24,386,007	\$25,025,274	\$25,392,656	\$25,819,489	\$22,194,922	\$20,464,249	\$18,567,904	\$16,328,672	\$14,911,137	\$12,660,527	\$9,383,332	\$5,284,710
Net Annual Difference (Total Revenues-Net Expenditures)	(\$207,536)	(\$495,901)	(\$2,396,019)	(\$2,382,457)	(\$2,440,384)	(\$2,542,670)	(\$2,811,785)	(\$1,955,803)	(\$2,698,297)	(\$3,620,743)	(\$4,328,018)	(\$5,303,100)
Financing/Investment Adjustment In Year	(\$5,707)	(\$13,637)	(\$65,891)	(\$83,793)	(\$67,111)	(\$69,923)	(\$77,324)	(\$73,235)	(\$74,203)	(\$95,570)	(\$119,020)	(\$145,835)
Financing/Investment Adjustment Opening Balance	\$653,510	\$675,920	\$688,743	\$693,682	\$716,249	\$716,249	\$649,877	\$571,504	\$521,890	\$443,118	\$328,417	\$184,265
Sub-Total	\$647,803	\$662,282	\$622,852	\$767,890	\$709,712	\$646,325	\$572,553	\$518,269	\$447,687	\$343,548	\$208,396	\$38,430
End of Year Cumulative Balance	\$25,025,274	\$25,392,656	\$23,819,489	\$22,194,922	\$20,464,249	\$18,567,904	\$16,328,672	\$14,911,137	\$12,660,527	\$9,383,332	\$5,284,710	\$0
TOTAL CUMULATIVE BALANCE	\$153,192,978	\$160,176,008	\$156,327,020	\$149,629,276	\$141,514,927	\$132,506,047	\$122,084,432	\$110,169,918	\$94,154,094	\$71,263,726	\$40,040,735	\$0

ROADS - EXPLANATION OF GROWTH RELATED CAPITAL PROGRAM CODES

Jurisdiction

Code	Description
COB	City of Brampton
ROP	Region of Peel
MTO	Ministry of Transportation Ontario

Implementation Type

Treatment Code	Cross-section	Work Type	Lanes From	Lanes To	Road Class
2-4UC-WR	Urban	Widening with Full Base Reconstruction	2	4	Major collector
2-4UA-WR	Urban	Widening with Full Base Reconstruction	2	4	Arterial road
2-4UAO-WR*	Urban	Widening with Full Base Reconstruction	2	4	Arterial road
2-4UMA-WR	Urban	Widening with Full Base Reconstruction	2	4	Minor arterial road
4-6UA-WR	Urban	Widening with Full Base Reconstruction	4	6	Arterial road
2-4UC-WS	Urban	Widening with Salvaged base	2	4	Major collector
2-4UMA-WS	Urban	Widening with Salvaged base	2	4	Minor arterial road
4-6UA-WS	Urban	Widening with Salvaged base	4	6	Arterial road
4-6UAI-WS**	Urban	Widening with Salvaged base	4	6	Arterial road
6-8UAI-WS**	Urban	Widening with Salvaged base	6	8	Arterial road
2UA-NC	Urban	New Construction	0	2	Arterial road
2UC-NC	Urban	New Construction	0	2	Major collector
4UA-NC	Urban	New Construction	0	4	Arterial road
4UC-NC	Urban	New Construction	0	4	Major collector
4UMA-NC	Urban	New Construction	0	4	Minor arterial road
6UA-NC	Urban	New Construction	0	6	Arterial road
2RA-RR	Rural	Reconstruct & Repave	2	2	Arterial road
2UA-RR	Urban	Reconstruct & Repave	2	2	Arterial road

* Building the outer curb lane in either direction at the ultimate 6-lane configuration location with a large grassed median to accommodate future widening.

** Building the two inner lanes to complete 6 or 8 lane configuration.

ROADS - GROWTH RELATED CAPITAL PROGRAM (as per draft TTMP update)

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
2009 Roads									
Cottrelle Boulevard	McVean Drive	Mid concession	COB	1.000	4UMA-NC	2,518,174		2,518,174	
Countryside Drive	Dixie Road	Bramalea Road	COB	1.400	2-4UMA-WR	8,977,587		8,528,708	448,879
Dixie Road	Steeles Avenue	Clark Boulevard	ROP	2.500	ROP Road	416,274		395,461	20,814
Ebenezer Road	The Gore Road	Clarkway valley		0.700		1,000,000	500,000	500,000	
Fogal Road	Hwy 50	The Gore Road	COB	0.300	2-4UMA-WR	2,636,567		1,318,284	1,318,284
Hwy 410 Extension - MTO			MTO	11.200	4UA-NC	5,000,000		5,000,000	
Intersection improvements	Various Locations - Region		COB		Intersection	1,096,000		1,096,000	
Intersection improvements	Various Locations - City		COB		Intersection	790,000		750,000	40,000
McLaughlin Road	Southern Boundary	Steeles Avenue	COB	2.000	2-4UMA-WR	7,325,482		6,959,207	366,274
McVean Drive	Queen Street	Cottrelle Boulevard	COB	1.700	2-4UMA-WR	9,751,107		9,263,551	487,555
Property Acquisition	Various Locations		COB		Property	10,500,000		10,500,000	
Queen Street	Kennedy Road	Hwy 410	COB	1.400	4-6UA-WS	6,708,550		6,373,123	335,428
Sidewalks	Various Locations		COB		Sidewalks	3,155,000		3,155,000	
Signals	Various Locations		COB		Signals	1,060,000		1,007,000	53,000
Wantless Drive	McLaughlin Road	Chinguacousy Road	COB	1.300	2-4UMA-WR	5,981,560		5,682,482	299,078
Sub-Total - Roads for 2009						\$66,916,301	\$500,000	\$63,046,990	\$3,369,312
Gateways									
Hurontario & Williams Parkway Intersection Improvement			COB		Gateways	195,000		185,250	9,750

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Hurontario Street & Mayfield Road			COB		Gateways	312,500		296,875	15,625
North East Corner of Hwy 410 & Hwy 407			COB		Gateways	312,500		296,875	15,625
Sub-Total - Gateways for 2009						\$820,000	\$0	\$779,000	\$41,000
Total for 2009						\$67,736,301	\$500,000	\$63,825,990	\$3,410,312
2010									
Roads									
Additional signalization	6 Locations		COB		Signals	1,279,690		1,215,706	63,985
BramWest Parkway	Hwy 407-Heritage Road	Mayfield Road	COB		EA Study	1,200,000		1,200,000	
Castlemore Road	The Gore Road	Hwy 50	COB	2.200	2-4UAO-WR	17,436,851		16,565,008	871,843
Castlemore Road	The Gore Road	Hwy 50	COB		Signals	213,282		213,282	
Chinguacousy Road	Bovaird Drive	Steeles Avenue	COB		Signals	2,383,490		2,383,490	
Chinguacousy Road	Steeles Avenue	Queen Street	COB	3.100	4-6UA-WS	15,525,453		14,749,180	776,273
Chinguacousy Road	Wanless Drive	Steeles Avenue	COB	9.300	Intersection PrimCor	910,712		865,176	45,536
Chinguacousy Road	Queen Street	Major William Sharpe Drive	COB	1.600	4-6UA-WS	7,703,708		7,318,523	385,185
Clarkway Drive	North of Cottrelle Boulevard	Hwy 50	COB	0.500	2UC-NC	4,888,122	2,444,061		
Clarkway Drive	Cottrelle Boulevard	Castlemore Road	COB	2.200	2-4UMA-WR	13,654,089		12,971,385	682,704
Cottrelle Boulevard	Humberwest Parkway	Goreway	COB		Signals	426,563		426,563	
Cottrelle Boulevard	Humberwest Parkway	Goreway Drive	COB	0.800	4UC-NC	5,396,569		5,396,569	
Financial Drive	Steeles Avenue	South of Hwy 407	COB		Signals	213,282		213,282	
Financial Drive	Southern Boundary	Steeles Avenue	COB	1.800	2-4UC-WS	4,653,911		4,421,216	232,696
Intermodal Drive	Airport Road	CNR Bridge	COB	0.650	2-4UC-WR	5,463,396		5,190,227	273,170

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Intermodal Drive	Airport Road	Goreway Drive	COB		Signals	213,282		213,282	
Intersection Improvements	Various Locations		COB		Intersection	1,151,179		1,093,621	57,559
Intersection Improvements	Dixie Road	Bovaird Drive	ROP		ROP Road	225,977		225,977	
Mississauga Road	Queen Street	Bovaird Drive	ROP	3.600	ROP Road	492,674		468,040	24,634
Noise Wall Retrofit	Various Locations		COB	0.608	Noise Wall	920,666		690,499	230,166
Property Acquisition	Various Locations		COB		Property	13,500,000		13,500,000	
Property Acquisition (NSTC)	Meadowdale Road	Embleton Road	COB		Property	18,153,601		18,153,601	
Sidewalks	Various Locations		COB	1.500	Sidewalks	256,601		256,601	
Wexford Road - Extension	West of Hurontario Street	Bovaird Drive	COB	0.340	2UC-NC	3,824,370	3,824,370		
Sub-Total - Roads for 2010						\$120,087,468	\$6,268,430	\$110,175,288	\$3,643,750
Grade Separations									
Torbram Road & CN Halton Line			COB		GS-Rail	12,140,000		11,533,000	607,000
Sub-Total - Grade Separations for 2010						\$12,140,000	\$0	\$11,533,000	\$607,000
Gateways									
Downtown - West Entrance			COB		Gateways	62,500		59,375	3,125
Mississauga Road & Steeles Avenue			COB		Gateways	1,250,000		1,187,500	62,500
North west corner of Hwy 407 & Gorewood Drive			COB		Gateways	312,500		296,875	15,625
Sub-Total - Gateways for 2010						\$1,625,000	\$0	\$1,543,750	\$81,250
Total for 2010						\$133,852,468	\$6,268,430	\$123,252,038	\$4,332,000

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
2011 Roads									
Additional Signalization	6 Locations		COB		Signals	1,279,690		1,215,706	63,985
Bramalea Road	Mayfield Road	Countryside Drive	COB		Signals	213,282		213,282	
Bramalea Road	Countryside Drive	Mayfield Road	COB	1.150	2-4UMA-WR	9,792,339		9,302,722	489,617
Castlemore Road	Airport Road	Goreway Drive	COB		Signals	639,845		639,845	
Castlemore Road	Airport Road	Goreway Drive	COB	1.400	4-6UAI-WS	5,947,772		5,650,383	297,389
Countryside Drive	Bramalea Road	Goreway Drive	COB		Signals	869,994		869,994	
Countryside Drive	Bramalea Road	Torbram Road	COB	1.300	2-4UMA-WR	7,947,105		7,549,749	397,355
Countryside Drive	Torbram Road	Goreway Drive	COB	3.000	2-4UMA-WR	22,570,665		21,442,132	1,128,533
Creditview Road	James Potter Road	Queen Street	COB		Signals	639,845		639,845	
Creditview Road	Sandalwood Parkway	Bovaird Drive	COB		Signals	426,563		426,563	
Creditview Road (Old)	Pleasant Road / Creditview Road	Sandalwood Parkway	COB	1.900	2RUC-RR	1,679,093		335,819	1,343,275
Creditview Road (Old)	James Potter Road	Queen Street	COB	2.000	2RUC-RR	1,767,467		353,493	1,413,973
Financial Drive	Steeles Avenue	Heritage Road	COB		Signals	426,563		426,563	
Financial Drive	Mississauga Road	Heritage Road	COB	1.500	4UC-NC	5,733,776	2,866,888	2,866,888	
Financial Drive	Steeles Ave	Mississauga Road	COB	1.100	4UC-NC	5,192,042	2,596,021	2,596,021	
Humberwest Parkway	Williams Parkway	Queen Street	COB	1.500	4-6UAI-WS	6,290,460		5,975,937	314,523
Humberwest Parkway	Williams Parkway	Queen Street	COB		Signals	306,073		306,073	
Intersection Improvements	Various Locations		COB		Intersection	1,348,909		1,281,463	67,445
James Potter Road	Orangeville Railway DC crossing	South of Williams Parkway	COB	3.400	4UMA-NC	11,871,133	5,935,567	5,935,567	
Ken Whillans Drive	Vodden Street	Church Street	COB		Signals	306,073		306,073	
Ken Whillans Drive	Church Street	Nelson Street	COB	0.300	2UC-NC	3,500,000		3,500,000	

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Mayfield Road	Bramalea Road	Airport Road	ROP	2.700	ROP Road	1,528,105		1,451,700	76,405
McLaughlin Road	Wanless Drive	Steeles Avenue	COB	9.300	Intersection PrimCor	1,850,429		1,757,908	92,521
McVean Drive	Cottrelle Boulevard	Castlemore Road	COB		Signals	825,427		825,427	
McVean Drive	Cottrelle Boulevard	Castlemore Road	COB	1.300	2-4UMA-WR	5,272,978		5,009,329	263,649
Merging Lanes (Huronario at Hwy 410)			COB	0.750	2UA-NC	1,365,000		1,365,000	
Noise Wall Retrofit	Various Locations		COB	0.608	Noise Wall	920,666		690,499	230,166
Property Acquisition	Various Locations		COB		Property	13,500,000		13,500,000	
Property Acquisition (NSTC)	Meadowvale Road	Embleton Road	COB		Property	18,153,601		18,153,601	
Queen Street West	Mississauga Road	Chinguacousy Road	ROP	3.000	ROP Road	1,952,554		1,854,926	97,628
Sandalwood Parkway	Dixie Road	Bramalea Road	COB		Signals	825,427		825,427	
Sidewalks	Various Locations		COB	1.500	Sidewalks	256,601		256,601	
The Gore Road	Castlemore Road	Mayfield Road	ROP	4.300	ROP Road	1,554,847		1,477,105	77,742
Wanless Drive	Creditview Drive	Chinguacousy Road	COB	1.400	2-4UC-WR	5,889,589		5,595,109	294,479
Wanless Drive	Creditview Road	Chinguacousy Road	COB		Signals	213,282		213,282	
Sub-Total - Roads for 2011						\$142,857,194	\$11,398,475	\$124,810,033	\$6,648,686
Gateways									
Airport Road & Hwy 407			COB		Gateways	312,500		296,875	15,625
Sub-Total - Gateways for 2011						\$312,500	\$0	\$296,875	\$15,625
Total for 2011						\$143,169,694	\$11,398,475	\$125,106,908	\$6,664,311
2012 Roads									
Additional signalization	6 Locations		COB		Signals	1,279,690		1,215,706	63,985

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Airport Road	Mayfield Road	Southern City Boundary	ROP	11.300	Intersection PrimCor	1,318,242		1,252,330	65,912
Bramwest Parkway	Hwy 407 (Meadowdale Road)	Steeles Ave	ROP	1.460	6UA-NC	34,875,000		34,875,000	
Castlemore Road	Goreway Drive	McVean Drive	COB	1.500	4-6UAI-WS	4,312,636		4,097,004	215,632
Castlemore Road	Goreway Drive	McVean Drive	COB		Signals	306,073		306,073	
Clark Boulevard	Hwy 410	Dixie Road	COB		Signals	1,530,363		1,530,363	
Clark Boulevard	Rutherford Road	Dixie Road	COB	1.500	4-6UA-WS	18,683,025		17,748,874	934,151
Clarkway Drive			COB		Signals	426,563		426,563	
Clarkway Drive	Mayfield Road	Countryside Drive	COB		Signals	213,282		213,282	
Clarkway Drive	Countryside Drive	Mayfield Road	COB		2RUMA-RR	5,583,737		1,116,747	4,466,989
Countryside Collector	Dixie Road	Countryside Drive	COB	4.300	4UC-NC	16,393,894	8,196,947	8,196,947	
Creditview Road	Sandalwood Parkway	Wanless Drive	COB	1.300	2-4UMA-WR	5,270,105		5,006,599	263,505
Creditview Road	Wanless Drive	Sandalwood Parkway	COB		Signals	213,282		213,282	
Financial Drive	Heritage Road	Winston Churchill Boulevard	COB	1.500	4UC-NC	5,733,776	2,866,888	2,866,888	
Financial Drive	Heritage Road	Winston Churchill Boulevard	COB		Signals	426,563		426,563	
Finley Road	West Drive	Hwy 410	COB	0.580	2-4UMA-WR	4,105,176		3,899,917	205,259
Heritage Road	Bovaird Drive	Steeles Avenue	COB		Signals	426,563		426,563	
Heritage Road	Steeles Avenue	New Road A	COB	3.500	2RUMA-RR	21,216,913		4,243,383	16,973,530
Heritage Road	New Road A	Bovaird Road	COB	1.000	2RUC-RR	9,312,390		1,862,478	7,449,912
Intersection Improvements	Various Locations		COB		Intersection	1,348,909		1,281,463	67,445
James Potter Road	Ashby Field Road	Bovaird Drive	COB	0.500	4UMA-NC	3,343,435	1,671,717	1,671,717	
Mavis Road	Southern Boundary	Steeles Avenue	ROP	1.800	ROP Road	374,647		355,915	18,732
Noise Wall Retrofit	Various Locations		COB	0.608	Noise Wall	920,666		690,499	230,166

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Property Acquisition	Various Locations		COB		Property	13,500,000		13,500,000	
Property Acquisition (NSTC)	Meadowvale Road	Embleton Road	COB		Property	18,153,601		18,153,601	
Sandalwood Parkway	Bramalea Road	Torbram Road	COB		Signals	918,218		918,218	
Sidewalks	Various Locations		COB	1,500	Sidewalks	256,601		256,601	
Torbram Road	Mayfield Road	Countryside Drive	COB		Signals	306,073		306,073	
Torbram Road	Queen Street	South of Hwy 407	COB		Signals	918,218		918,218	
Torbram Road	Southern Boundary	Queen Street	COB	4,100	4-6UA-WS	28,224,917		26,813,672	1,411,246
Torbram Road	Countryside Drive	Mayfield Road	COB	1,200	2-4UMA-WR	6,542,800		6,215,660	327,140
Torbram Road	Countryside Drive	Southern City Boundary	COB	10,000	Intersection PrimCor	2,665,491		2,532,216	133,275
Wanless Drive	Mississauga Road	Creditview Road	COB		Signals	426,563		426,563	
Wanless Drive	Creditview Road	Mississauga Road	COB	1,400	2RUMA-RR	1,256,000		251,200	1,004,800
Williams Parkway	Kennedy Road	McLaughlin Road	COB	2,900	4-6UA-WS	22,500,000		21,375,000	1,125,000
Williams Parkway	Creditview Drive	Mississauga Road	COB	1,400	4UMA-NC	12,656,740		12,023,903	632,837
Williams Parkway	McLaughlin Road	Kennedy Road	COB		Signals	4,263,622		4,263,622	
Sub-Total - Roads for 2012						\$250,203,774	\$12,735,552	\$201,878,705	\$35,589,517
Grade Separations									
New Creditview Road & CN Halton Line			COB		GS-Rail	33,236,000		31,574,200	1,661,800
Sub-Total - Grade Separations for 2012						\$33,236,000	\$0	\$31,574,200	\$1,661,800
Gateways									
Hwy 410 & Bovaird Drive			COB		Gateways	312,500		296,875	15,625
Hwy 410 & Queen Street			COB		Gateways	312,500		296,875	15,625
Sub-Total - Gateways for 2012						\$625,000	\$0	\$593,750	\$31,250

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Total for 2012						\$284,064,774	\$12,735,552	\$234,046,655	\$37,282,567
2013 Roads									
Additional signalization	6 Locations		COB		Signals	1,279,690		1,215,706	63,985
Dixie Road	Queen Street	Bovaird Dr	ROP	3.600	ROP Road	1,691,039		1,606,487	84,552
Goreway Drive	Hwy 407	City Boundary	COB		Signals	306,073		306,073	
Humberwest Parkway	Airport Road	Williams Parkway	COB	4.000	4-6UAI-WS	10,612,650		10,082,018	530,633
Intersection Improvements	Various Locations		COB		Intersection	1,348,909		1,281,463	67,445
Mississauga Road	Bovaird Drive	Mayfield Road	ROP	4.200	ROP Road	1,917,108		1,821,253	95,855
New Creditview Road	Bovaird Drive	Farhill Ave	COB	1.300	4UMA-NC	5,514,807	2,757,403	2,757,403	
New Road A	Financial Drive	Winston Churchill Boulevard	COB		Signals	213,282		213,282	
New Road A	Financial Drive	Winston Churchill Boulevard	COB	5.000	4UC-NC	18,929,133	9,464,567	9,464,567	
Noise Wall Retrofit	Various Locations		COB	0.608	Noise Wall	920,666		690,499	230,166
Property Acquisition	Various Locations		COB		Property	13,500,000		13,500,000	
Property Acquisition (NSTC)	Meadowvale Road	Embleton Road	COB		Property	18,153,601		18,153,601	
Sidewalks	Various Locations		COB	1.500	Sidewalks	256,601		256,601	
The Gore Road	Hwy 50	Queen Street East	ROP	1.350	ROP Road	761,199		723,139	38,060
TTMP and DC Update Study	City wide		COB		Study	500,000		475,000	25,000
Williams Parkway	James Potter Road	Airport Road	COB	12.000	Intersection PrimCor	1,871,286		1,777,721	93,564
Williams Parkway	Kennedy Road	Howden/North Park	COB		Signals	1,530,363		1,530,363	
Williams Parkway	Torbram Road	Humberwest Parkway	COB		Signals	2,142,509		2,142,509	

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Williams Parkway	Kennedy Road	Howden Boulevard	COB	2.200	4-6UA-WS	20,000,000		19,000,000	1,000,000
Sub-Total - Roads for 2013						\$101,448,915	\$12,221,970	\$86,997,684	\$2,229,260
New Interchange									
Bramwest Parkway and Hwy 407			COB		Interchange	25,757,500		25,757,500	
Sub-Total - New Interchange for 2013						\$25,757,500	\$0	\$25,757,500	\$0
Grade Separations									
Goreway Drive & CN Halton Line	Rail grade separation & culvert replacement	EA Report, 2008	COB		GS-Rail	20,687,917		19,653,521	1,034,396
Sub-Total - Grade Separations for 2013						\$20,687,917	\$0	\$19,653,521	\$1,034,396
Gateways									
Hwy 50 & Castlemore Road			COB		Gateways	312,500		296,875	15,625
Hwy 50 & Queen Street			COB		Gateways	312,500		296,875	15,625
Sub-Total - Gateways for 2013						\$625,000	\$0	\$593,750	\$31,250
Total for 2013						\$148,519,332	\$12,221,970	\$133,002,456	\$3,294,906
2014									
Roads									
Bramalea Road	Countryside Drive	Southern City Boundary	COB	10.500	Intersection PrimCor	2,690,422		2,555,901	134,521
Bramalea Road	Southern Boundary	Queen Street	COB	4.100	4-6UA-WS	29,778,850		28,289,907	1,488,942
Bramwest Parkway	Steeles Ave	Embleton Road	COB	3.100	6UA-NC	18,750,000		18,750,000	-00
Castlemore Road	McVean Drive	The Gore Road	COB	1.300	4-6UAI-WS	11,714,035		11,128,333	585,702
Countryside Drive	The Gore Road	Goreway Road	COB	2.700	2-4UMA-WR	22,004,850		20,904,608	1,100,243
Dixie Road	Bovaird Drive	Mayfield Road	ROP	4.400	ROP Road	2,040,337		1,938,320	102,017

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Dixie Road	Countryside Drive	Southern City Boundary	ROP	11.000	Intersection PrimCor	2,208,098		2,097,693	110,405
Eastern Avenue	Kennedy Road	Truman Street	COB	0.400	2RUMA-RR	964,501		192,900	771,600
Goreway Drive	Humberwest Parkway	Countryside Drive	COB	6.000	2-4UMA-WR	34,786,250		33,046,938	1,739,313
Goreway Drive	Countryside Drive	Southern City Boundary	COB	10.500	Intersection PrimCor	1,559,405		1,481,434	77,970
Heritage Road	Hwy 7	Wanless Drive	COB	3.000	2RUMA-RR	6,592,435		1,318,487	5,273,948
Intersection Improvements	Various Locations		COB		Intersection	1,348,909		1,281,463	67,445
New North/South Road (Major MacKenzie extension)	New East/West Road	Mayfield Road	COB	3.000	4LUC-NC	12,392,197	6,196,099	6,196,099	
Noise Wall Retrofit	Various Locations		COB	0.608	Noise Wall	920,666		690,499	230,166
Property Acquisition	Various Locations		COB		Property	13,500,000		13,500,000	
Property Acquisition (NSTC)	Meadowvale Road	Embleton Road	COB		Property	18,153,601		18,153,601	
Sidewalks	Various Locations		COB	1.500	Sidewalks	256,601		256,601	
Torbram Road	Queen Street	Bovaird Dr	COB	3.100	4-6UA-WS	17,048,948		16,196,501	852,447
Traffic Signalization	Various Locations		COB		Signals	5,203,235		4,943,074	260,162
Sub-Total - Roads for 2014						\$201,913,339	\$6,196,099	\$182,922,359	\$12,794,882
Gateways									
Airport Road & Mayfield Road			COB		Gateways	312,500		296,875	15,625
Chinguacousy Road & Mayfield Road			COB		Gateways	312,500		296,875	15,625
Sub-Total - Gateways for 2014						\$625,000	\$0	\$593,750	\$31,250
Total for 2014						\$202,538,339	\$6,196,099	\$183,516,109	\$12,826,132

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
2015 Roads									
Bovaird Drive	Halton Border	Mississauga Road	ROP	3.000	ROP Road	3,075,708		2,921,923	153,785
Bramalea Road (for BRT)	Bovaird Dr	Queen Street	COB	3.000	4-6UA-WS	17,674,662		16,790,929	883,733
Castlemore Road	The Gore Road	Hwy 50	COB	2.050	4-6UAI-WS	6,259,826		5,946,834	312,991
Creditview Road (old)	Steeles Ave	Queen Street	COB	3.250	2RUC-RR	3,610,920		722,184	2,888,736
Intersection Improvements	Various Locations		COB		Intersection	1,348,909		1,281,463	67,445
Mayfield Road	Hurontario Street	Chinguacousy Road	ROP	2.800	ROP Road	1,545,124		1,467,868	77,256
Noise Wall Retrofit	Various Locations		COB	0.608	Noise Wall	920,666		690,499	230,166
Orenda Road	Dixie Road	Bramalea Road	COB	1.440	2-4UC-WS	9,418,400		8,947,480	470,920
Property Acquisition	Various Locations		COB		Property	13,500,000		13,500,000	
Sandalwood Parkway	Creditview Drive	Mississauga Road	COB	1.300	4UA-NC	6,572,788	3,286,394	3,286,394	
Sandalwood Parkway	Mississauga Road	Creditview Road	COB		Signals	213,282		213,282	
Sandalwood Parkway	McLaughlin Road	Heart Lake Road	COB	4.500	4-6UA-WS	35,141,126		33,384,070	1,757,056
Sidewalks	Various Locations		COB	1.500	Sidewalks	256,601		256,601	
Traffic Signalization	Various Locations		COB		Signals	5,203,235		4,943,074	260,162
Wanless Drive	Chinguacousy Road	Hurontario Street	COB	2.800	Intersection PrimCor	719,412		683,441	35,971
Williams Parkway	Mississauga Road	Heritage Road	COB	1.700	4UMA-NC	8,762,989		8,762,989	
Sub-Total - Roads for 2015						\$114,223,648	\$3,286,394	\$103,799,031	\$7,138,223
Gateways									
Hurontario Street & northern City Boundary			COB		Gateways	312,500		296,875	15,625
Hwy 7 & Winston Churchill Boulevard			COB		Gateways	312,500		296,875	15,625

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Sub-Total - Gateways for 2015						\$625,000	\$0	\$593,750	\$31,250
Total for 2015						\$114,848,648	\$3,286,394	\$104,392,781	\$7,169,473
2016									
Roads									
Chinguacousy Road	Wanless Drive	Mayfield Road	COB	1.200	2-4UMA-WR	5,500,631		5,225,599	275,032
Clark Boulevard Extension	Rutherford Road	Hansen Road	COB	0.430	4UMA-NC	6,000,708	3,000,354	3,000,354	
Coleraine Drive	Hwy 50	Mayfield Road	COB	3.000	2-4UMA-WR	13,451,390		6,725,695	6,725,695
Denison Street Extension	Park Street	Mill Street North	COB	0.250	2UC-NC	874,897		874,897	
Eastern Avenue	Hansen Road	Kennedy Road	COB	0.460	2-4UMA-WS	1,937,441		1,840,569	96,872
Goreway Road	Countryside Drive	Mayfield Road	COB	1.200	2-4UMA-WR	13,949,748		13,252,260	697,487
Heritage Road	Steeles Ave	Financial Drive	COB	0.700	2-4UMA-WR	12,469,685		11,846,201	623,484
Intersection Improvements	Various Locations		COB		Intersection	1,348,909		1,281,463	67,445
McVean Drive	Castlemore Dr	Mayfield Road	COB	4.360	2-4UMA-WR	29,629,210		28,147,749	1,481,460
Noise Wall Retrofit	Various Locations		COB	0.608	Noise Wall	920,666		690,499	230,166
North-South Spine Road	New Creditview Road	Mayfield Road	COB	3.400	4UC-NC	16,780,906	8,390,453	8,390,453	
Property Acquisition	Various Locations		COB		Property	13,500,000		13,500,000	
Sandalwood Parkway	Torbram Road	Airport Road	COB	1.600	4-6UAI-WS	3,447,652		3,275,269	172,383
Sandalwood Parkway	Creditview Road	Airport Road	COB	12.600	Intersection PrimCor	3,118,809		2,962,869	155,940
Sidewalks	Various Locations		COB	1.500	Sidewalks	256,601		256,601	
The Gore Road	Castlemore Road	Queen Street	ROP	4.000	Intersection PrimCor	1,347,249		1,279,886	67,362
Torbram Road	Bovaird Drive	Countryside Drive	COB	1.250	4-6UA-WS	8,545,467		8,118,193	427,273
Traffic Signalization	Various Locations		COB		Signals	5,203,235		4,943,074	260,162

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Wanless Drive	Mississauga Road	Winston Churchill Boulevard	COB	2.800	2RUMA-RR	4,062,168		812,434	3,249,735
Sub-Total - Roads for 2016						\$142,345,371	\$11,390,807	\$116,424,066	\$14,530,497
Gateways									
Hurontario Street & Bovaird Drive			COB		Gateways	312,500		296,875	15,625
Hurontario Street & Williams Parkway			COB		Gateways	312,500		296,875	15,625
Sub-Total - Gateways for 2016						\$625,000	\$0	\$593,750	\$31,250
Total for 2016						\$142,970,371	\$11,390,807	\$117,017,816	\$14,561,747
2017									
Roads									
Biscayne Creek / Westcreek Boulevard Connection	Biscayne Crescent	Westcreek Boulevard	COB	0.550	4UC-NC	2,709,242		2,573,780	135,462
Bramalea Road	Bovaird Drive	Steeles Ave	COB	6.100	Intersection BRT	4,473,094		4,249,439	223,655
Clarkway Drive	Mayfield Road	Countryside Drive	COB	1.250	2-4UMA-WS	8,978,716		8,529,780	448,936
Clarkway Drive	Castlemore Dr	Countryside Drive	COB	3.700	2-4UMA-WR	16,924,642		16,078,410	846,232
Countryside Drive	Dixie Road	Airport Road	COB	4.100	Intersection PrimCor	478,249		454,337	23,912
Countryside Drive	The Gore Road	Hwy 50	COB	3.600	2-4UMA-WR	23,228,420		22,066,999	1,161,421
Heritage Road	Financial Road	New Road A	COB	3.300	2-4UMA-WS	12,585,131		11,955,874	629,257
Intersection Improvements	Various Locations		COB		Intersection	1,348,909		1,281,463	67,445
Mississauga Road	Bovaird Drive	Southern City Boundary	ROP	7.500	Intersection BRT	1,557,516		1,479,640	77,876
Noise Wall Retrofit	Various Locations		COB	0.608	Noise Wall	920,666		690,499	230,166
Property Acquisition	Various Locations		COB		Property	13,500,000		13,500,000	

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Sidewalks	Various Locations		COB	1.500	Sidewalks	256,601		256,601	
Traffic Signalization	Various Locations		COB		Signals	5,203,235		4,943,074	260,162
Urbanization of Hurontario	Bovaird Drive	Northern City boundary	COB	5.000	4RUA-RR	23,430,809		22,259,268	1,171,540
Wanless Road	Creditview Road	Mississauga Road	COB	1.400	2-4UMA-WS	5,620,795		5,339,755	281,040
Sub-Total - Roads for 2017						\$121,216,024	\$0	\$115,658,920	\$5,557,104
Grade Separations									
Hwy 410 overpass	Biscayne Creek/Westcreek		COB		Over Pass	11,250,000		10,687,500	562,500
Sub-Total - Grade Separations for 2017						\$11,250,000	\$0	\$10,687,500	\$562,500
Gateways									
Queen Street & Airport Road			COB		Gateways	312,500		296,875	15,625
Queen Street & Mississauga Road			COB		Gateways	312,500		296,875	15,625
Sub-Total - Gateways for 2017						\$625,000	\$0	\$593,750	\$31,250
Total for 2017						\$133,091,024		\$126,940,170	\$6,150,854
2018 Roads									
Biscayne Creek / Westcreek Boulevard connection	Biscayne Creek	First Gulf Boulevard	COB	0.500	2-4UC-WS	2,865,587	1,432,794	1,432,794	
Biscayne Creek / Westcreek Boulevard connection	Westcreek Boulevard	Tomken Road	COB	0.700	2-4UC-WS	2,436,822	1,218,411	1,218,411	
Bramwest Parkway	Hwy 407 (Meadowvale Road)	Steeles Ave	COB	1.460	6-8UAI-WS	3,500,000		3,500,000	
Conservation Drive	Hurontario	Kennedy Road	COB	1.300	2-4UMA-WR	6,557,387		6,229,517	327,869

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Heritage Road	New Road A	Bovaird Dr	COB	2.500	2-4UJA-WS	26,532,457		25,205,834	1,326,623
Intersection Improvements	Various Locations		COB		Intersection	1,348,909		1,281,463	67,445
John Street	Truman Street	Centre Street	COB	0.500	2RUMA-RR	1,096,251		219,250	877,001
Kennedy Road	Sandalwood Drive	Southern City Boundary	ROP	10.300	Intersection PrimCor	3,509,559		3,334,081	175,478
Noise Wall Retrofit	Various Locations		COB	0.608	Noise Wall	920,666		690,499	230,166
Property Acquisition	Various Locations		COB		Property	4,000,000		4,000,000	
Sandalwood Parkway	Bramalea Road	Torbram Road	COB	0.900	4-6UJA-WS	4,446,691		4,224,356	222,335
Sidewalks	Various Locations		COB	1.500	Sidewalks	256,601		256,601	
Traffic Signalization	Various Locations		COB		Signals	5,203,235		4,943,074	260,162
TTMP and DC Update Study	City wide		COB		Study	500,000		475,000	25,000
Sub-Total - Roads for 2018						\$63,174,164	\$2,651,205	\$57,010,881	\$3,512,079
Gateways									
Eldorado			COB		Gateways	75,000		71,250	3,750
Lornel Gate			COB		Gateways	62,500		59,375	3,125
Sub-Total - Gateways for 2018						\$137,500	\$0	\$130,625	\$6,875
Total for 2018						\$63,311,664	\$2,651,205	\$57,141,506	\$3,518,954
2019 Roads									
Bramwest Parkway	Steeles Ave	Embleton Road	COB	3.100	6-8UJA-WS	6,625,000		6,293,750	331,250
Heritage Road	Wanless Road	Mayfield Road	COB	1.260	2RUC-RR	1,117,213		223,443	893,770
Intersection Improvements	Various Locations		COB		Intersection	1,348,909		1,281,463	67,445
John Street Extension	Centre Street	James Street	COB	0.200	2UC-NC	6,086,199		6,086,199	

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Noise Wall Retrofit	Various Locations		COB	0.608	Noise Wall	920,666		690,499	230,166
Property Acquisition	Various Locations		COB		Property	4,000,000		4,000,000	
Sandalwood Parkway	Dixie Road	Bramalea Road	COB	1.300	4-6UAI-WS	5,217,037		4,956,185	260,852
Sidewalks	Various Locations		COB	1.500	Sidewalks	256,601		256,601	
Traffic Signalization	Various Locations		COB		Signals	5,203,235		4,943,074	260,162
Williams Parkway	Torbram Road	Humberwest Parkway	COB	2.600	4-6UA-WS	11,844,963		11,252,715	592,248
Sub-Total - Roads for 2019						\$42,619,822	\$0	\$39,983,928	\$2,635,894
Total for 2019						\$42,619,822		\$39,983,928	\$2,635,894
2020 Roads									
East-West Spine Road	North-South Spine Road	McLaughlin Road	COB	3.500	4UC-NC	14,385,923	7,192,961	7,192,961	
Heritage Road	Hwy 7/Bovaird Road	Wanless Drive	COB	3.000	2-4UMA-WS	11,480,801		10,906,761	574,040
Intersection Improvements	Various Locations		COB		Intersection	1,151,179		1,093,621	57,559
Noise Wall Retrofit	Various Locations		COB	0.608	Noise Wall	920,666		690,499	230,166
Property Acquisition	Various Locations		COB		Property	4,000,000		4,000,000	
Sidewalks	Various Locations		COB	1.500	Sidewalks	256,601		256,601	
Traffic Signalization	Various Locations		COB		Signals	5,203,235		4,943,074	260,162
Sub-Total - Roads for 2020						\$37,398,405	\$7,192,961	\$29,083,516	\$1,121,927
Total for 2020						\$37,398,405	\$7,192,961	\$29,083,516	\$1,121,927
2021 Roads									
Creditview Road	Wanless Drive	Mayfield Road	COB	1.300	2-4UMA-WR	7,613,245		7,232,583	380,662

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Intersection Improvements	Various Locations		COB		Intersection	1,348,909		1,281,463	67,445
Noise Wall Retrofit	Various Locations		COB	0.608	Noise Wall	920,666		690,499	230,166
Property Acquisition	Various Locations		COB		Property	4,000,000		4,000,000	
Property Acquisition (NSTC) - Additional lanes	Sandalwood Parkway	Mayfield Road	COB		Property	15,579,407		15,579,407	
Sandalwood Parkway	Mississauga Road	Heritage Road	COB	1.400	4UA-NC	6,024,184	3,012,092	3,012,092	
Sidewalks	Various Locations		COB	1.500	Sidewalks	256,601		256,601	
Traffic Signalization	Various Locations		COB		Signals	5,203,235		4,943,074	260,162
Wanless Drive	Mississauga Road	Winston Churchill Boulevard	COB	3.800	2-4UMA-WS	14,916,909		14,171,064	745,845
Sub-Total - Roads for 2021						\$55,863,155	\$3,012,092	\$51,166,782	\$1,684,281
Interchanges									
Hwy 410 & Hurontario			COB		Interchange	4,375,000		4,375,000	
Hwy 410 & Mayfield Road			COB		Interchange	4,375,000		4,375,000	
Sub-Total - Interchanges for 2021						\$8,750,000	\$0	\$8,750,000	\$0
Grade Separations									
BramWest Parkway & CN Halton Line			COB		GS-Rail	8,223,231		7,812,069	411,162
Sub-Total - Grade Separations for 2021						\$8,223,231	\$0	\$7,812,069	\$411,162
Total for 2021						\$72,836,386	\$3,012,092	\$67,728,851	\$2,095,443
By 2031 Roads									
Bramwest Parkway	Sandalwood Parkway	Mayfield Drive		1.900	6UA-NC	10,125,000		10,125,000	

Road Name	From	To	Jurisdiction	Section Length (KM)	Implementation Type	Total Project Cost (COB)	Developer Contribution	DC Contribution	Replacement and Benefit to Existing
Bramwest Parkway	Embleton Road	Bovaird Drive		3.400	6-8UAI-WS	5,875,000		5,581,250	293,750
Chinguacousy Road	Bovaird Drive	Wanless Drive	COB	3.100	4-6UA-WS	13,477,457		12,803,584	673,873
Creditview Road	Bovaird Drive	Mount Pleasant Spine	COB	1.000	4-6UA-WR	5,343,074		5,075,920	267,154
Heritage Road	Wanless Drive	Mayfield Road	COB	1.200	2-4UMA-WR	5,805,751		5,515,464	290,288
Intersection Improvements (10 years)	Various Locations		COB		Intersection	1,348,909		1,281,463	67,445
McLaughlin Road	Wanless Drive	Mayfield Road	COB	1.200	2-4UMA-WR	5,500,631		5,225,599	275,032
Noise Wall Retrofit (10 years)	Various Locations		COB	6.077	Noise Wall	9,206,655		6,904,991	2,301,664
Property Acquisition (10 years)	Various Locations at \$4.35M/year		COB		Property	40,000,000		40,000,000	
Sandalwood Parkway	Heritage Road	Winston Churchill Boulevard	COB	1.400	4UMA-NC	7,386,946	3,693,473	3,693,473	
Sidewalks (10 years)	Various Locations		COB	15.000	Sidewalks	2,566,008		2,566,008	
Traffic Signalization (10 years)	Various Locations		COB		Signals	52,032,353		49,430,735	2,601,618
TTMP and DC Update Study	City wide		COB		Study	1,000,000		1,000,000	
Sub-Total - Roads for By 2031						\$159,667,784	\$3,693,473	\$149,203,489	\$6,770,823
Grade Separations									
Heritage Road & CN Halton Line			COB		GS-Rail	6,398,406		6,078,486	319,920
Sandalwood Parkway & CN Halton Line			COB		GS-Rail	6,398,406		6,078,486	319,920
Sub-Total - Grade Separations for By 2031						\$12,796,812	\$0	\$12,156,972	\$639,841
Total for By 2031						\$172,464,597	\$3,693,473	\$161,360,460	\$7,410,663
Grand Total						\$1,759,421,824	\$80,547,459	\$1,566,399,182	\$112,475,183



DRAFT XXX-2009

Development Charges

To establish development charges for the City of Brampton pertaining to Roads and to repeal By-law 224-2004 and By-Law 111-2008

WHEREAS subsection 2(1) of the Act provides that the Council of a municipality may by by-law impose development charges against land to pay for increased capital costs required because of increased needs for services arising from the development of the area to which the by-law applies;

AND WHEREAS the City has completed and has considered a report entitled “2009 Development Charge Background Study”, the City of Brampton, dated June XX, 2009 (the “Study”), as required by section 10 of the Act;

AND WHEREAS the Study was made available to the public, and Council gave notice to the public of a public meeting, pursuant to section 12 of the Act, which was held on June 22, 2009, and at which the Study was again provided to the public, along with the proposed development charge by-laws, and Council heard representations from all persons who applied to be heard (the “Public Meeting”);

AND WHEREAS Council held X further Public Meetings on XXXXX XX, 2009 and XXXXXX XX, 2009, and Council heard representations from all persons who applied to be heard;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council approved the Study, as amended by the matters identified in the staff report dated August 5, 2009;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council indicated that it intends to ensure that the increase in the need for services attributable to the anticipated development identified in the Study, as amended, will be met;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council indicated its intent that future excess capacity identified in the Study shall be paid for by development charges or other similar charges;

AND WHEREAS by Resolution adopted by Council on August 5, 2009, Council determined that no further public meetings were required, under section 12 of the Act.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE CITY OF BRAMPTON ENACTS AS FOLLOWS:

Definitions

1. In this by-law,

“accessory” means, where used to describe a use, building or structure, that the use, building or structure is naturally and normally incidental to and exclusively devoted to a principal use, building or structure;

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

"agricultural use" means a bona fide farming operation, including sod farms, the breeding and boarding of horses, and greenhouses;

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

"apartment dwelling" means a building containing six or more dwelling units which have a common entrance from the street level, and the occupants of which have the right to use common elements;

“apartment” means a dwelling unit in a duplex, triplex, double duplex or in a mixed use building not exceeding three stories in height and a

dwelling unit in a building where such dwelling unit is served by a principal entrance from the street level common to three or more other dwelling units;

“board of education” has the same meaning as “board” under the *Education Act*, R.S.O. 1990, ch. E.2;

"building or structure" means a structure occupying an area greater than 10 square metres consisting of a wall, roof, and floor or any of them or a structural system serving the function thereof, and includes an air-supported structure, mezzanine, and an exterior storage tank, but does not include:

a farm building, or a canopy, or an exterior storage tank where such exterior storage tank constitutes an accessory use;

“*Building Code Act*” means the *Building Code Act*, S.O. 1992, chapter 23, as amended, and all Regulations thereto including the Ontario Building Code, 1997, as amended;

“canopy” means a canopy as defined in the *Building Code Act* and includes a free-standing roof-like structure constructed on lands used for a gas bar or service station;

"City" means The Corporation of the City of Brampton;

“college” has the same meaning as in section 171.1 of the *Education Act*, R.S.O. 1990, ch. E.2;

“Council” means the Council of the Corporation of the City of Brampton;

"development" means the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of increasing the total floor area, and includes redevelopment;

"development charge" means a charge imposed pursuant to this by-law;

“distribution centre” means a building or structure primarily used for the storage and distribution of goods, wares, merchandise, substances, articles or things;

“double duplex” means a separate building that consists of two duplexes attached to each other;

“duplex” means a separate building that is divided horizontally into two separate dwelling units, each of which has a separate entrance either directly or through a common vestibule;

"dwelling unit" means one or more habitable rooms designed or intended to be used together as a single and separate house-keeping unit by one person or jointly by two or more persons, containing its own kitchen and sanitary facilities;

“farm building” means a farm building as defined in the *Building Code Act*;

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

"grade" means the average level of proposed or finished ground adjoining a building or structure at all exterior walls;

“industrial use” means land, buildings or structures used or designed or intended for use for or in connection with manufacturing, producing, or processing of raw goods, warehousing or bulk storage of goods, distribution centre, truck terminal, research or development in connection with manufacturing, producing, or processing of raw goods, storage, and includes office uses and the sale of commodities to the general public where such uses are accessory to an industrial use, but does not include a building used exclusively for office or administrative purposes unless it is attached to an industrial building or structure as defined above, and does not include a retail warehouse;

“land” includes buildings or structures;

“large apartment” means, for the purposes of the Schedules attached: an apartment unit having a floor area of more than 750 square feet;

“local board” means a public utility commission, transportation commission, public library board, board of park management, local board of health, police services board, planning board, or any other board, commission, committee, body or local authority established or exercising any power or authority under any general or special act with respect to any of the affairs or purposes of the City or the Region;

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

“mixed use” means a use or intended use of the same land, building or structure for any two or more uses defined in this by-law;

“mobile temporary sales trailer” means a trailer that is designed to be made mobile, is placed without a foundation on land and is used exclusively for new residential sales, and concrete piers or sono tubes are deemed not to be foundations for the purposes of this definition;

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

“non-industrial use” means the use of land, buildings or structures or parts thereof, used, designed or intended to be used for any use other than for residential use or for industrial use, or for office use, as those terms are defined in this section, and a non-industrial use includes a retail warehouse;

“non-residential use” means the use of land, buildings or structures or portions thereof used, designed or intended to be used for any use other than for residential use as that term is defined in this section;

“office use” means the use of land, buildings or structures used primarily for, or designed or intended for use primarily for or in connection with office or administrative purposes, provided that the building or structure has an office or administrative component equal to or greater than 50 percent of the total gross floor area of the building or structure. For the purposes of this by-law office use excludes office or administrative uses located in a shopping centre or plaza, and excludes office or administrative uses where such uses are accessory to an industrial use;

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

“planned seniors retirement community” means a housing project consisting of ground-related dwelling units in single family, semi-detached, or multiple dwellings and other amenities, all of which are designed, marketed, developed, and constructed to provide living accommodation for and to meet the needs of senior citizens or older

or retired persons on land designated by a resolution of the City Council as a planned seniors retirement community;

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

“public hospital” means a hospital as defined in the *Public Hospitals Act*, R.S.O. 1990, ch. P.40;

“redevelopment” means the construction, erection or placing of one or more buildings or structures on land where all or part of a building or structure has previously been demolished on such land, or changing the use of a building or structure for any of the following:

- i) from residential to non-residential,
- ii) from non-residential to residential,
- iii) from industrial to non-industrial and,
- iv) from office to non-office;

“Region” means The Regional Municipality of Peel;

“Regulation” means Ontario Reg.82/98, under the Act;

“residential use” means land, buildings or structures or portions thereof used, designed, or intended to be used as living accommodation within a dwelling unit, for one or more individuals;

“row house” means a building other than an apartment building, that is vertically divided into a minimum of three dwelling units, each of which has independent entrances at grade to the front and the rear of the building, and each of which shares a common wall adjoining dwelling units above grade;

“semi-detached dwelling” means a building divided vertically, into two separate dwelling units, with at least 50 per cent of the above-grade area of a main wall on one side of each dwelling unit attached to or the same as a main wall on one side of the other dwelling unit;

“services” means services designated in this by-law or in an agreement under section 44 of the Act, or both;

“Servicing Agreement” means, a servicing agreement, subdivision agreement, condominium agreement, rezoning/site plan agreement or

any other agreement requiring the payment of capital contribution or lot levies and the provision of municipal services to specified lands within the City entered into between the owner or a former owner and the City;

“shelf and rack storage system” means a shelf and rack storage system as defined in the Building Code Act;

“single detached dwelling” means a completely detached residential building containing only one dwelling unit;

“small apartment”, notwithstanding the definition of an “apartment”, means any residential unit having a total floor area equal to or less than 750 square feet;

“temporary building or structure” means a building or structure constructed or erected or placed on land for a continuous period not exceeding eight months, or an addition or alteration to a building or structure that has the effect of increasing the total floor area thereof for a continuous period not exceeding eight months;

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

- (a) includes the floor area of a mezzanine and air-supported structure and the space occupied by interior walls and partitions; and
- (b) excludes any parts of the building or structure used for mechanical equipment related to the operation or maintenance of the building or structure, stairwells, elevators and washrooms; and
- (c) excludes any part of a building or structure above or below grade, used exclusively for the temporary parking of a motor vehicle or used for the provision of loading spaces; and
- (d) includes any part of a building or structure above or below grade used as a commercial parking garage; and

(e) where a building or structure does not have any walls, the total floor area shall be the sum total of the area of land directly beneath the roof of the building and the total areas of the floors in the building or structure; and

(f) excludes the area of any self contained structural shelf and rack storage system as defined in the Building Code Act;
“triplex” means a building or structure that is divided horizontally into three separate dwelling units, each of which has a separate entrance through a common vestibule;

“truck terminal” means a building, structure or place where, for the purpose of a common carrier, trucks or transports are rented, leased, kept for hire, or stored, or parked for remuneration or from which trucks or transports are dispatched.

“university” has the same meaning as is set out in section 171.1 of the *Education Act*;

“use” means the use of land, a building or a structure.

Rules

2. For the purpose of complying with section 6 of the Act:

- (a) the area to which this by-law applies shall be the area described in section 3 of this by-law;
- (b) the rules developed under paragraph 9 of subsection 5(1) of the Act for determining if a development charge is payable in any particular case and for determining the amount of the charge are set forth in sections 4 through 17 inclusive;
- (c) the exemptions provided for by such rules shall be the exemptions set forth in sections 18 through 22 inclusive and in section 25, of this by-law, the indexing of charges shall be in accordance with section 15 of this by-law, and there shall be no phasing in as provided in subsection 16(1) of this by-law; and
- (d) the calculation of development charges payable with respect to redevelopment of land shall be in accordance with the rules set forth in section 23 of this by-law.

Lands Affected

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

Designation of Services

4. It is hereby declared by Council that all development of land within the area to which this by-law applies will increase the need for services.
5. The development charge applicable to a development as determined under this by-law shall apply without regard to the services required or used by an individual development.
6. Development charges shall be imposed under this by-law, for the following categories of services to pay for the increased capital costs required because of increased needs for services arising from development:

Roads Services.

Approvals for Development

7. Development charges shall be imposed against all lands, buildings or structures within the area to which this by-law applies, if the development of such lands, buildings or structures requires any of the following approvals:
 - (a) the passing of a zoning by-law or of an amendment thereto under section 34 of the *Planning Act*;
 - (b) the approval of a minor variance under section 45 of the *Planning Act*;
 - (c) a conveyance of land to which a by-law passed under subsection 50(7) of the *Planning Act* applies;
 - (d) the approval of a plan of subdivision under section 51 of the *Planning Act*;
 - (e) a consent under section 53 of the *Planning Act*;

- (f) the approval of a description under section 9 of the *Condominium Act*; or
 - (g) the issuing of a permit under the *Building Code Act* in relation to a building or structure.
8. No more than one development charge for each service designated in section 6 of this by-law shall be imposed upon any lands, buildings or structures to which this by-law applies even though two or more of the actions described in section 7 are required before the lands, buildings or structures can be developed.
 9. Notwithstanding section 8, if two or more of the actions described in section 7 occur at different times, additional development charges shall be imposed in respect of any increased or additional development permitted by that action.
 10. Where a development requires an approval described in section 7 after the issuance of a building permit and no development charge has been paid, then the development charge shall be paid prior to the granting of the approval required under section 7.
 11. If a development does not require a building permit but does require one or more of the approvals described in section 7, then the development charge shall nonetheless be payable in respect of any increased or additional development permitted by such approval required for the increased or additional development being granted, and such development charge shall be paid prior to the granting of the approval required.

Calculation of Development Charges

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

- (c) in the case of non-residential developments, or the non-residential portion of a non-residential mixed use development containing industrial and/or office and/or other non-residential components, based upon the total floor area of the industrial component and based upon the total floor area of the office component, and based on the total floor area of the all other non-residential components, respectively.

Amount of Charge – Residential

- 13. (1) The development charges described in Schedule A to this by-law shall be imposed on residential uses of lands, buildings or structures, including a dwelling unit accessory to a non-residential use and, in the case of a mixed use building or structure, on the residential component of the mixed use building or structure, according to the type of residential use.
- (2) Despite subsection 13(1), the development charges described in Schedules A to this by-law for dwelling units larger than 750 square feet in apartment dwellings shall be imposed on all dwelling units in single family dwellings, semi-detached dwellings and multiple-dwellings constructed in a planned seniors retirement community, provided that the zoning by-law in force for the planned seniors retirement community limits the number of bedrooms in any dwelling unit to 2 bedrooms, and the number of dwelling units in the community and the maximum floor area of the dwelling units to amounts determined by Council in the zoning by-law.
- (3) If the development charges required to be paid by subsection 13(1) or subsection 13(2) or any part of them remains unpaid after they are payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes in accordance with subsection 32(1) of the Act.

Amount of Charge – Non-Residential

- 14. (1) The development charges described in Schedule B to this by-law shall be imposed on non-residential uses of lands, buildings or structures (including office use, industrial uses and all other non-residential uses) and, in the case of a mixed use building or structure, on the non-residential component of the mixed use

building or structure, and calculated with respect to each of the services according to the total floor area of the non-residential use.

- (2) Despite subsection 14(1) for the period commencing on the August 5th, 2009 and ending on August 5th, 2010, or such later date as may be determined by Council through an amendment of this by-law, the development charge rate described in Schedule B to this by-law applicable to the development of non-residential office type uses of lands, building or structures, and the development charge rate applicable to non-residential industrial type uses of lands, buildings or structures, shall be discounted to the rates identified in Schedule C to this by-law (the “discounted industrial and office rate”). The discounted industrial and office rate shall be applied for the purpose of calculating the development charges owing on non-residential office type uses and non-residential industrial type uses, subject to applicable indexing and subject to applicable exemptions.
- (3) If the development charges required to be paid by subsection 14(1) or subsection 14(2), or if any part of them remains unpaid after they are payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes in accordance with subsection 32(1) of the Act.

Indexing of Development Charges

15. The development charges set out in Schedules A, B, and C, hereto shall be adjusted, without amendment to this by-law, semi-annually on February 1st and August 1st in each year, commencing February 1st, 2010, in accordance with the Statistics Canada Quarterly, Construction Price Statistics (catalogue number 62-007) with the base index value being that in effect on August 1, 2009.

Phasing, Timing of Calculation and Payment

16. (1) The development charges set out in this by-law are not subject to phasing in and are payable in full from the effective date of this by-law, subject to applicable exemptions, credits, and discounts;

- (2) Subject to section 23 of this by-law (with respect to redevelopment) and subsection 16(3) below, the development charge shall be calculated as of, and shall be payable, on the date the first building permit is issued in relation to a building or structure on the land to which the development charge applies;
- (3) Where a development charge applies to land in relation to which a building permit is required, no building permit shall be issued until the development charge has been paid in full;
- (4) Notwithstanding subsection 16(3), the City may, in its sole discretion, require an owner to enter into an agreement, including the provision of security for the owner's obligations under agreement, pursuant to section 27 of the Act, providing for all or part of a development charge to be paid before or after it otherwise would be payable. In that event, the terms of such agreement shall then prevail over the provision of this by-law.

Payment By Money or the Provision of Services

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

- (ii) (ii) in no event shall the City be required to make a cash payment to the credit holder.
 - (c) notwithstanding the repeal of By-law 224-2004 and By-Law 111-2008, any credits owing to a landowner, or previous landowner, pursuant to an agreement entered into under section 38 of the Act, prior to the enactment of this by-law, may, at the City's sole discretion, be recognized and used as a credit under this by-law, pursuant to section 41 of the Act; or
 - (d) any credits owing to a landowner, or previous landowner, pursuant to an agreement entered into under section 38 of the Act, either prior to, or after, the enactment of this by-law, which credits do not relate to the category of services covered by this by-law, may, at the City's sole discretion, be recognized and used as a credit under this by-law, pursuant to section 41 of the Act.
- (3) Nothing in this by-law prevents Council from requiring, as a condition of an agreement under sections 51 or 53 of the *Planning Act*, that the owner, at his or her own expense, install such local services related to a plan of subdivision or within the area to which the plan relates, as Council may require, and/or that the owner pay for local connections to storm drainage facilities installed at the owner's expense, and/or administrative, processing, or inspection fees.

Rules with Respect to Exemptions for Intensification of Existing Housing

18. (1) This by-law does not apply with respect to approvals related to the residential development of land, buildings or structures that would have the effect only,
- (a) of permitting the enlargement of an existing dwelling unit;
 - (b) of creating one or two additional dwelling units in an existing single detached dwelling unit;
 - (c) of creating one additional dwelling unit in an existing semi detached dwelling unit; or

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

Rules with Respect to Industrial Expansion Exemption

- 19. (1) If a development includes the enlargement of the gross floor area of an existing industrial building, the amount of the development charge that is payable under this by-law, is the following:
 - (a) if the gross floor area is enlarged by 50 per cent or less, the amount of the development charge in respect of the enlargement is zero; and
 - (b) if the gross floor area is enlarged by more than 50 per cent, development charges are payable on the amount by which the enlargement exceeds 50 per cent of the gross floor area before the enlargement.
- (2) For the purpose of this section, the terms “gross floor area” and “existing industrial building” shall have the same meaning as those terms have in the Regulation made under the Act.
- (3) For the purpose of interpreting the definition of “existing industrial building” contained in the Regulation, regard shall be had for the classification of the lands in question pursuant to the *Assessment Act*, R.S.O. 1990, c.A.31, and in particular:
 - (a) whether the lands fall within a tax class such that taxes on the lands are payable at the industrial tax rate; and
 - (b) whether more than fifty per cent (50%) of the gross floor area of the building or structure has an industrial property code for assessment purposes;

- (4) Despite subsection (3), distribution centres, warehousing, the bulk storage of goods and truck terminals shall be considered industrial uses.
- (5) For the purpose of the application of section 4 of the Act to the operation of this by-law:
 - (a) the gross floor area of an existing industrial building shall be calculated as it existed prior to the first enlargement in respect of that building for which an exemption under section 4 of the Act is sought; and
 - (b) the enlargement of the gross floor area of the existing building must:
 - (i) be attached to the existing industrial building;
 - (ii) not be attached to the existing industrial building by means only of a tunnel, bridge, canopy, corridor or other passageway, shared below-grade connection, foundation, footing, parking facility, service tunnel or service pipe;
 - (iii) be for use or in connection with an industrial purpose as set out in this by-law; and
 - (iv) constitute a bone fide increase in the size of the existing building.

Categories of Exempt Institutions

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

- (d) land, buildings or structures owned by and used for the purposes of a college or university;
 - (e) that portion of land, buildings or structures owned by a church or religious organization which is used only as a place of worship; and
 - (f) land, buildings or structures used only for the purpose of a temporary office for new residential sales.
- (2) The exemption referred to in this paragraph 20(1)(b) does not apply to the development for residential uses of lands owned by:
- (a) the Region or any local board thereof, including the Peel Children's Aid Society; or
 - (b) any corporation owned, controlled, or operated by the Region, including Peel Non-Profit Housing Corporation.

Agricultural Uses

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

Temporary Buildings or Structures

22. (1) Temporary buildings or structures shall be exempt from the provisions of this by-law, so long as the status as a temporary building or structure is maintained in accordance with the provisions of this by-law;
- (2) In the event that a temporary building or structure becomes protracted, it shall be deemed not to be, or ever to have been a temporary building or structure, and the development charges required to be paid under this by-law shall become payable on the date the temporary building or structure becomes protracted; and

- (3) Prior to the City issuing a building permit for a temporary building or structure, the City may require an owner to enter into an agreement, including the provision of security for the owner's obligation under the agreement, pursuant to section 27 of the Act, providing for all or part of the development charge required by subsection 22(2) to be paid after it would otherwise be payable. The terms of such agreement shall then prevail over the provisions of this by-law.

Rules with Respect to the Redevelopment of Land

23. (1) Where there is a redevelopment of land on which there is a conversion of space proposed, or on which there was formerly erected a building or structure that will be demolished within a period no longer than 4 months from the date of issuance of a building permit, has been demolished, a credit shall be allowed against the development charge otherwise payable by the owner pursuant to this by-law, for the portion of the previous building or structure still in existence that is being converted or for the portion of the building or structure that has or will be demolished, as the case may be, calculated by multiplying the number and type of dwelling units being converted or demolished or the non-residential total floor area being converted or demolished by the relevant development charge in effect on the date when the development charge is payable in accordance with this by-law.
- (2) If a credit has been allowed against the development charge otherwise payable and a building permit for the redevelopment has been issued, in advance of the occurrence of the demolition, the owner must complete and provide proof of the demolition no later than 4 months after the issuance of the building permit or the amount for which the development charge credit was provided shall become fully payable.
- (3) A credit in respect of any demolition under this section shall not be given unless the demolition permit was issued on or after October 28, 1991.
- (4) The amount of any credit hereunder shall not exceed, in total, the amount of the development charges otherwise payable under this by-law with respect to the redevelopment.
- (5) For the purposes of this section, dwelling units or total floor area accidentally destroyed by fire shall be deemed to have been

demolished under a demolition permit issued on the date of the fire.

Interest

24. The City shall pay interest on a refund under subsections 17(3), (5) and 24(2) of the Act at a rate equal to the Bank of Canada rate on the date this by-law comes into effect.

Rules with Respect to Partial Exemptions for Certain Lands that are subject to Pre October 28, 1991 Servicing Agreement

25. (1) If the City and an owner, or former owner of land to which this by-law applies, had entered into a Servicing Agreement prior to October 28, 1991:

- (i) provided that the owner or former owner of the land paid to the City, prior to October 28, 1991, all or any portion of a capital contribution relating to the development of non-residential lands as required by the terms and provisions of the Servicing Agreement; and
- (ii) provided that the owner or former owner of the land did not apply to the City for recognition of a Section 14 credit under the Development Charges Act, 1989, pursuant to the requirements of section 17 of the Regulation, either for the subject parcel of land, or for any other parcel of land that is subject to the same Servicing Agreement; and
- (iii) provided that a Section 14 credit under the Development Charges Act, 1989 was not recognized by the City, in writing, for the subject parcel of land, or for any other parcel of land that is subject to the Servicing Agreement; then, during the term of this by-law, the City will recognize a non-transferable partial exemption from the development charges otherwise owing under this by-law, with respect to an undeveloped, non-residential parcel of land that is subject to the Servicing Agreement.

(2) The amount of the partial exemption to be recognized by the City pursuant to subsection 25(1) above, and to be applied in the calculation of development charges owing for the land, under this by-law, shall be based on the amount of the capital contribution actually received by the City, in

accordance with the terms and provisions of the Servicing Agreement, pro-rated over all non-residential development lots and development blocks within the area of the lands subject to the Servicing Agreement. In no event shall the value of the exemption exceed the amount paid to the City, in accordance with the terms of the Servicing Agreement.

Front Ending Agreements

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

Schedules

27. The following Schedules to this by-law form an integral part of this by-law:

Schedule 'A' Residential Development Charges

Schedule 'B' Non-residential Development Charges

Schedule "C" Industrial and Office Development Charge with
Economic Development Incentive Discount

By-law Registration

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

Date By-law Effective

29. This by-law comes into force and effect on August 5, 2009.

Date By-law Expires

30. This by-law expires five years after the date on which it comes into force and effect.

Repeal

31. By-law No. 224-2004 and By-Law No.111-2008 are hereby repealed, effective on the date this by-law comes into force and effect.

Headings for Reference Only

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

Interpretation

33. All words defined in the Act or the Regulation have the same meaning in this by-law as they have in the Act or the Regulation, unless they are defined differently in this by-law.
34. All references to the provisions of any statute or regulation or to the Ontario Building Code contained in this by-law shall also refer to the same or similar provision in the statute or regulation or code as amended, replaced, revised or consolidated from time to time.

Severability

35. If, for any reason, any provision, section, subsection or paragraph of this by-law is held invalid, it is hereby declared to be the intention of Council that all the remainder of this by-law shall continue in full force and effect until repealed, re-enacted or amended, in whole or in part or dealt with in any other way.

Short Title

36. This by-law may be referred to as the City of Brampton Development Charges By-law for Road Services, 2009.

READ A FIRST, SECOND, AND THIRD TIME, AND PASSED IN OPEN COUNCIL THIS 5TH DAY OF AUGUST, 2009.

THE CORPORATION OF THE CITY OF BRAMPTON

Original Signed by
Susan Fennell, Mayor

Original Signed by
Peter Fay, City Clerk

Approved as to Content
Original Signed by Maurice Lewis

Approved as to Form
Original Signed by Colin Grant

Schedule A to By-Law xxx-2009
Residential Development Charge

Service Category	Charge for Singles/Semis	Charge for Rows	Charge for Apartment >750 Sq.Ft.	Charge for Apartment <= 750 Sq.Ft.
Roads Services	\$14,853.99	\$12,254.55	\$10,026.45	\$5,570.25

Schedule B to By-Law xxx-2009
Non-Residential Development Charge

Service Category	Non-Residential Non-Industrial use Non-Office Use Charge per Sq.M.
Roads Services	\$97.41

Schedule C to By-Law xxx-2009
Industrial/Office Discounted Charge

Service Category	Non-Residential Industrial Use Charge per Sq.M. *	Non-Residential Office Use Charge per Sq.M. *
Roads Services	\$34.47	\$34.47

* The discounted Non-Residential Industrial/Office rate is as at June 1st, 2009 and is subject to be indexed.

City of Brampton
Planning and Development
Department

Transportation and Transit
Master Plan Update -
Supplementary Analyses -
Appendix F

Brampton

May 2009

City of Brampton
Planning and Development
Department

Transportation and Transit
Master Plan Update -
Supplementary Analyses -
Appendix F

Brampton

May 2009

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Project # 4587

TABLE OF CONTENTS

1.	Introduction	1
1.1	Purpose and Scope	1
1.2	Relation to the TTMP Report	2
2.	Travel Demand Forecasting	4
2.1	Method	4
2.2	2006 Model Validation	4
2.3	General Forecasting Assumptions	6
2.3.1	Trip Generation Rates	6
2.3.2	Distribution	7
2.3.3	Peak Hour Factors (Auto & Transit)	7
2.3.4	Speeds and Capacities	8
2.3.5	Transit lines and stations	8
3.	Transit Mode Split Calculation	10
3.1	Methodology	10
3.2	Application and Results	14
3.2.1	2006 Base Year Transit Mode Split	14
3.2.2	2031 Transit Mode Split, Alternative 3	15
3.2.3	2031 Transit Mode Split, Alternative 4	19
4.	Land Use Forecasts and Trip Distribution	20
4.1	Land Use	20
4.2	Trip Distribution	24
5.	TTMP Alternatives	28
5.1	The Alternatives	28
5.1.1	Alternative 1: Do Nothing	28
5.1.2	Alternative 2: Transit-only	29
5.1.3	Alternative 3: Currently Planned Transit and Road Network Improvements 32	
5.1.4	Alternative 4 – TTMP Update Transit and Road Network Improvements	34
5.2	Network Performance of Alternatives	35
6.	Transit Network Alternatives	43
6.1	Methodology and Land Use Assumptions	43
6.2	Steeles Avenue BRT	43
6.3	Queen Street BRT	45
6.4	Hurontario Street BRT	45
6.5	Mississauga Road BRT	45
6.6	Brampton East BRT Corridor	45
6.6.1	Dixie Road	45
6.6.2	Bramalea Road	46
6.6.3	Torbram Road	46
6.6.4	Airport Road	47
6.6.5	Analysis of Alternatives	47
6.7	Bovaird Drive BRT	52
6.8	Support Services	52

6.9	Transit Nodes.....	52
6.10	Future HOT / LRT Corridors.....	52
6.11	Transit Service Level.....	53
7.	West Brampton Road Network.....	54
7.1	Projected Growth in West Brampton.....	54
7.2	North-South Transportation Corridor (NSTC) Alternatives.....	54
7.2.1	Brampton Super Arterial.....	56
7.2.2	Brampton-only Freeway.....	59
7.2.3	NSTC Connectivity Improvements.....	60
7.2.4	NSTC Conclusions.....	61
8.	Other Road Network Alternatives.....	62
8.1	North-East Brampton Network Alternatives.....	62
8.1.1	Base-case Option (Recommended 2009 YP BATS).....	62
8.1.2	Triggers for Major MacKenzie - Mayfield Link.....	65
8.1.3	Hwy 427 extension to Mayfield/EW Corridor.....	68
8.1.4	Recommended Alternative.....	72
8.2	Impacts of East-West GTA Corridor.....	73
8.2.1	Impacts on the City of Brampton.....	74
	Brampton Central Analyses.....	76
8.3	76	
8.3.1	Clark-Eastern Connection.....	76
8.3.2	John Street Extension.....	79
8.3.3	Ken Whillans Extension.....	82
8.3.4	Denison-Mill Connection.....	85
8.3.5	Queen Street EA and Capital Improvements.....	89
8.3.6	Queen Street Access Management Improvements.....	90
8.3.7	Previously Considered Improvements.....	91
8.3.8	Final Recommendations.....	91
9.	Recommendations and Implementation.....	94
9.1	2009 TTMP Recommended Transit Networks.....	94
9.2	2009 TTMP Recommended Road Networks.....	96
9.2.1	Projected Screenline Auto Demand.....	96
9.2.2	Development Charges Program, 2010 to 2031.....	100
9.3	Recommended Horizon Year Road Networks.....	108
9.4	Summary of Recommendations.....	111

Tables

Table 2-1:	Model Validation Results, Base Year, PM Peak Hour.....	5
Table 2-2:	Trip Generation Categories.....	7
Table 2-3:	Peak Hour Factor by Trip Purpose.....	8
Table 2-4:	Model Speeds and Capacities.....	8
Table 3-1:	Local Transit Mode Share Legend.....	12
Table 3-2:	City of Brampton Transit Mode Splits, TTS 2006.....	15

Table 3-3: City of Brampton PM Transit Mode Splits, 2004 TTMP 2031.....	15
Table 3-4: City of Brampton PM Transit Mode Splits, 2004 TTMP 2031 – Detailed Table.	16
Table 3-5: City of Brampton PM Transit Mode Splits, TTMP Update 2031 – Detailed Table	17
Table 3-6: City of Brampton PM Transit Mode Splits, TTMP Update 2031	19
Table 4-1: Population and Employment Forecast Sources	20
Table 4-2: Population and Employment 2031 Forecast Totals.....	20
Table 4-3: Land Use Assumptions for the City of Brampton, 2006 - 2031.....	23
Table 4-4: Travel to Brampton, All Purposes, Person Travel, 2006 and 2031 PM Peak Period	24
Table 4-5: Travel from Brampton, All Purposes, Person Travel, 2006 and 2031 PM Peak Period	26
Table 5-1: Future Transportation Alternatives	28
Table 5-2: Evaluation criteria	36
Table 5-3: Arterial Road Network Performance.....	36
Table 5-4: Screenline Summary Comparison for Five TTMP Alternatives	38
Table 5-5: Evaluation of Transportation Alternatives	40
Table 5-6 Evaluation of the Planning Alternatives.....	41
Table 6-1: Summary of Steeles BRT Alternatives	44
Table 6-2: Northbound PM Transit Riders with BRT on Dixie Road.....	46
Table 6-3 Northbound PM Transit Riders with BRT on Bramalea Road.....	46
Table 6-4: Northbound PM Transit Riders with BRT on Torbram Road.....	46
Table 6-5: Northbound PM Transit Riders with BRT on Airport Road	47
Table 6-6: Ridership Increase on Potential BRT Corridors.....	47
Table 7-1: Projected Growth in West Brampton and Surrounding Area.....	54
Table 7-2: NB Screenline, NSTC 407 ETR to GTA West Corridor	57
Table 7-3: Network Performance for NSTC Options.....	59
Table 7-4: Northbound traffic volumes for Brampton-only Freeway	59
Table 7-5: Timing of Sandalwood Parkway Extension	60
Table 7-6: NSTC implementation timing	61
Table 8-1: North-South Screenline Summary, 2009 YP BATS Recommended Alternative .	64
Table 8-2: East-West Screenline Summary, 2009 YP BATS Recommended Alternative.....	65
Table 8-3: North-South Screenline Summary, 2009 YP BATS Recommended Alternative - No Major MacKenzie Drive - Mayfield Road link.....	68
Table 8-4: East-West Screenline Summary for NE Brampton Recommended Alternative ..	68
Table 8-5: North-South Screenline Summary for NE Brampton with Hwy 427 Extension and East-West Corridor	72
Table 8-6: East-West Screenline Summary for NE Brampton with Hwy 427 Extension and East-West Corridor	72
Table 8-7: Screenline Summary Comparison between Base Case Scenario and Scenario with E-W Corridor	74
Table 8-8: Queen Street Existing Access Points Summary Table.....	91
Table 8-9: Recommended Central Brampton Improvements	92
Table 9-1: 2011 Screenline V/C Ratios	97
Table 9-2: 2016 Screenline V/C Ratios	98

Table 9-3: 2021 Screenline V/C Ratios	99
Table 9-4: 2031 Screenline V/C Ratios	100
Table 9-5: City of Brampton Capital Road Projects, 2011 to 2031	102

Exhibits

Exhibit 3-1: Local Transit Mode Share for Trip Origins, 2031 PM Peak Period.....	12
Exhibit 3-2: Local Transit Mode Share for Trip Destinations, 2031 PM Peak Period.....	13
Exhibit 3-3: Local Transit Mode Share for Trip Origin, 2006 PM Peak Period	13
Exhibit 3-4: Local Transit ModeShare for Trip Destinations, 2006 PM Peak Period.....	14
Exhibit 3-5: Transit Mode Split Aggregation	18
Exhibit 4-1: Sustainable Halton Option 1 – Milton Centred	22
Exhibit 4-2: Travel to Brampton, PM Peak Period, 2006 TTS.....	25
Exhibit 4-3: Travel to Brampton, PM Peak Period, 2031 TTMP Model.....	25
Exhibit 4-4: Travel from Brampton, PM Peak Period, 2006 TTS	27
Exhibit 4-5: Travel from Brampton, PM Peak Period, 2031 TTMP Model	27
Exhibit 5-1: Alternative 1 East-West Screenline V/C Ratios	29
Exhibit 5-2: Alternative 1 North-South Screenline V/C Ratios.....	29
Exhibit 5-3: Recommended Transit Network for 2021, 2004 TTMP	30
Exhibit 5-4: Alternative 2 East-West Screenline V/C Ratios	31
Exhibit 5-5: Alternative 2 North-South Screenline V/C Ratios.....	31
Exhibit 5-6: Recommended 2031 Road Network, 2004 TTMP	32
Exhibit 5-7: Alternative 3 East-West Screenline V/C Ratios	33
Exhibit 5-8: Alternative 3 North-South Screenline V/C Ratios.....	33
Exhibit 5-9: Alternative 4 East-West Screenline V/C Ratios	34
Exhibit 5-10: Alternative 4 North-South Screenline V/C Ratios.....	35
Exhibit 6-1: Steeles Avenue BRT Alternatives	44
Exhibit 7-1: NSTC Connection to Hwy 401	58
Exhibit 8-1: Auto Volume Plot, 2009 YP BATS Recommended Alternative.....	63
Exhibit 8-2: V/C Ratio Plot, 2009 YP BATS Recommended Alternative	64
Exhibit 8-3: Auto Volume Plot, 2009 YP BATS Recommended Alternative - No Major MacKenzie Drive - Mayfield Road Link	66
Exhibit 8-4: V/C Ratio Plot, 2009 YP BATS Recommended Alternative - No Major MacKenzie Drive - Mayfield Road Link	67
Exhibit 8-5: Auto Volume Plot, NE Brampton with Hwy 427 Extension and East-West Corridor.....	70
Exhibit 8-6: V/C Ratio Plot, NE Brampton with Hwy 427 Extension and East-West Corridor	71
Exhibit 8-7: Clark –Eastern Connection	77
Exhibit 8-8: Auto Volumes with Clark-Eastern Connection	79
Exhibit 8-9: Auto Volumes without Clark-Eastern Connection	79
Exhibit 8-10: John Street Extension	80
Exhibit 8-11: Auto Volumes with John Street Extension.....	81
Exhibit 8-12: Auto Volumes without John Street Extension.....	81

Exhibit 8-13: Ken Whillans Extension	83
Exhibit 8-14: Auto Volumes with Ken Whillans Extension.....	85
Exhibit 8-15: Auto Volumes without Ken Whillans Extension.....	85
Exhibit 8-16: Potential Denison Avenue to Mill Street Connection.....	86
Exhibit 8-17: Denison-Mill Connection	87
Exhibit 8-18: Auto Volumes with Denison Avenue Extension.....	88
Exhibit 8-19: Auto Volumes without Denison Avenue Extension.....	88
Exhibit 8-20: Queen Street 2031 Traffic Forecast, Kennedy to Rutherford.....	89
Exhibit 8-21:Ultimate Vision for Queen Street	90
Exhibit 8-22: Recommended Central Brampton Road Improvements	93
Exhibit 9-1: Recommended Transit Network by 2011	94
Exhibit 9-2: Recommended Transit Network by 2016	95
Exhibit 9-3: Recommended Transit Network by 2021	95
Exhibit 9-4: Recommended Transit Network by 2031	96
Exhibit 9-5: Road Network Projects 2010 - 2031.....	101
Exhibit 9-6: Recommended Road Network by 2011	108
Exhibit 9-7: Recommended Road Network by 2016.....	109
Exhibit 9-8: Recommended Road Network by 2021	110
Exhibit 9-9: Recommended Road Network by 2031	110
Exhibit 9-10: Recommended Road Network Beyond 2031	111

1. INTRODUCTION

This Supplementary Analyses Report is a Technical Appendix to the 2009 TTMP Final Report. Its intent is to provide documentation for the technical analysis undertaken as part of the 2009 Brampton TTMP Sustainable Update, which serves as the technical support and background for the infrastructure and service level information included in the City of Brampton Development Charge Background Study input for Roads and Transit Services.

The 2009 TTMP recommendations are based on the analysis presented in this report as well as on the input received from the public, City staff, and stakeholders. Further details regarding policy, staging, broader transit and land use strategy, implementation and other issues and recommendations will be included in the overall TTMP Master Plan documentation currently being prepared.

1.1 Purpose and Scope

The purpose of the 2009 TTMP study is to update the 2004 Transportation and Transit Master Plan (TTMP) to expedite the implementation of the transportation vision. Key goals of the 2009 TTMP update are to further enhance the vision of Brampton's transportation system and make it fully compatible with bold long term goals set by the Growth Management Plan. The Growth Management Plan goals include:

- Embracing compact communities
- Sustainable development
- Protecting the natural environment
- Economic vitality
- Healthy communities
- Providing safe, affordable, and efficient transportation for people and goods

The analyses described in this report are completed under the direction of the Core Technical Committee and are intended to provide technical insight and input to the transportation and development related decisions.

The Report documents technical analyses completed for the study between June 2007 and May 2009 and documents assumptions, methods and findings for the transportation modeling and forecasting, evaluation of land use, transit and road networks, the outcomes of alternative development scenarios and various sensitivity tests, evaluation of the Central Area, recommendations and implementation guidelines. As noted above, the focus of this document is the technical background to support the infrastructure and service level information related to the roads and transit infrastructure included in the City of Brampton's Development Charges Background Study. Further details regarding policy, staging, broader transit and land use strategy, implementation and other issues and recommendations will be included in the overall TTMP Master Plan documentation currently being prepared.

The results of these tasks are described in **Chapters 2 to 9** respectively in this report.

Travel Demand Forecasting Method (Chapter 2): In this Chapter we document the structure and the performance of the PM Peak Hour travel demand forecasting model used during the course of the study. The discussion on model validation and network coding assumptions supplements the examination of methodology applied to trip generation, distribution and assignment. The intricacies of the City model, developed by Peter Dalton, are further discussed in **Technical Appendix A**.

Transit Modal Split Calculation (Chapter 3): This section of the report describes the assumptions, methods and the results of modal split methodology used for the study.

Land Use Forecasts and Travel Distribution (Chapter 4): This section discusses and documents population and employment forecasts used in base-line travel demand analyses for each of the horizon year. Population and employment assumptions used in sensitivity test for various development staging are discussed in Chapter 7. In Chapter 3 the reader will find a discussion on travel distribution patterns between 2006 and 2031, as forecasted by the model.

TTMP Alternatives (Chapter 5): This section presents the results of the assessment of the four transportation alternatives developed and evaluated for the 2009 TTMP. Section 5.5 discusses and documents the selection of the preferred alternative.

Transit Network Alternatives (Chapter 6): In this chapter we present the results of the evaluation of the various components of the transit network, justification for the selection of new Bus Rapid Transit corridors and the extension of services on other corridors identified in earlier studies.

West Brampton Road Network (Chapter 7): This Chapter documents the inputs, methodology and the results of technical analyses for road network alternatives in the west part of Brampton including North South Transportation Corridor (NSTC); documents the results of the assessment of the development staging in North West Brampton and Bram West in relation to need and timing of NSTC; impacts of GTA West and the travel patterns on the NSCT itself.

Other Road Network Alternatives (Chapter 8): In this section the reader will find the discussion and documentation of network need and timing assessment for roads in north-east Brampton, Central Area and other.

Recommendations and Implementation (Chapter 9): presents summary of road and transit recommendations and a discussion on the implementation timing and strategy.

1.2 Relation to the TTMP Report

While written as a stand-alone report, this document also serves as a Technical Appendix to the 2009 TTMP Final Report. The recommendations, implementation staging and policy

directions presented in 2009 TTMP Report are all based on technical inquiries presented in this report.

2. TRAVEL DEMAND FORECASTING

2.1 Method

Travel demand forecasts serves as the primary tool for estimating future travel demands and assessing the alternative development scenarios. The forecasts were based upon the City of Brampton's EMME/2 PM Peak Hour travel demand forecasting model, which simulates travel for a typical weekday PM peak hour throughout the Greater Toronto Area, including the City of Brampton and Region of Peel. The model uses the following traditional four-step demand modelling approach:

- 1) Trip generation, in which the total number of trips that start and end in each zone are calculated, as a function of the different land-uses in each zone. Non-motorized trips are also calculated as well but do not partake in the remaining three steps of the modelling process.
- 2) Modal split, in which the trips are allocated to the different available travel modes. The allocation within the motorized trip group is between autos, transit, and GO. The modal split module uses the observed auto-transit mode split relationships.
- 3) Trip distribution, in which the generated trips are distributed among all zones in origin-destination pairs. The distribution is conducted as a function of the zonal land-uses, the characteristics of the transportation network and cost (i.e., travel time, congestion, fuel and parking cost, transit fares, tolls cost, etc.).
- 4) Trip assignment, in which the trips for each mode are loaded onto, or assigned to, the respective transportation network(s). The model uses the EMME/2 "equilibrium assignment" technique. This process allocates traffic to links so as to minimize the "cost" of the vehicle or transit passenger between his / her origin and destination; where "cost" is commonly defined as travel time with a monetary cost expressed in terms of time.

The City's model is a customised version of the "Simplified GTA Model" developed by Peter Dalton. The model has been calibrated to 2006 Transportation Tomorrow Survey and validated against 2006 Cordon Counts. Detail discussion of the City's Model, authored by Peter Dalton and entitled "*Brampton 2006 P.M. Peak Hour Model – Documentation and User's Guide*", is provided in **Appendix B** of the 2009 TTMP report. Further information is available from the City upon request.

2.2 2006 Model Validation

The model was calibrated using origin-destination patterns from the 2006 Transportation Tomorrow Survey (TTS) and validated against the 2006 Cordon Counts. Project-specific validation of the 2006 model results (based on 2006 TTS based population and employment numbers) were compared with observed traffic volumes on specific roads. The 2006 validation results are presented in **Table 2-1**. 2006 served as the base year for the Brampton TTMP update.

Table 2-1: Model Validation Results, Base Year, PM Peak Hour

	West Totals (Winston Churchill to west of Hwy 410)			East Totals (Hwy 410 to Highway 50)		
NORTHBOUND	Observed	Model	Model / Obs.	Observed	Model	Model / Obs.
Caledon / Brampton	3,162	2,571	0.81	5,330	5,037	0.95
North of Bovaird Drive / Castlemore Road	7,721	9,075	1.18	9,595	11,717	1.22
North of Queen Street / Embleton Road	10,203	10,175	1	19,945	21,173	1.06
North of Steeles Avenue	9,576	9,405	0.98	17,034	18,279	1.07
Brampton / Mississauga	9,316	10,187	1.09	13,141	14,407	1.1
SOUTHBOUND	Observed	Model	Model / Obs.	Observed	Model	Model / Obs.
Caledon / Brampton	1,825	1,410	0.77	2,202	2,302	1.05
North of Bovaird Drive / Castlemore Road	5,023	4,651	0.93	5,414	4,349	0.8
North of Queen Street / Embleton Road	5,143	3,741	0.73	8,547	8,704	1.02
North of Steeles Avenue	5,571	4,933	0.89	9,225	9,418	1.02
Brampton / Mississauga	6,078	5,423	0.89	8,762	6,852	0.78
	North Totals (Mayfield to North of Queen)			South Totals (Queen to Bram.-Miss. Boundary)		
WESTBOUND	Observed	Model	Model / Obs.	Observed	Model	Model / Obs.
Brampton / Halton	1,453	1,200	0.83	5,599	5,243	0.94
Credit River*				7,790	7,776	1
East of Highway 10	7,063	6,205	0.88	8,986	8,687	0.97
East of Highway 410 / Heartlake Road	5,164	5,686	1.1	13,042	12,130	0.93
East of Airport Road	3,393	4,131	1.22	9,288	7,629	0.82

West of Highway 50	1,692	2,020	1.19	8,896	6,957	0.78
EASTBOUND	Observed	Model	Model / Obs.	Observed	Model	Model / Obs.
Brampton / Halton	1,016	1,203	1.18	3,149	2,587	0.82
Credit River*				5,065	4,995	0.99
East of Highway 10	5,262	4,443	0.84	5,606	4,357	0.78
East of Highway 410 / Heartlake Road	4,350	4,742	1.09	8,385	6,809	0.81
East of Airport Road	1,867	2,826	1.51	7,457	6,607	0.89
West of Highway 50	1,396	1,448	1.04	7,252	5,698	0.79

*Credit River Screenline from Bovaird to Bram.-Miss. Boundary

Based on the validation results presented above the model has been accepted as a suitable tool to forecast future travel demand within the City of Brampton for the population and employment quotas estimated for 2011, 2016, 2021, 2026 and 2031 horizon years.

2.3 General Forecasting Assumptions

This section provides an overview of the forecasting methodology and assumptions used for this study. Detailed discussions of the models structure, modelling parameters and procedures are provided in the *Brampton 2006 PM Peak Model, Documentation and Users Guide, July 2008, prepared by Peter Dalton*, available in **Appendix B** of the TTMP Final Report.

2.3.1 Trip Generation Rates

Trip rates per population and employment are based on 2006 data obtained from the Transportation Tomorrow Survey. The Transportation Tomorrow Survey (TTS) is a comprehensive travel survey conducted in the Greater Toronto Hamilton Area (GTHA) once every five years and is used to collect information on travel patterns, including trip origins and destinations as well as travel modes, for GTHA residents. For this study, the 2006 TTS data was aggregated to a “superzone” system that is less detailed than the GTA traffic zone system but more detailed than the Planning District level. For each superzone, different rates for various trip purposes were extracted and applied to population and employment forecasts. The model is forecasting trips made for the purpose of traveling to and from work, traveling to and from home, trips that cannot be associated with neither work nor home and so called discretionary travel, or trips with purpose such as shopping, entertainment or personal.

Table 2-2 below summarizes the total trips for each trip purpose used in the model.

Table 2-2: Trip Generation Categories

	2006 TTS	2001 TTS
Employment Based Trip Rates		
Work trip origins - all modes	1,496,055	1,650,477
Population Based Trip Rates		
Work to home destinations - all modes	1,211,057	1,349,188
Non work to home destinations -auto mode	680,177	756,800
Non work to home destinations - transit mode	142,616	123,982
Home origins – auto mode	476,210	585,324
Home origins - transit mode	39,482	40,337
Composite Trip Rates (applied to employment plus 50% population)		
Work to non-home destinations - all modes	284,998	335,117
Non-home non-work origins - auto mode	912,725	1,005,768
Non-home destinations with non-work origins - auto mode	708,758	649,085

Population and employment forecasts are discussed in detail in **Chapter 4**.

2.3.2 Distribution

The trip distributions assumed in the Brampton model were based on the 2006 TTS trip tables for the trip purposes listed in **Table 2-2**. Each of the “base” trip matrices from TTS were modified, and balanced to the appropriate trip ends. Areas with no trip activities in 2006 were “seeded” or provided with infinitesimal non-zero values to allow trip distributions to occur once the area develops.

When compared to the base TTS matrices, the Brampton model matrices have trip patterns comparable to TTS, with uniform distribution at the traffic zone level. In addition, trip length distributions are similar to the observed distributions.

2.3.3 Peak Hour Factors (Auto & Transit)

The three-hour peak period matrices used for trip generation and trip distribution processes were factored down using peak hour factors for traffic and transit assignments. The factors used in the model are summarized below.

Table 2-3: Peak Hour Factor by Trip Purpose

Trip Purpose	Peak Hour Factor
Auto-work trips from Brampton	0.44
Auto-work trips from Halton	0.44
Auto-work trips from all other origins	0.4
Non-work	0.35
GO Rail egress	0.4

2.3.4 Speeds and Capacities

Posted speeds and per lane capacity assumptions were based on the GTHA Coding Standards, coded to the model by City staff for the area of Peel Region and by iTRANS staff for the remaining area of the GTA, with particular focus on neighbouring regions. The 2011 to 2031 road networks are reflective of road improvements identified by road authorities across the GTA. **Table 2-4** lists the speed and capacity assumptions coded for each road type in the City of Brampton. Coding of the future proposed roads followed the speed and capacity values identified for each road class. More discussion on road network and road network coding is provided in **Chapters 5, 7 and 8**.

Table 2-4: Model Speeds and Capacities

	ID	Speed (km/h)	Lane Capacity (vph)	Example
Provincial freeway	12	100	1800	Highway 410, Highway 401
Private toll road	15	100	1800	Highway 407
Provincial ramp	22	70	1400	Highway 410 off/on ramp
Private ramp	25	70	1400	Highway 407 off/on ramp
Peel Regional Highway	33	60-80	800-900	Dixie Rd, Steeles Ave
Brampton Highway	34	50-80	800-900	Sandalwood Pkwy, Chinguacousy Rd
Brampton Arterial	44	50-80	600-800	Goreway Dr, Clark Blvd
Brampton Minor Arterial	54	50	500	Vodden St, Financial Dr
Brampton Collector	64	50	500	Railroad St

2.3.5 Transit lines and stations

All existing transit lines were coded into the EMME/2 model within Peel and Highway 7 through York Region. All GO rail corridors as well as GO bus services in Brampton as well as Highway 407 were checked and updated. The future proposed major transit services were added to model. Considerable attention was given to accurately reflect future transit services

in Brampton (as recommended by 2004 TTMP and BRT plans) and services recommended in Metrolinx Regional Transportation Plans. Additional major service expansion in Mississauga and York as well as connectivity details with Mississauga Transit, TTC or YRT were also considered. More discussion on transit network coding is provided in **Chapter 6**.

3. TRANSIT MODE SPLIT CALCULATION

The “Simplified GTA Model”, although highly capable forecasting tool, is not sensitive to modal split changes resulting from higher land use densities and improvements in connectivity and level of transit services. To overcome this limitation the project team devised a method to allow for changes to be made to the transit mode split based on population and employment density and transit level of service. The method is documented in this section.

3.1 Methodology

In order to assess future changes in travel demand resulting from increased population densities and the implementation of higher order transit (Bus Rapid Transit or BRT), Brampton traffic zones were compared to “proxy” zones, or the 2006 traffic zones located in other parts of the GTA with similar densities and transit systems parallel to future BRT and GO networks. Traffic zones such as those located along the Yonge Street corridor in southern York Region between Steeles Avenue and Highway 7, with high-frequency VIVA bus rapid transit (BRT) were chosen as probable proxies. Other proxy zones were taken from the northeast and northwest corners of Toronto (North Etobicoke and Scarborough), as these represented areas with intermediate population / employment densities and regular transit service, but without direct access to subway lines.

To model appropriate modal-shares in the PM peak period, the origins and destinations of work trips were considered and related to zone population or employment density. Density was defined as population per hectare for trip destinations and employment per hectare for trip origins. The mode share prediction was obtained for each Brampton traffic zone by comparing the horizon year population densities against proxy zones with similar densities and transit services using the following formula:

$$\text{New zone mode share} = 2006 \text{ zone mode share} + [(2006 \text{ proxy share} - 2006 \text{ zone share}) * 0.6 * 2031 \text{ zone density} / 2006 \text{ proxy density}]$$

Or

If the new mode share is less than the original mode share (i.e. the original mode share is greater than that for the proxy zone), the original value is used so that no zones decrease in mode share.

Or

If the new mode share is greater than the highest mode share recorded for any of the proxy zones in that density range, the highest proxy mode share is used instead.

Or

If the density in a new zone is very high, the mode share is increased by 1% over the value that would otherwise be used for every 400 people or jobs/sq km above 7500 people/sq km. For example, a destination mode share of 10% would increase to 15% if the population density of that zone is 9500/sq km.

Or

Where the density in the new zone is very low, mode share is capped at 1% of the density, so a zone with only 5 people/sq km for example, will have a maximum transit destination mode share of $5/100 = 5\%$.

In the “New Zone Mode Share” formula, 0.6 represents the approximate rate of mode share increase in relation to the increase in population density. For example, if density increases 100%, the transit mode share increases 60%. This is calculated by averaging all the zones and comparing their mode shares and densities. The 0.6 rate reflects the transit increase rate derived from 1986-2006 TTS data.

The proxy zones are broken down into three categories for trip destinations. For trip origins, only one category is used due to the low overall numbers of trips, with an average mode share determined for all proxy zones.

Destination Categories:

Category 1: Density of 0-2,500/sq km OR not in close proximity to a BRT line

Category 2: Density of 2,500-5,000/sq km AND in close proximity to a BRT line

Category 3: Density over 5,000/sq km AND in close proximity to a BRT line

All Brampton zones that are not located within 1 km of a BRT route are automatically set to Category 1, irrespective of the density of that zone. These zones are mainly located in the northwest and northeast corners of the city and this method avoids comparing them against any zones that are near higher-order transit such as VIVA lines in York Region. This applies for all of the BRT corridors proposed- Steeles, Queen, Main, Bovaird, Mississauga Rd and Airport Rd.

For zones forecasted to have zero population in 2031, the existing (2006) mode share for that zone is preserved.

Similar calculations were carried out for the other horizon years (2011, 2016, and 2021).

From these calculations, an estimation of expected transit mode share, based on the average proxy zone value for each density range, can be obtained. A 2031 plot of the work trip transit mode shares for Brampton traffic by destination is shown below, along with the existing (2006) shares. The legend for each plot is shown in **Table 3-1**.

Table 3-1: Local Transit Mode Share Legend

Transit mode share	Colour
0-10%	Green
10-20%	Blue
20-30%	Yellow
30-40%	Orange
> 40%	Red

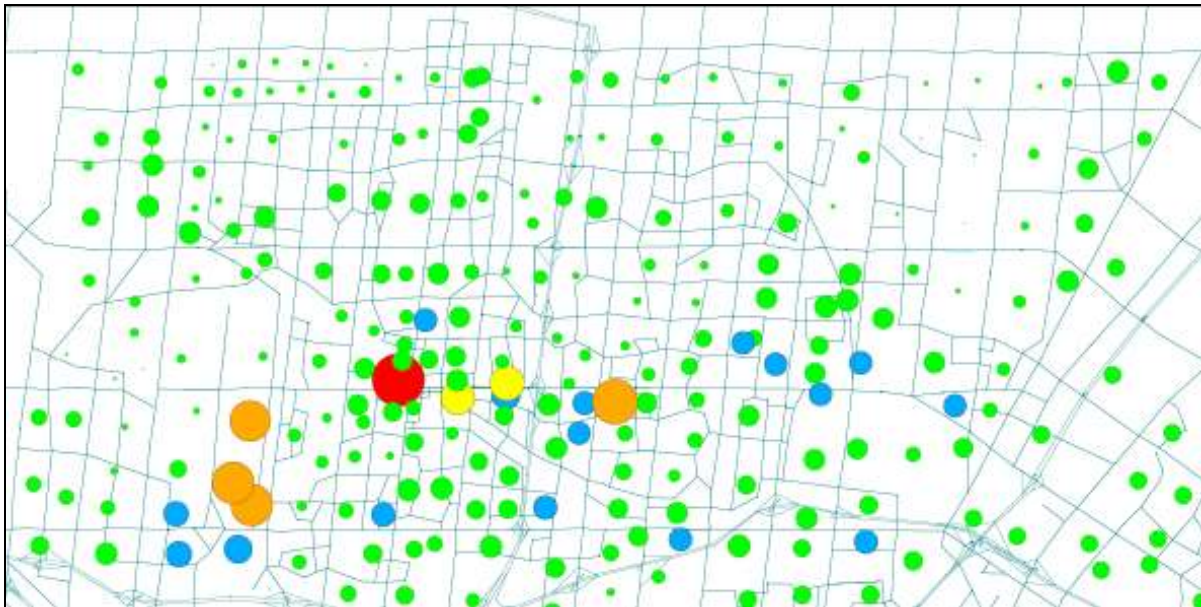


Exhibit 3-1: Local Transit Mode Share for Trip Origins, 2031 PM Peak Period

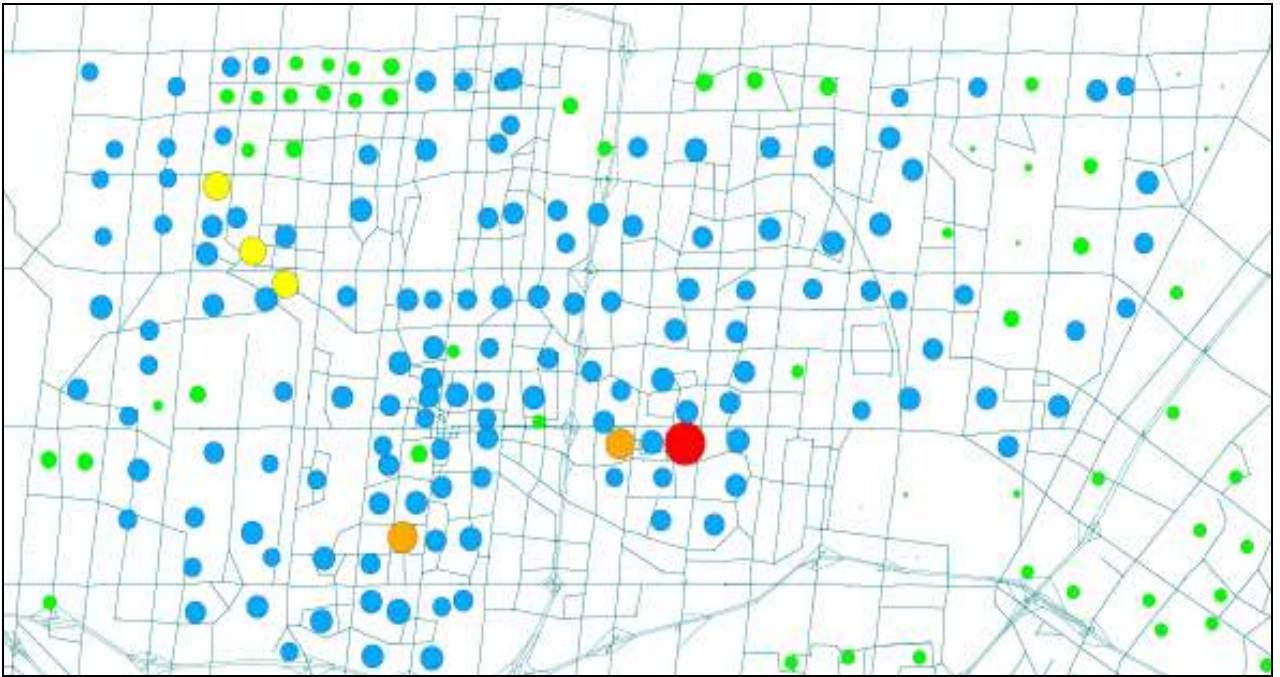


Exhibit 3-2: Local Transit Mode Share for Trip Destinations, 2031 PM Peak Period

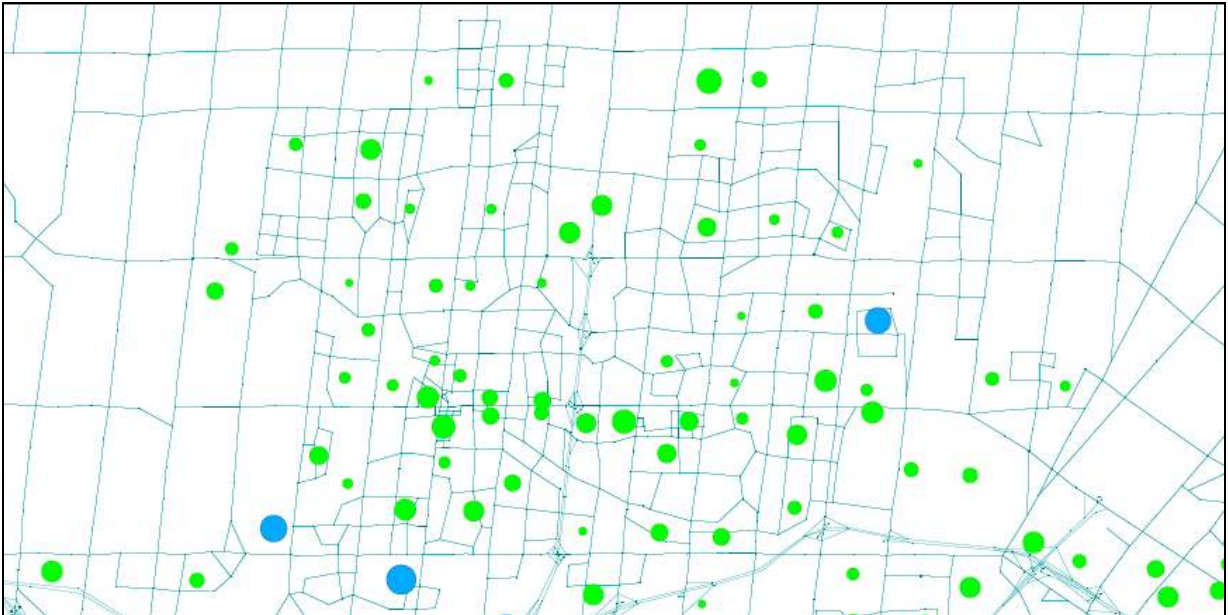


Exhibit 3-3: Local Transit Mode Share for Trip Origin, 2006 PM Peak Period

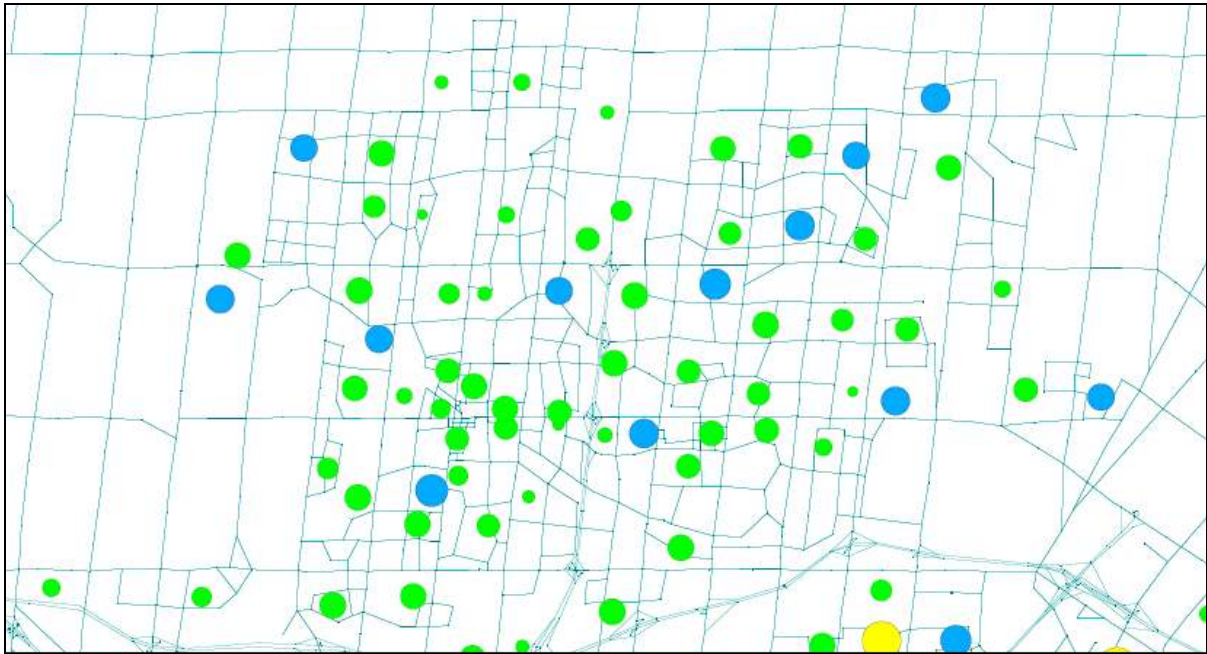


Exhibit 3-4: Local Transit ModeShare for Trip Destinations, 2006 PM Peak Period

Planned 2031 transit investments combined with higher land use densities along Bus Rapid Transit corridors, expanded GO rail service and improved transit connectivity between cities and regions in GTA planned by the City of Brampton, GO Transit, Metrolinx, City of Mississauga and York Region will, most likely, produce much higher modal splits than those observed in 2006. The transit coverage will also improve providing many zones that did not previously have any transit service planned for, particularly in the northeast and the northwest, with coverage by primary, secondary, and local services.

3.2 Application and Results

The methodology described above was applied to the 2011-2031 horizon years' models. This chapter documents the resulting transit modal splits for trips to and from the City of Brampton along with the "existing" transit mode splits extracted from the 2006 TTS. This section reports on mode splits as calculated for 2006 base year and Alternatives 3 and 4 of the TTMP. The specifics on each Alternative are described in **Chapter 5**.

3.2.1 2006 Base Year Transit Mode Split

The split between peak hour auto drivers and peak hour transit users was extracted from the 2006 TTS to assess the current competitiveness of transit versus auto drivers. Auto

passengers and other modes are not included in the calculation because the EMME/2 transportation model does not model these other modes. All trip purposes are considered in the data as well. **Table 3-2** below summarizes the transit mode splits for all Brampton related trips.

Table 3-2: City of Brampton Transit Mode Splits, TTS 2006

Trips	From Brampton	To Brampton	Bram-Bram	All Bram Trips
Peak Hour Autos	43,800	55,100	26,200	72,700
Peak Hour Transit	2,600	5,700	1,700	6,600
Total	46,400	60,800	27,900	79,300
Transit MS %	5.6%	9.4%	6.1%	8.3%

According to the 2006 TTS, transit mode split, when compared only with auto drivers, accounts for 8.3% of travel to, from, and within the City of Brampton. This number increases for trips destined to Brampton, as these are the primarily home-based work trips (commuter trips) in the PM.

3.2.2 2031 Transit Mode Split, Alternative 3

The mode split methodology described in **Section 3.1** was applied to the proposed 2031 road and transit network as recommended by 2004 TTMP (Alternative 3). The resulting auto and transit matrices produced the mode splits listed in **Table 3-3**.

Table 3-3: City of Brampton PM Transit Mode Splits, 2004 TTMP 2031

Trips	From Brampton	To Brampton	Bram-Bram	All Bram Trips
Peak Hour Autos	112,400	119,600	70,400	161,500
Peak Hour Transit	7,900	23,100	6,500	24,500
Total	120,300	142,700	76,900	186,000
Transit MS %	6.6%	16.2%	8.5%	13.2%

Based on the 2004 TTMP recommended road and transit network, the overall Brampton transit mode split is 13.2%.

Detailed transit mode splits for specific O-D pairs, similar to those identified in the 2004 TTMP, are provided in **Table 3-4**. Traffic zone aggregation for the mode split table is provided in **Exhibit 3-5**.

Table 3-4: City of Brampton PM Transit Mode Splits, 2004 TTMP 2031 – Detailed Table

	Toronto CBD	Rest of Toronto	Etobicoke	York U	Durham	Other York Region	Richmond Hill & Markham	Vaughan	Caledon	NW Bram	BramWest	South Central Brampton	Queen St Corridor	North Central Brampton	North East Brampton	East Brampton	Southeast Brampton	Mississauga South	Huronario St Corridor	Mississauga West	Mississauga East	Haltom Hills	Malton	Other Halton	Hamilton	External	TOTAL
Toronto CBD	0.63	0.81	0.81	0.88	0.88	0.86	0.85	0.79	0.95	0.95	0.89	0.81	0.98	0.73	0.67	0.70	0.99	0.91	0.67	0.91	0.92	0.92	0.94	0.92	0.75	0.38	0.82
Rest of Toronto	0.57	0.29	0.33	0.37	0.10	0.15	0.12	0.13	0.21	0.49	0.23	0.33	0.58	0.41	0.31	0.35	0.45	0.35	0.31	0.32	0.20	0.08	0.30	0.30	0.10	0.04	0.28
Etobicoke	0.50	0.33	0.15	0.35	0.04	0.11	0.05	0.06	0.00	0.14	0.27	0.36	0.14	0.16	0.12	0.15	0.10	0.13	0.12	0.10	0.09	0.00	0.02	0.06	0.05	0.00	0.17
York U	0.67	0.41	0.28	0.29	0.21	0.12	0.22	0.24	0.00	0.20	0.42	0.46	0.20	0.19	0.18	0.21	0.13	0.31	0.26	0.19	0.06	0.44	0.00	0.00	0.00	0.01	0.29
Durham	0.12	0.05	0.09	0.37	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.04
Other York Region	0.09	0.04	0.08	0.00	0.03	0.06	0.05	0.01	0.00	0.20	0.00	0.00	0.00	0.12	0.00	0.01	0.00	0.03	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05
Richmond Hill & Markham	0.24	0.12	0.00	0.19	0.02	0.06	0.04	0.06	0.00	0.13	0.27	0.45	0.42	0.21	0.00	0.01	0.40	0.00	0.00	0.00	0.05	0.00	0.00	0.02	0.01	0.00	0.06
Vaughan	0.25	0.14	0.09	0.14	0.01	0.01	0.05	0.07	0.00	0.11	0.05	0.08	0.26	0.13	0.10	0.12	0.15	0.00	0.00	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.08
Caledon	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.11	0.05	0.13	0.23	0.10	0.06	0.04	0.06	0.03	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
NW Bram	0.09	0.01	0.01	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.07	0.09	0.03	0.04	0.06	0.04	0.00	0.07	0.02	0.00	0.06	0.00	0.01	0.00	0.00	0.03
BramWest	0.14	0.04	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.07	0.03	0.10	0.17	0.08	0.05	0.07	0.09	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.05
South Central Brampton	0.11	0.02	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.13	0.10	0.12	0.14	0.12	0.12	0.13	0.09	0.12	0.05	0.03	0.01	0.00	0.17	0.00	0.00	0.00	0.09
Queen St Corridor	0.33	0.09	0.08	0.18	0.00	0.00	0.04	0.00	0.00	0.21	0.24	0.26	0.17	0.20	0.24	0.24	0.12	0.06	0.04	0.02	0.10	0.04	0.05	0.00	0.00	0.04	0.16
North Central Brampton	0.11	0.01	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.07	0.06	0.02	0.10	0.11	0.04	0.01	0.05	0.01	0.00	0.07	0.01	0.00	0.00	0.00	0.04
Northeast Brampton	0.23	0.07	0.13	0.09	0.00	0.00	0.00	0.01	0.00	0.05	0.02	0.14	0.12	0.08	0.04	0.09	0.04	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.05
East Brampton	0.24	0.06	0.10	0.06	0.00	0.00	0.00	0.01	0.00	0.05	0.01	0.11	0.09	0.08	0.06	0.07	0.03	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.05
Southeast Brampton	0.43	0.02	0.02	0.01	0.00	0.00	0.01	0.00	0.00	0.06	0.03	0.05	0.11	0.07	0.04	0.08	0.11	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.05
Mississauga South	0.20	0.12	0.05	0.10	0.00	0.02	0.09	0.00	0.00	0.05	0.09	0.13	0.17	0.08	0.19	0.22	0.12	0.14	0.17	0.10	0.08	0.00	0.04	0.04	0.01	0.00	0.12
Huronario Corridor	0.19	0.13	0.11	0.21	0.00	0.00	0.00	0.00	0.00	0.16	0.14	0.21	0.26	0.16	0.08	0.09	0.14	0.11	0.09	0.08	0.04	0.00	0.00	0.01	0.03	0.00	0.09
Mississauga West	0.16	0.07	0.06	0.08	0.00	0.00	0.02	0.00	0.00	0.15	0.03	0.10	0.20	0.17	0.06	0.09	0.09	0.07	0.07	0.05	0.04	0.00	0.05	0.01	0.00	0.00	0.06
Mississauga East	0.23	0.08	0.07	0.07	0.01	0.00	0.01	0.02	0.00	0.15	0.12	0.16	0.27	0.17	0.15	0.19	0.10	0.10	0.12	0.05	0.04	0.01	0.00	0.00	0.00	0.00	0.08
Haltom Hills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.02	0.00	0.08	0.00	0.02
Other Halton	0.06	0.03	0.04	0.05	0.02	0.00	0.00	0.00	0.15	0.04	0.05	0.00	0.05	0.01	0.02	0.03	0.03	0.06	0.05	0.04	0.01	0.00	0.00	0.04	0.03	0.00	0.03
Hamilton	0.26	0.19	0.05	0.09	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.07	0.01	0.23	0.35	0.00	0.16	0.23	0.13	0.00	0.00	0.12	0.04	0.17	0.00	0.15
External	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
TOTAL	0.54	0.36	0.23	0.32	0.09	0.10	0.14	0.13	0.13	0.22	0.09	0.16	0.33	0.12	0.11	0.14	0.32	0.23	0.13	0.15	0.17	0.05	0.07	0.11	0.15	0.01	0.20

Table 3-5: City of Brampton PM Transit Mode Splits, TTMP Update 2031 – Detailed Table

	Toronto CBD	Rest of Toronto	Etobicoke	York U	Durham	Other York Region	Richmond Hill & Markham	Vaughan	Caledon	NW Bram	BramWest	South Central Brampton	Queen St Corridor	North Central Brampton	Northeast Brampton	East Brampton	Southeast Brampton	Mississauga South	Huronario St Corridor	Mississauga West	Mississauga East	Haltom Hills	Malton	Other Halton	Hamilton	External	TOTAL
Toronto CBD	0.63	0.81	0.82	0.88	0.89	0.86	0.86	0.80	0.96	0.95	0.65	0.74	0.98	0.67	0.60	0.64	0.99	0.93	0.88	0.92	0.93	0.93	0.95	0.92	0.76	0.44	0.82
Rest of Toronto	0.57	0.28	0.33	0.37	0.10	0.15	0.12	0.13	0.21	0.41	0.17	0.23	0.54	0.33	0.25	0.29	0.45	0.42	0.64	0.42	0.18	0.09	0.39	0.39	0.08	0.05	0.28
Etobicoke	0.48	0.31	0.14	0.34	0.04	0.10	0.05	0.05	0.04	0.13	0.22	0.31	0.10	0.13	0.11	0.12	0.11	0.17	0.31	0.14	0.06	0.00	0.02	0.10	0.05	0.00	0.17
York U	0.67	0.40	0.28	0.29	0.21	0.12	0.21	0.24	0.00	0.18	0.34	0.45	0.19	0.16	0.17	0.18	0.14	0.35	0.42	0.21	0.07	0.00	0.66	0.00	0.00	0.01	0.29
Durham	0.12	0.05	0.07	0.36	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.04
Other York Region	0.08	0.03	0.08	0.00	0.03	0.06	0.05	0.01	0.00	0.13	0.03	0.00	0.06	0.12	0.00	0.00	0.00	0.03	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Richmond Hill & Markham	0.24	0.12	0.00	0.18	0.02	0.06	0.04	0.06	0.00	0.11	0.25	0.35	0.34	0.13	0.00	0.01	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Vaughan	0.25	0.15	0.10	0.14	0.01	0.01	0.05	0.07	0.00	0.08	0.04	0.04	0.19	0.10	0.08	0.09	0.13	0.00	0.03	0.01	0.02	0.00	0.00	0.00	0.01	0.01	0.08
Caledon	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.01	0.03	0.03	0.01	0.01	0.01	0.01	0.00	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
NW Bram	0.19	0.00	0.03	0.09	0.00	0.00	0.00	0.00	0.04	0.01	0.03	0.10	0.09	0.03	0.09	0.10	0.06	0.03	0.16	0.01	0.00	0.06	0.01	0.00	0.00	0.00	0.00
BramWest	0.26	0.10	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.14	0.07	0.19	0.28	0.17	0.11	0.15	0.17	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.10
South Central Brampton	0.19	0.09	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.19	0.15	0.16	0.21	0.18	0.18	0.18	0.14	0.13	0.06	0.03	0.02	0.00	0.18	0.00	0.00	0.01	0.13
Queen St Corridor	0.40	0.15	0.11	0.30	0.00	0.00	0.08	0.00	0.00	0.24	0.28	0.27	0.19	0.23	0.28	0.27	0.13	0.13	0.25	0.05	0.12	0.05	0.05	0.00	0.00	0.04	0.19
North Central Brampton	0.18	0.02	0.03	0.08	0.00	0.00	0.00	0.00	0.00	0.04	0.06	0.11	0.08	0.03	0.13	0.14	0.00	0.02	0.16	0.01	0.00	0.08	0.01	0.00	0.00	0.00	0.05
Northeast Brampton	0.22	0.11	0.13	0.12	0.00	0.00	0.00	0.02	0.00	0.04	0.02	0.14	0.11	0.09	0.04	0.09	0.03	0.00	0.00	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.05
East Brampton	0.26	0.17	0.14	0.18	0.00	0.00	0.00	0.03	0.00	0.08	0.04	0.13	0.12	0.12	0.12	0.11	0.00	0.00	0.00	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0.08
Southeast Brampton	0.47	0.07	0.06	0.10	0.00	0.00	0.04	0.00	0.00	0.22	0.16	0.17	0.24	0.24	0.14	0.18	0.15	0.07	0.13	0.05	0.08	0.00	0.00	0.00	0.00	0.00	0.13
Mississauga South	0.17	0.10	0.05	0.10	0.00	0.04	0.08	0.00	0.00	0.04	0.07	0.08	0.09	0.06	0.13	0.15	0.04	0.14	0.22	0.11	0.06	0.00	0.04	0.06	0.00	0.00	0.12
Huronario Corridor	0.16	0.10	0.06	0.07	0.00	0.00	0.00	0.00	0.00	0.06	0.05	0.07	0.14	0.04	0.02	0.03	0.08	0.12	0.15	0.10	0.02	0.00	0.00	0.05	0.02	0.00	0.09
Mississauga West	0.14	0.05	0.04	0.04	0.00	0.00	0.02	0.00	0.00	0.10	0.02	0.05	0.13	0.09	0.03	0.05	0.05	0.09	0.12	0.07	0.03	0.00	0.07	0.01	0.00	0.00	0.06
Mississauga East	0.24	0.09	0.07	0.08	0.01	0.00	0.01	0.02	0.00	0.12	0.10	0.12	0.22	0.13	0.13	0.16	0.08	0.16	0.40	0.09	0.03	0.01	0.00	0.01	0.00	0.00	0.10
Haltom Hills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.04	
Milton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	
Other Halton	0.06	0.02	0.05	0.00	0.03	0.00	0.00	0.00	0.23	0.04	0.00	0.00	0.05	0.01	0.02	0.03	0.00	0.07	0.11	0.04	0.00	0.00	0.00	0.04	0.03	0.00	0.04
Hamilton	0.27	0.22	0.04	0.08	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.08	0.00	0.28	0.26	0.04	0.16	0.34	0.15	0.00	0.00	0.12	0.05	0.17	0.00	0.15
External	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	
TOTAL	0.53	0.36	0.23	0.32	0.09	0.10	0.14	0.13	0.14	0.22	0.10	0.16	0.33	0.12	0.12	0.14	0.33	0.26	0.26	0.18	0.17	0.05	0.08	0.12	0.15	0.02	0.20



Exhibit 3-5: Transit Mode Split Aggregation

3.2.3 2031 Transit Mode Split, Alternative 4

The TTMP sustainable update proposes a number of improvements beyond the 2004 TTMP transit network, including:

- Extending Hurontario BRT north of Bovaird to Mayfield;
- Extending Steeles BRT west of Mississauga Road to Lisgar GO Station;
- New Mississauga Road BRT from Bovaird south into City of Mississauga;
- Extending Queen BRT west of Chinguacousy to Mississauga Road;
- Extending Bovaird BRT west of Mount Pleasant GO Station to meet new Mississauga Road BRT; and
- Identification of Primary and Secondary transit service and/or corridors.

These improvements were incorporated into the mode split model. The resulting transit mode split's are listed in **Table 3-6**.

Table 3-6: City of Brampton PM Transit Mode Splits, TTMP Update 2031

Trips	From Brampton	To Brampton	Bram-Bram	All Bram Trips
Peak Hour Auto Trips	107,300	110,600	66,000	151,900
Peak Hour Transit Trips	14,800	27,700	12,200	30,200
Total	122,100	138,300	78,200	182,100
Transit MS %	12.1%	20.0%	15.6%	16.6%

The detailed transit mode split table is provided in **Table 3-5**.

Comparing **Table 3-4** and **Table 3-5**, significant transit mode split increases are observed for trips originating in Bram-West, South Central Brampton, and South East Brampton, increasing from 5, 9 and 5 percent respectively to 10, 13, and 13 percent with the TTMP update. Trips destined to the Hurontario Street Corridor from all origins also see a significant increase from 13% in the 2004 TTMP to 26% in the TTMP update.

4. LAND USE FORECASTS AND TRIP DISTRIBUTION

4.1 Land Use

The 2031 land use forecasts for the TTMP analysis are based on the sources listed in **Table 4-1**:

Table 4-1: Population and Employment Forecast Sources

Population and Employment Forecasts for:	Source
Brampton	City of Brampton, June 2008
Caledon	Region of Peel, February 2007
Mississauga	Region of Peel, February 2007
Halton	Region of Halton, September 2008
York Region	York Region, February 2007
Toronto	City of Toronto,
Durham	Region of Durham
Hamilton	City of Hamilton

The 2031 population and employment forecasts are summarized in **Table 4-2**.

Table 4-2: Population and Employment 2031 Forecast Totals

Municipality	2031 Population	2031 Employment
Brampton	758,000	320,000
Caledon	113,000	48,600
Mississauga	784,000	504,000
Peel Total	1,590,000	863,000
Halton	780,000	390,000
York Region	1,507,000	799,000
Toronto	2,881,500	1,834,300
Durham	1,000,000	434,000
Hamilton	660,000	301,000

Traffic zone based land use forecasts for each respective Regional Municipality were obtained directly from the respective Region's. The forecasts incorporate intensification centres and corridors identified in the Province of Ontario's "Places to Grow" Provincial Growth Plan as incorporated by the agencies by June 2008.

Land use forecast for the Region of Halton are derived from preliminary and unconfirmed employment and population estimates for the Sustainable Halton planning process. The Sustainable Halton process is an on-going Regional effort to establish potential new growth and intensification areas in conformance to Places to Grow Plan and the directions set in the Regional Official Plan.

Phase II of the Sustainable Halton identified five preferable 2031 land use options. Land Use Concept 1 – “Milton Centred,” illustrated in **Exhibit 4-1**, assumes all new residential growth is allocated within Milton and employment growth is located in the north-east areas of Milton and the Highway 401 corridor in Halton Hills. This concept assumes intensification occurring in each of the area municipalities except Halton Hills. Sustainable Halton Phase II Concept 1 has been adopted by the Brampton TTMP Update study as it represents the most conservative option for estimating cross boundary demand between the areas of Halton Hills and Brampton. The Brampton TTMP Update team used the preliminary, unconfirmed growth and intensification totals provided by Halton Region and Urban Strategies in September 2008 to allocate growth and intensification estimates to traffic zones in the study area.

It is recognized that this analysis is based on the June 2008 forecasts and that new population and employment forecasts are being developed for the City in accordance with Growth Plan compliance work based on City-wide totals of 738,000 people and 318,000 jobs by the year 2031. Given the sensitivity levels of the transportation modelling, the City wide nature of technical analysis undertaken and considering the distribution of the changes discussed with City staff, we are confident in the conclusions included in this report notwithstanding this evolution of the land use information. As part of finalizing TTMP documentation, the transportation model will be rerun with the most up to date land use information available from the City /Peel Region Growth Plan Compliance exercise

Land Use assumptions for areas with the City of Brampton the horizon years 2006, 2011, 2016, 2021, and 2031 are presented in **Table 4-3**.

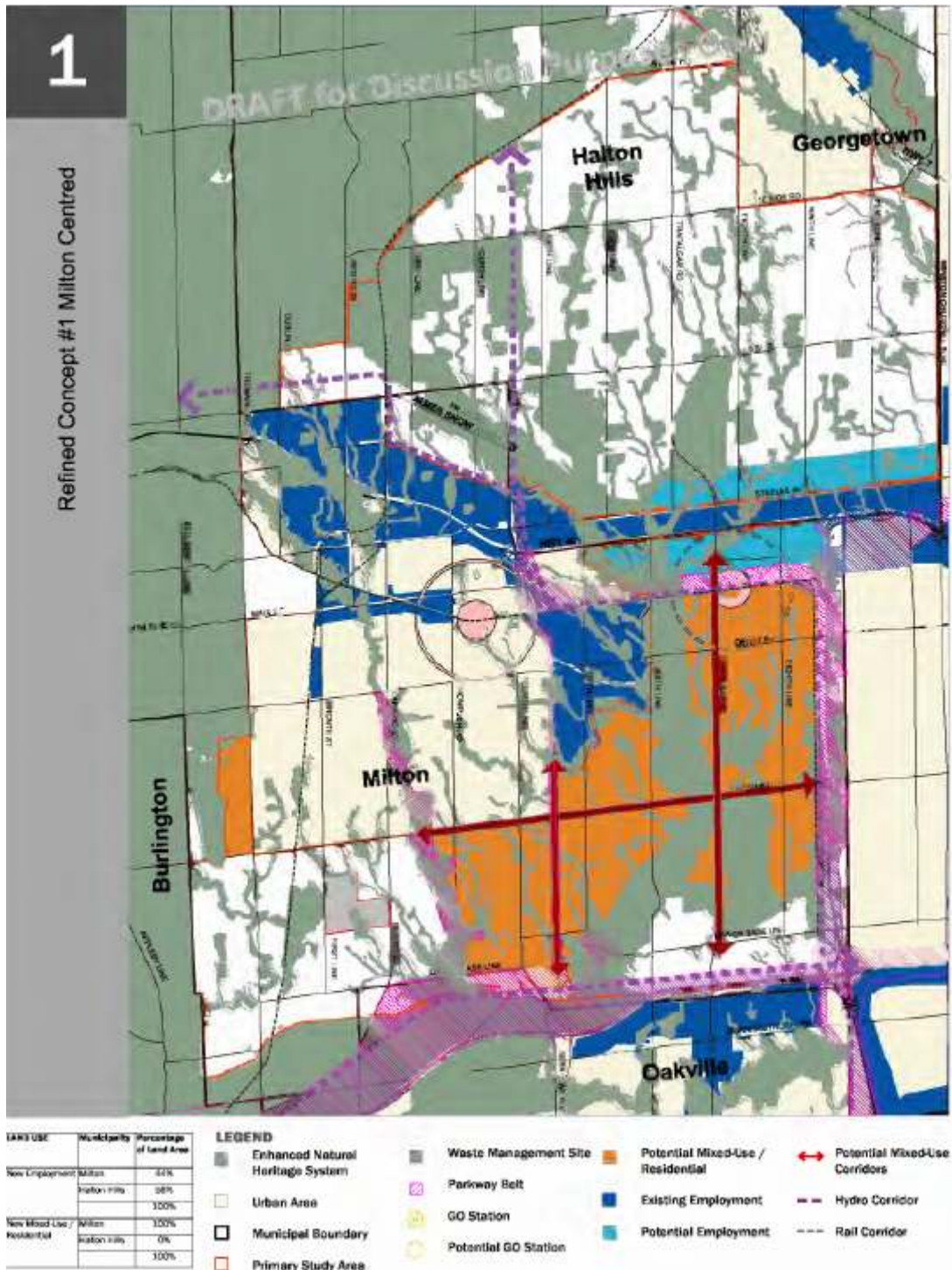


Exhibit 4-1: Sustainable Halton Option 1 – Milton Centred

Table 4-3: Land Use Assumptions for the City of Brampton, 2006 - 2031

Secondary Area	2006		2011		2016		2021		2031	
	Pop	Emp	Pop	Emp	Pop	Emp	Pop	Emp	Pop	Emp
SP41 - BramEast	18,460	2,660	35,580	4,310	45,350	6,060	47,270	7,760	47,270	9,190
SP46 - BramWest	6,489	3,960	13,457	13,820	24,793	22,070	35,731	27,120	47,771	33,872
SP47 - Highway 427 Industrial	500	270	500	3,280	500	7,200	11,670	11,670	34,490	17,030
SP51 - Mount Pleasant	236	12	1,396	32	17,650	1,023	33,971	2,092	51,740	2,742
SP52 - Huttonville North	146	7	146	7	146	7	146	923	18,232	6,332
SP53 - Mount Pleasant West	104	73	104	73	104	73	4,107	2,447	20,017	11,309
Rest of Brampton	425,653	147,851	482,815	181,533	510,790	202,564	526,311	221,771	538,790	239,529
Total	451,588	154,833	53,3998	203,055	599,333	238,997	659,206	273,783	758,310	320,004

4.2 Trip Distribution

It is estimated that during average weekday PM peak period in 2006 over 55% of travel originating in Brampton was internal to the City; approximately 20.2% of total trips originated in Mississauga, 14.4% in Toronto and 2.6% in Halton and Hamilton. By 2031 the percentage of internal travel with trip origin in Brampton is expected to increase to 57.2%. Mississauga will still remain the major origin of trips external to Brampton and will generate estimated 14.3% trips. Following the anticipated increase in employment in Milton and Halton Hills, travel from Halton is expected to increase to 5.3%. The overall contribution to Brampton's travel from Toronto will increase to over 15%. Trips from York Region will increase slightly to 4.8%. The 2006 and 2031 trip distribution patterns by trip origin are summarized in **Table 4-4**, **Exhibit 4-2** and **Exhibit 4-3**.

Table 4-4: Travel to Brampton, All Purposes, Person Travel, 2006 and 2031 PM Peak Period

From	To	2006		2031		
Toronto CBD	Brampton	8612	4.4%	25998	6.3%	
Rest of Toronto		21774	11.0%	37109	9.0%	
Durham Region		450	0.2%	1369	0.3%	
York Region		8288	4.2%	19760	4.8%	
Caledon		3665	1.9%	10204	2.5%	
Brampton		109912	55.6%	234504	57.2%	
Mississauga		40048	20.2%	58890	14.3%	
Halton		5108	2.6%	21684	5.3%	
Total			197587	100.0%	409518	100.0%

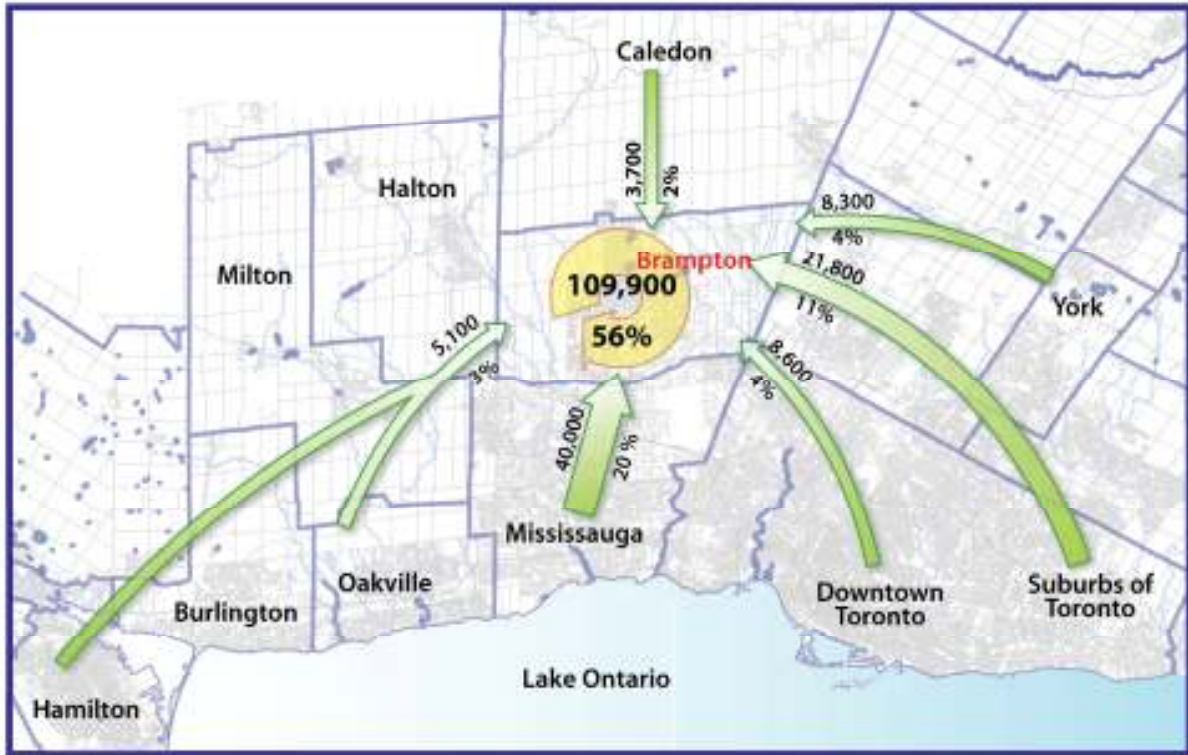


Exhibit 4-2: Travel to Brampton, PM Peak Period, 2006 TTS

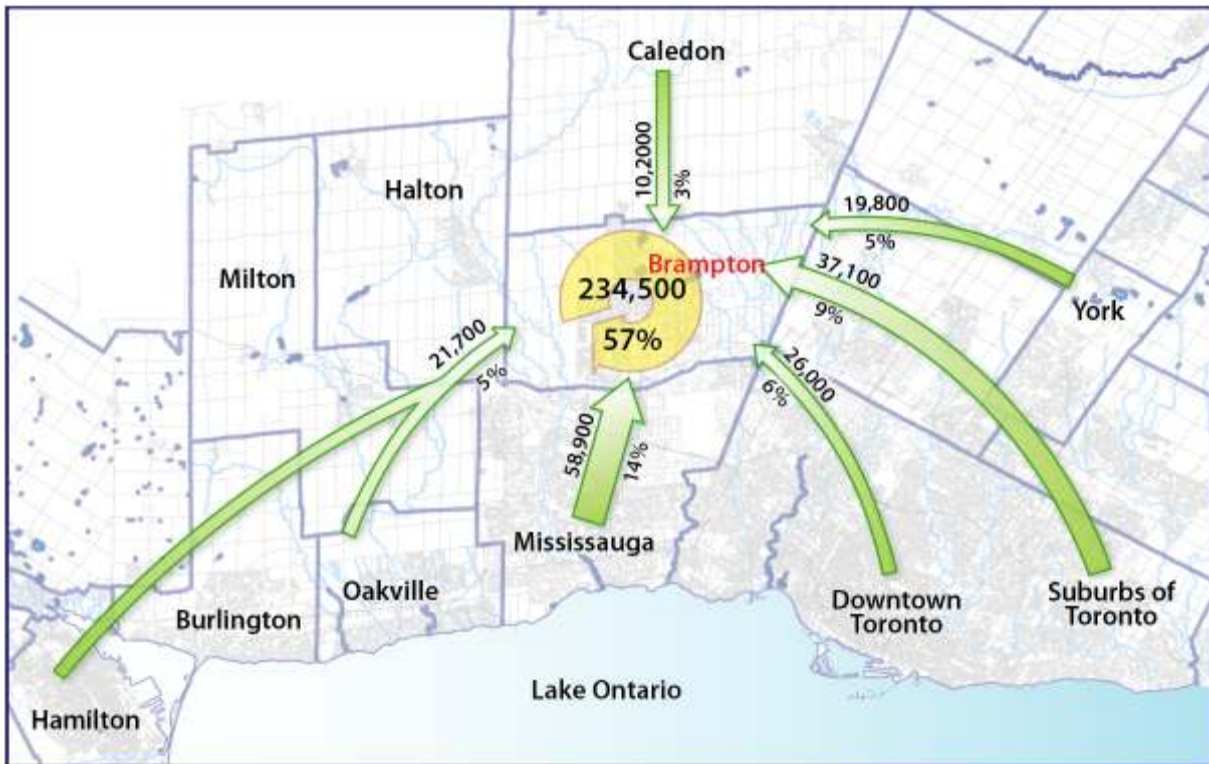


Exhibit 4-3: Travel to Brampton, PM Peak Period, 2031 TTMP Model

With respect to 2006 PM peak period person trips originating in Brampton, over 11.2% were destined to Mississauga, 8.0% to Toronto, 4.7% to Halton, and 3.4% in York Region. Although Mississauga will remain the major destination point for trips originating in Brampton, by 2031 the overall proportion of travel destined to Brampton's southern neighbour will decrease to 13.9%. More people will travel to Halton (5.0%) and York (3.6%). Less people will travel to Toronto (5.3%). The 2006 and 2031 trip patterns by trip destination are illustrated in **Table 4-5**, **Exhibit 4-4** and **Exhibit 4-5**.

Table 4-5: Travel from Brampton, All Purposes, Person Travel, 2006 and 2031 PM Peak Period

From	To	2006		2031	
Brampton	Toronto CBD	1220	0.8%	2107	0.6%
	Rest of Toronto	11478	7.2%	16204	4.7%
	Durham Region	664	0.4%	1394	0.4%
	York Region	5419	3.4%	12174	3.6%
	Caledon	4710	3.0%	11765	3.4%
	Brampton	109912	69.3%	234504	68.5%
	Mississauga	17692	11.2%	47478	13.9%
	Halton	7497	4.7%	16958	5.0%
Total:		158592	100.0%	342584	100.0%

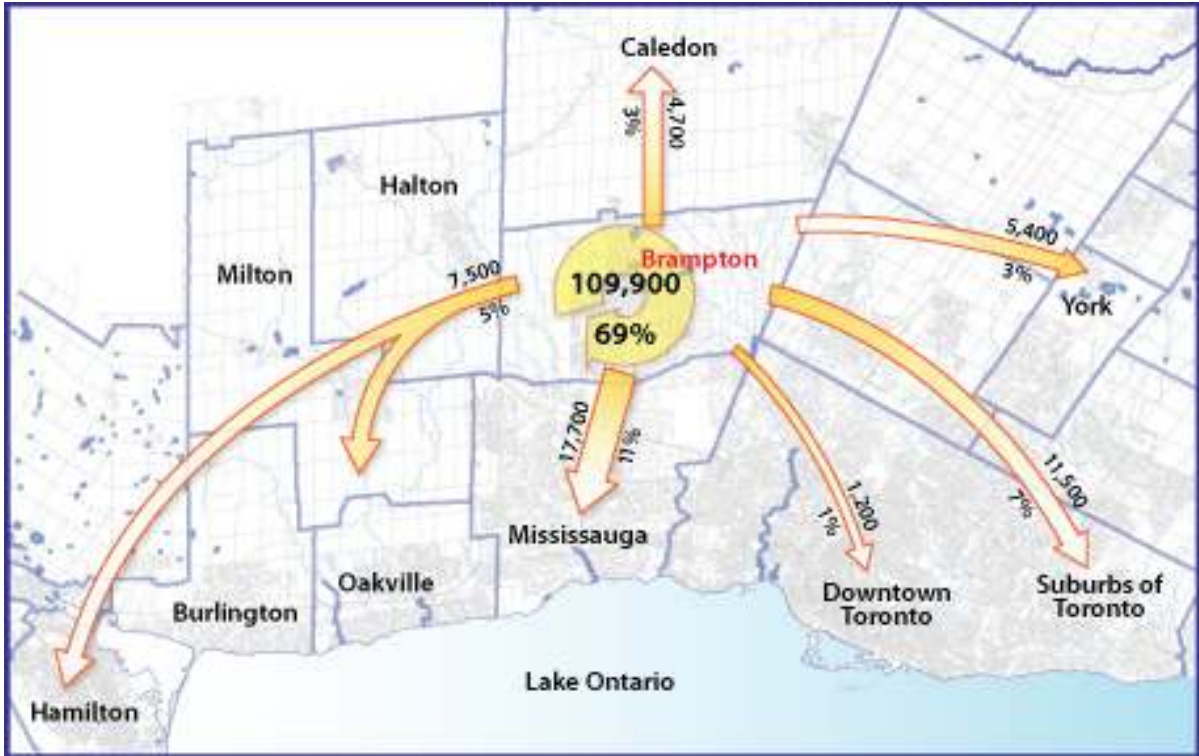


Exhibit 4-4: Travel from Brampton, PM Peak Period, 2006 TTS

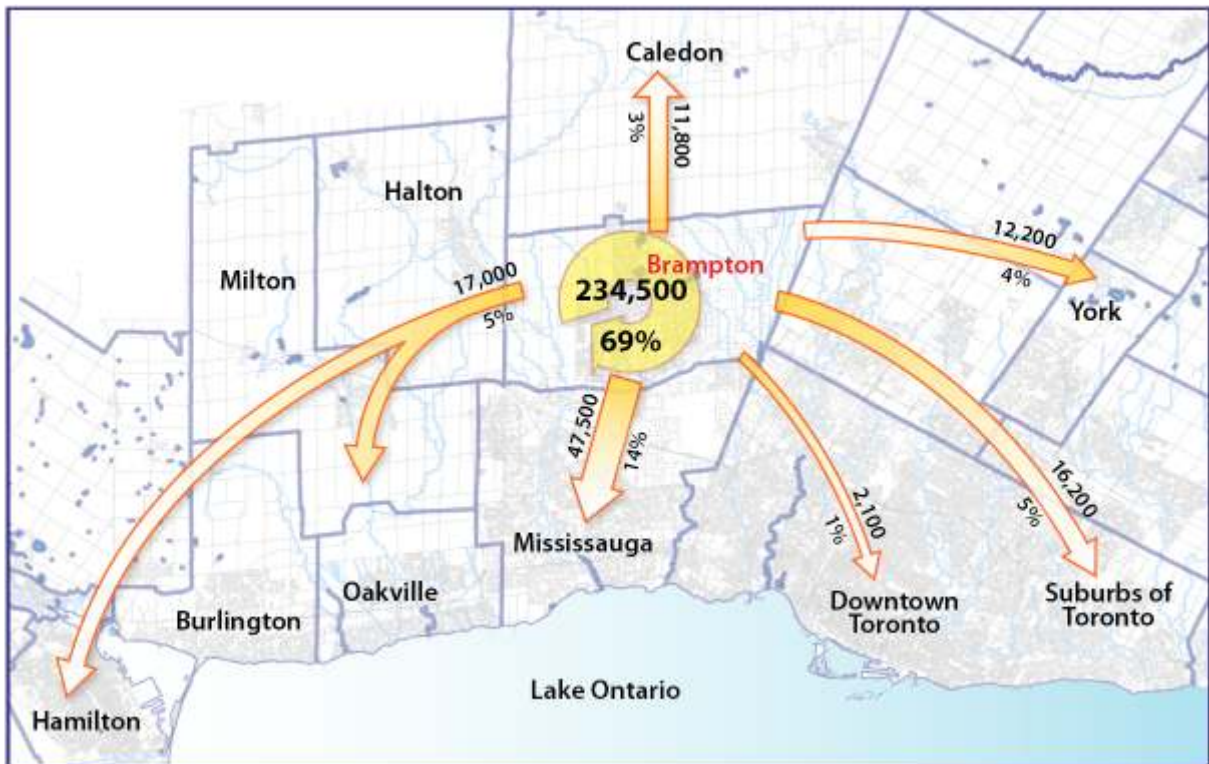


Exhibit 4-5: Travel from Brampton, PM Peak Period, 2031 TTMP Model

5. TTMP ALTERNATIVES

The purpose of the 2009 TTMP update is to reconfirm and enhance, if necessary the transportation vision developed in 2004. However to meet the requirements of the Environmental Assessment process the current TTMP update followed the requirements of Phases 1 and 2 of the Environmental Assessment process. The project team identified and evaluated four long-term, alternative transportation planning options. The transportation planning options were evaluated for 2031 travel demands, against a set of Evaluation Criteria.

5.1 The Alternatives

The TTMP alternatives listed in **Table 5-1**, are analyzed as part of Phase 2 of the Municipal Class EA process.

Table 5-1: Future Transportation Alternatives

Alternative #	2031 Transit Improvements	2031 Road Improvements
1	No change from existing	No change from existing
2	Transit improvements recommended in 2004 TTMP	No change from existing
3	Transit improvements recommended in 2004 TTMP	Road improvements recommended in 2004 TTMP
4	Preliminary transit improvements recommended in the TTMP update	Preliminary road improvements recommended in the TTMP update

5.1.1 **Alternative 1: Do Nothing**

To establish the need for transportation improvements, a “Do Nothing” alternative was assessed, by assigning projected 2031 travel demands to the existing transportation network. To assess the road network’s ability to service travel demand, volume to capacity ratios across screenlines were calculated. These ratios are illustrated schematically over a map of the City in **Exhibit 5-1** and **Exhibit 5-2**

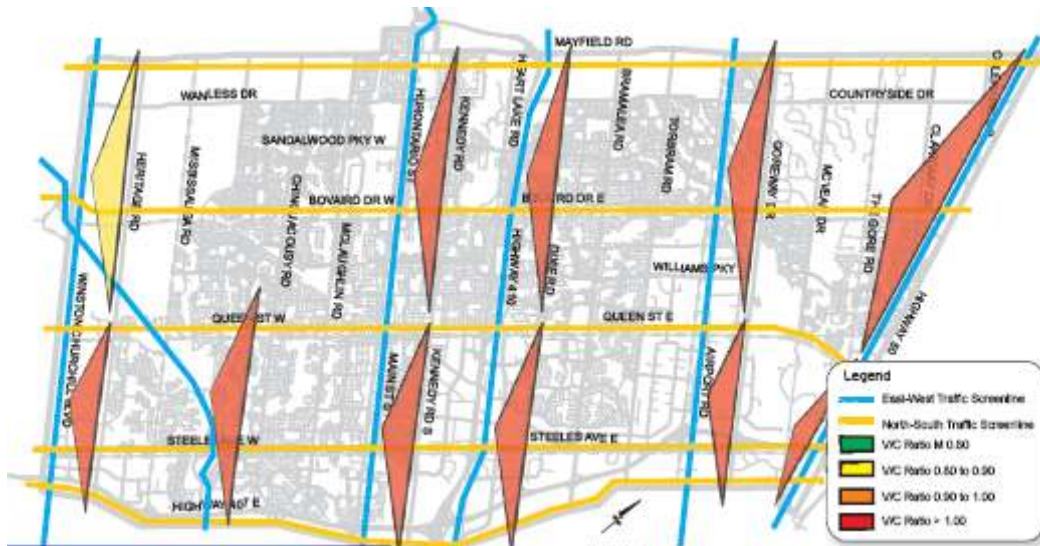


Exhibit 5-1: Alternative 1 East-West Screenline V/C Ratios

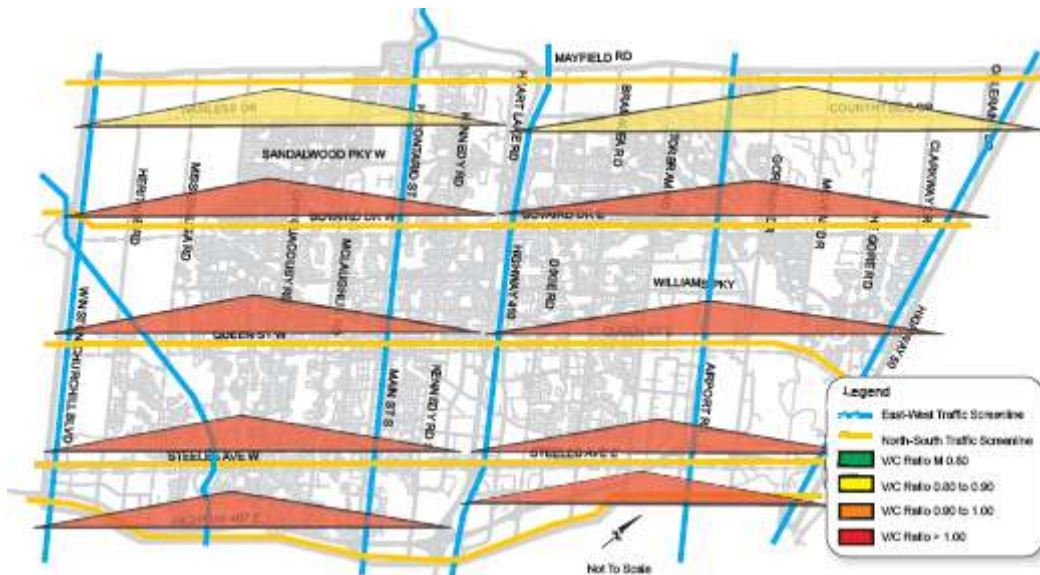


Exhibit 5-2: Alternative 1 North-South Screenline V/C Ratios

Clearly, significant improvements to the transportation network are required by 2031 as 18 of 21 screenlines have a V/C ratio greater than 1.

5.1.2 Alternative 2: Transit-only

Alternative 2 assesses the 2031 travel demand assuming that the 2004 TTMP recommended transit network is implemented with no road network improvements.

The recommended 2021 transit network from the 2004 Brampton TTMP proposes specific BRT, primary and secondary corridors, illustrated below in **Exhibit 5-3**.

Analyses for potential enhancements to the above transit network are documented in **Chapter 6**.

Screenline volume to capacity ratios for Alternative 2 are illustrated in **Exhibit 5-4** and **Exhibit 5-5** below.

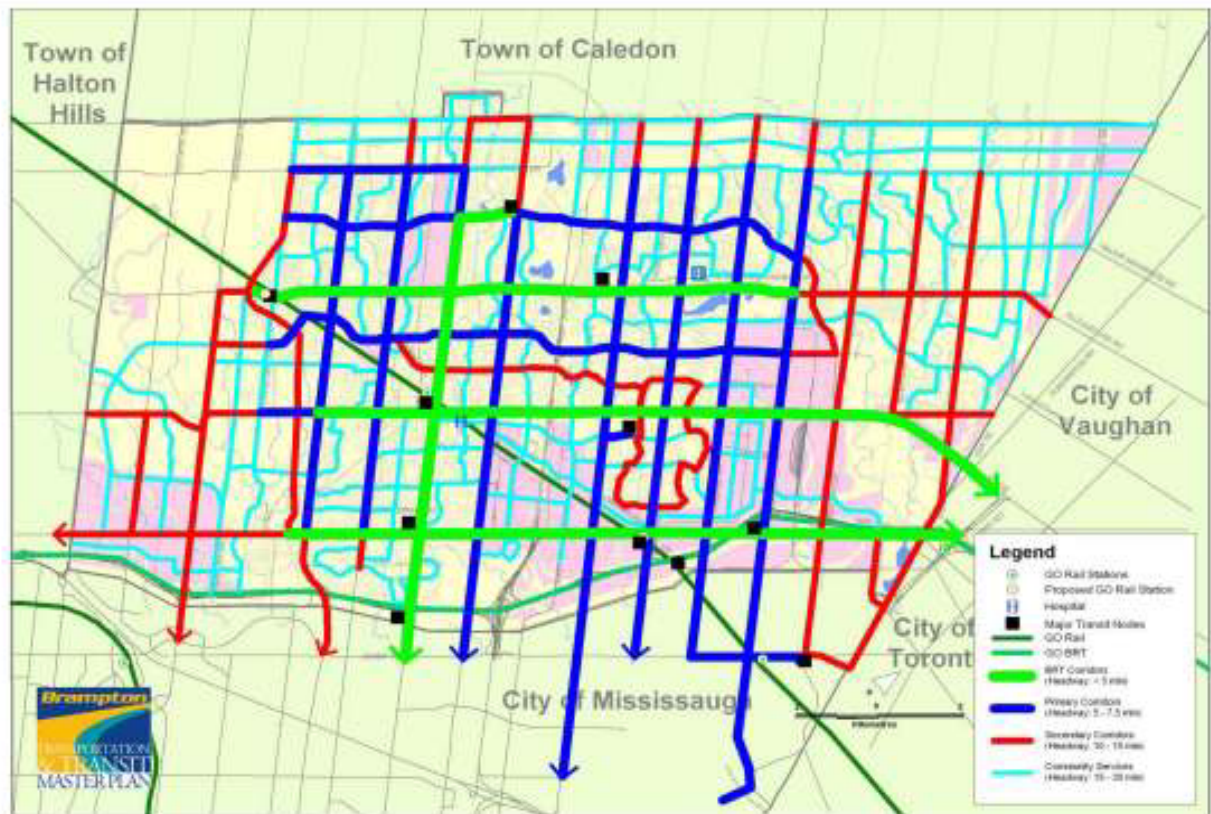


Exhibit 5-3: Recommended Transit Network for 2021, 2004 TTMP

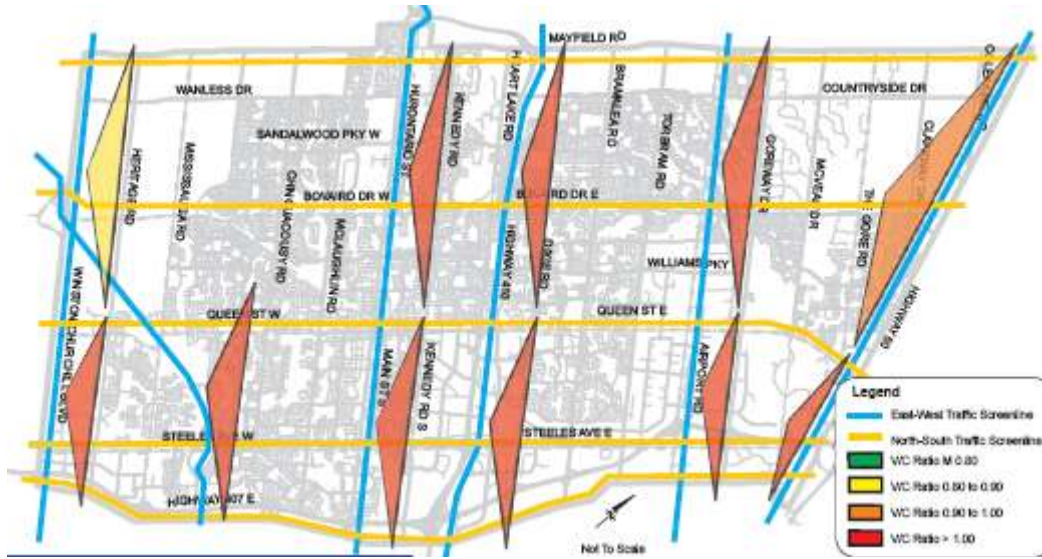


Exhibit 5-4: Alternative 2 East-West Screenline V/C Ratios

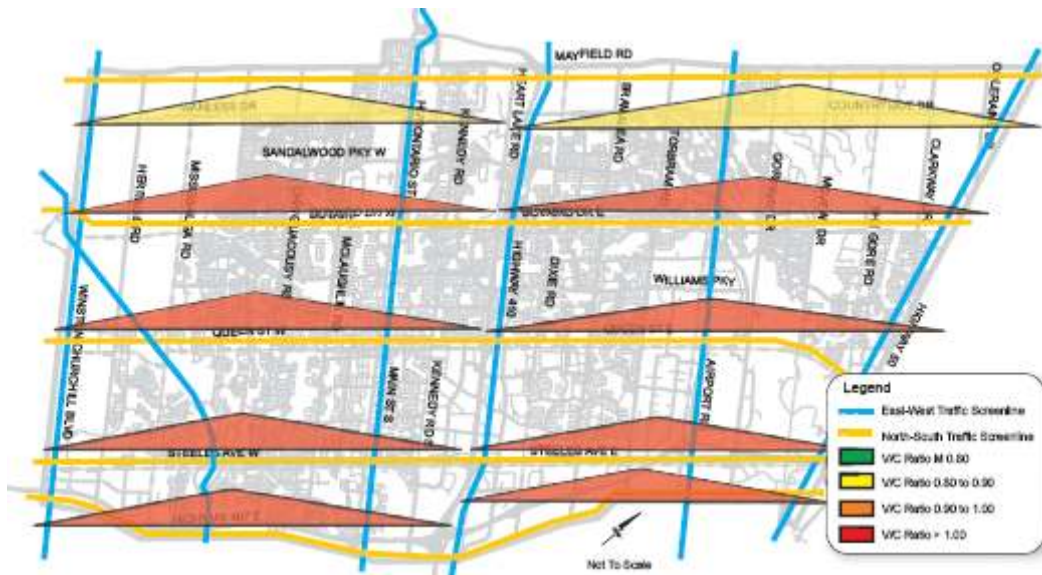


Exhibit 5-5: Alternative 2 North-South Screenline V/C Ratios

With transit improvements only in Alternative 2, the screenline volume to capacity performance is almost exactly the same as Alternative 1, with only one screenline improving from over 1.0 to the 0.9 to 1.0 range. It is clear that improvements to both the transit and road networks are required to ensure an efficient transportation system.

5.1.3 Alternative 3: Currently Planned Transit and Road Network Improvements

The recommended transit (**Exhibit 5-3**) and road networks (**Exhibit 5-6**) from the 2004 TTMP serve as the base for the TTMP Update and the analyses documented later on in the report are required to justify the recommended changes to this road network.



Exhibit 5-6: Recommended 2031 Road Network, 2004 TTMP

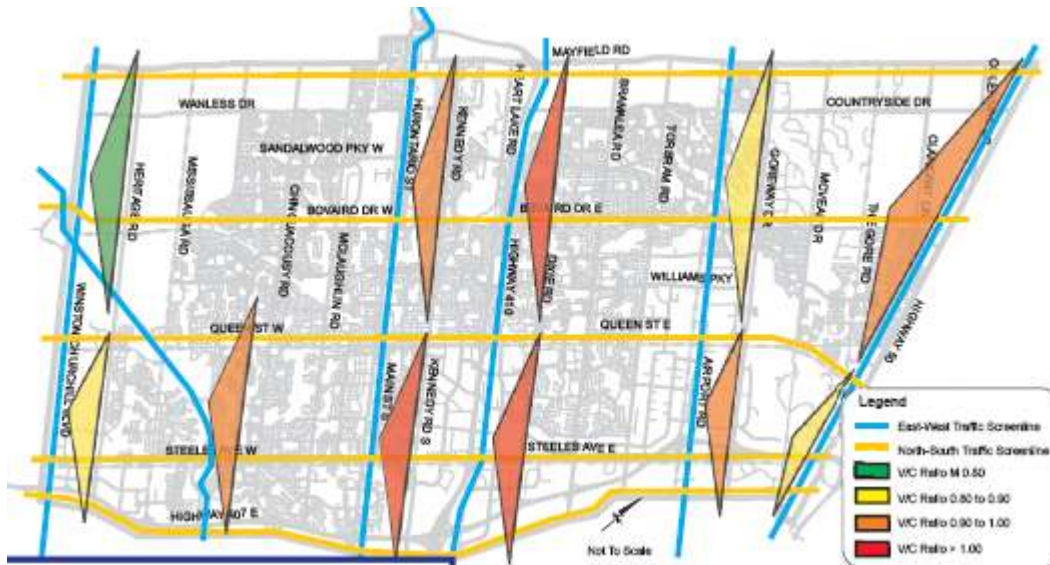


Exhibit 5-7: Alternative 3 East-West Screenline V/C Ratios

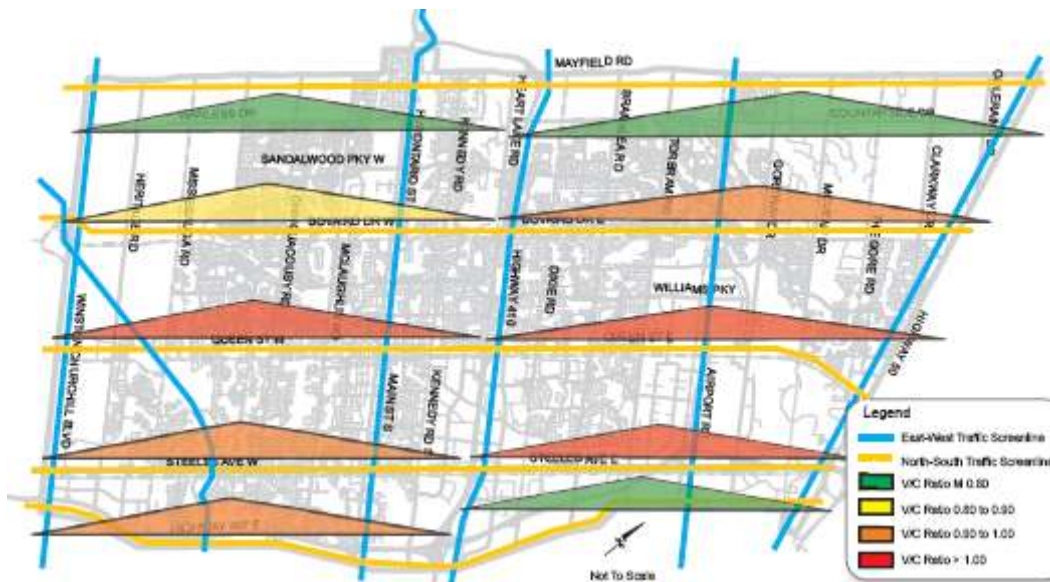


Exhibit 5-8: Alternative 3 North-South Screenline V/C Ratios

Improvements recommended in the 2004 TTMP have a positive effect on screenline V/C ratios. However, over half (13 out of 21) screenlines are significantly congested with a V/C ratio greater than 0.9.

Further improvements to the road network are required to improve the overall efficiency of the transportation network.

5.1.4 Alternative 4 – TTMP Update Transit and Road Network Improvements

The updated TTMP transit and road networks supersede the 2004 TTMP’s recommended networks. Increased transit mode split, (as described in **Section 3.2**), enhanced transit service, and an enhanced auto network result in improved screenline volume-to-capacity ratio results, as illustrated in **Exhibit 5-9** and **Exhibit 5-10**. For reference, the TTMP update transit and road networks are illustrated in **Exhibit 9-4** and , respectively in **Chapter 9**.

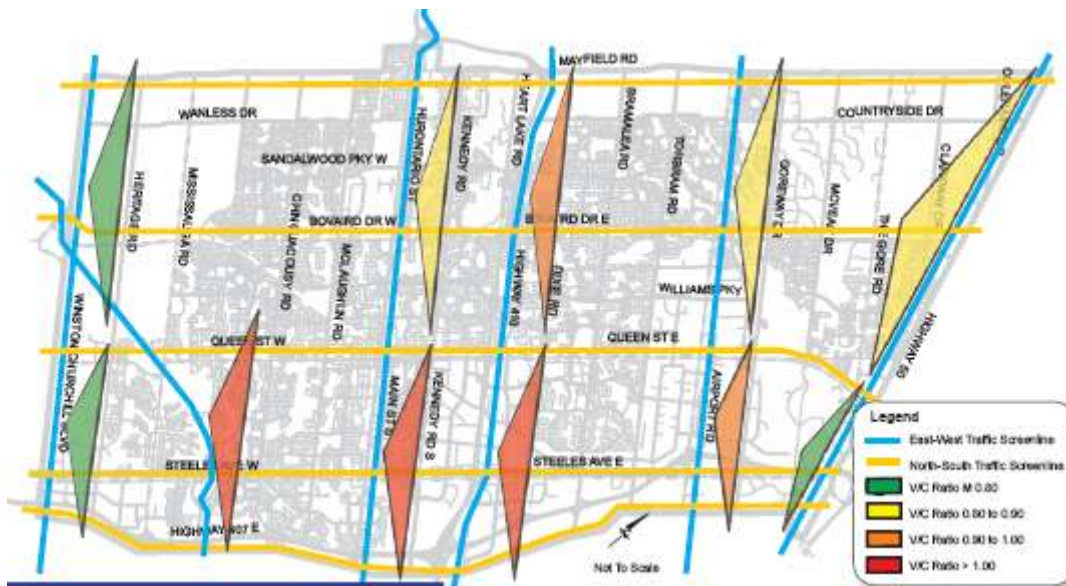


Exhibit 5-9: Alternative 4 East-West Screenline V/C Ratios

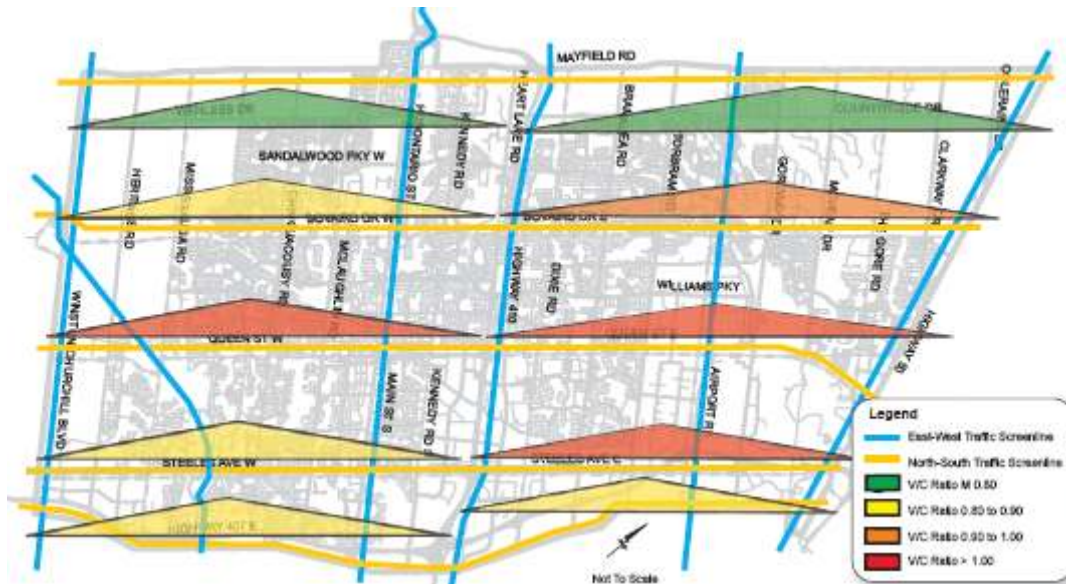


Exhibit 5-10: Alternative 4 North-South Screenline V/C Ratios

With the improvements recommended in the TTMP update, less than 50% of screenlines are congested.

5.2 Network Performance of Alternatives

The performance and impact of the transportation options were evaluated using a consistent set of evaluation criteria. They reflect broad community goals and objectives expressed in the Growth Management Plan, Regional as well as Provincial growth objectives.

The six evaluation criteria were:

- Supporting sustainable development
- Protecting the natural environment
- Supporting economic vitality
- Providing efficient and multimodal transportation for people and goods
- Maintaining cost effectiveness

Table 5-2 shows how each criterion relates to the goals of the Growth Management Plan and which performance indicators were used in the rating of each individual criterion. **Table 5-6** presents the performance of each of the transportation planning alternatives set against the evaluation criteria.

Table 5-2: Evaluation criteria

Criteria	Relation to Problem Statement	Performance Indicators
1. Supporting sustainable development	Meets requirements of growth management strategies defined by the Town, Region and the Province. Supports land use intensification along transit corridors and other key areas.	Average transit modal split, 2031 PM peak hour.
2. Protecting natural environment	Minimizes impact on the natural environment by improving air quality and reducing land loss to roadway construction.	GHG emissions 2031 tonnes/year.
3. Supporting economic vitality	Promotes economic viability and recognizes the transportation needs of local businesses. Improves quality of life by reducing congestion Promotes live-work communities.	Percent network congested, 2031 PM peak hour
4. Providing efficient and multimodal transportation for people and goods	Provides for safe and efficient mobility to transit vehicles, passenger cars and trucks, cyclists and walkers. Promotes modal integration, supports goals of travel demand management. Meets future travel demand at the acceptable level of service. Protects residential neighbourhoods from traffic infiltration and improves access safety.	Screenline V/C ratios, 2031 PM peak hour. Vehicle kilometres of travel by road type, 2031 PM peak hour.
5. Cost effectiveness	Is affordable and has acceptable cost-to-benefit ratio. Provides funding to all modes of travel including transit, carpooling, cycling and walking.	Estimated cost of the required infrastructure improvements (\$). Cost allocation between motorized and non-motorized modes of transportation.

Each alternative is also evaluated for various network-wide performance measures, on arterial roads and major collectors only. The evaluation is presented in **Table 5-3**. A screenline summary compares the five alternatives in **Table 5-4**.

Table 5-3: Arterial Road Network Performance

Performance measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
% Network congested (by lane km)	58%	56%	21%	16%
Total travel time (hours)	58,200	52,900	28,300	26,900
Vehicle-kilometres travelled	1,808,400	1,754,500	1,862,800	1,839,600
Annual GHG (tonnes)	556,300	532,300	399,100	384,600
Annual hours of congestion	58,711,700	51,646,100	14,897,800	13,234,300

Improvements recommended in both the 2004 TTMP and the TTMP update show significant improvements over the do nothing scenarios presented in Alternatives 1 and 2. Alternative 4 clearly builds upon the improvements in Alternative 3, further decreasing the percentage of congested roads from 21% to 16%, decreasing total annual travel time by 1,400 hours, overall vehicle-kilometres travelled by 22,400, annual GHG emissions by 14,500 tonnes, and annual hours of congestion by 1.66 million.

As discussed earlier, the two do nothing alternatives generate results which put many screenlines over capacity, while the other two alternatives significantly reduce congestion on Brampton roads. Alternative 4 has the lowest volume-to-capacity ratios due to the extra freeway facility north of Brampton.

Detailed evaluation is discussed in **Table 5-5** and **Table 5-6**.

Table 5-4: Screenline Summary Comparison for Five TTMP Alternatives

NORTHBOUND	Scenario 1 - 2031 Do Nothing (2031 LU on 2006 roads and transit)										Scenario 2 - 2031 Do-Nothing (2031 on 2006 roads and 2031 2004-TTMP transit)									
	West Totals (Winston Churchill to west of Hwy 410)					East Totals (Hwy 410 to Highway 50)					West Totals (Winston Churchill to west of Hwy 410)					East Totals (Hwy 410 to Highway 50)				
	Volume	Capacity	V/C Ratio	Transit Vol	Transit V/C Ratio	Volume	Capacity	V/C Ratio	Transit Vol	Transit V/C Ratio	Volume	Capacity	V/C Ratio	Transit Vol	Transit V/C Ratio	Volume	Capacity	V/C Ratio	Transit Vol	Transit V/C Ratio
Caledon / Brampton	7,800	7,300	1.07	2,090	1.16	7,900	6,800	1.16	0		19,300	11,800	1.64	4,370	1.63	7,900	6,800	1.16	0	
North of Bovaird Drive / Castlemore Road	18,900	11,800	1.60	5,190	1.63	22,200	13,600	1.63	4,020		19,100	10,900	1.75	3,740	1.51	22,100	13,600	1.63	3,450	
North of Queen Street / Embleton Road	19,300	10,900	1.77	2,020	1.52	26,000	17,100	1.52	5,940		18,800	12,500	1.50	8,070	1.46	25,900	17,100	1.51	5,250	
North of Steeles Avenue	19,300	12,500	1.54	8,650	1.49	18,600	12,500	1.49	5,970		15,000	11,900	1.26	350	0.98	18,300	12,500	1.46	4,430	
Brampton / Mississauga	15,300	11,900	1.29	400	1.01	13,600	13,400	1.01	6,070		South Totals (Queen to Bram.-Miss. Boundary)									
North Totals (Mayfield to North of Queen)										South Totals (Queen to Bram.-Miss. Boundary)										
Volume	Capacity	V/C Ratio	Transit Vol	Transit V/C Ratio	Volume	Capacity	V/C Ratio	Transit Vol	Transit V/C Ratio	Volume	Capacity	V/C Ratio	Transit Vol	Transit V/C Ratio	Volume	Capacity	V/C Ratio	Transit Vol	Transit V/C Ratio	
1,900	2,300	0.83	0	1.26	8,800	7,000	1.26	0		11,900	7,900	1.51	880	1.42	13,200	9,300	1.42	7,230		
				1.40	13,300	9,500	1.40	230		11,500	9,300	1.24	1,130	1.37	13,000	9,500	1.37	560		
East of Highway 10	12,500	7,900	1.58	1,680	1.47	13,700	9,300	1.47	6,520		7,600	5,700	1.33	420	1.28	18,600	13,600	1.37	2,590	
East of Highway 410 / Heartlake Road	11,900	9,300	1.28	1,830	1.40	19,100	13,600	1.40	2,280		4,600	5,300	0.87	0	1.18	5,900	4,600	1.28	3,940	
East of Airport Road	7,900	5,700	1.39	680	1.30	6,000	4,600	1.30	3,740		Scenario 3 - 2031 with 2004-TTMP improvements									
West of Highway 50	4,700	5,300	0.89	20	1.20	6,100	5,100	1.20	1,210		Scenario 4 - 2031 with 2009TTMP recommended roads and transit									
Scenario 3 - 2031 with 2004-TTMP improvements										Scenario 4 - 2031 with 2009TTMP recommended roads and transit										
West Totals (Winston Churchill to west of Hwy 410)					East Totals (Hwy 410 to Highway 50)					West Totals (Winston Churchill to west of Hwy 410)					East Totals (Hwy 410 to Highway 50)					
Volume	Capacity	V/C Ratio	Transit Vol	Transit V/C Ratio	Volume	Capacity	V/C Ratio	Transit Vol	Transit V/C Ratio	Volume	Capacity	V/C Ratio	Transit Vol	Transit V/C Ratio	Volume	Capacity	V/C Ratio	Transit Vol	Transit V/C Ratio	
5,400	14,500	0.37	1,310	0.65	11,100	17,100	0.65	0		5,500	18,000	0.31	3,370	0.56	11,000	19,600	0.56	1,040		
North of Bovaird Drive / Castlemore Road	15,500	17,300	0.90	3,310	0.92	21,800	23,600	0.92	3,420		15,900	20,600	0.77	8,270	0.87	21,300	24,500	0.87	6,350	
North of Queen Street / Embleton Road	17,900	16,500	1.08	3,880	1.06	24,600	23,100	1.06	5,210		19,400	20,200	0.96	13,430	1.01	22,800	22,500	1.01	9,390	
North of Steeles Avenue	19,600	21,200	0.92	6,610	1.10	18,400	16,700	1.10	4,440		19,200	23,600	0.81	13,680	1.04	16,700	16,100	1.04	7,170	
Brampton / Mississauga	18,300	18,800	0.97	290	0.78	11,700	15,000	0.78	4,430		14,900	19,300	0.77	1,020	0.88	10,900	12,400	0.88	6,780	

	North Totals (Mayfield to North of Queen)					South Totals (Queen to Bram.-Miss. Boundary)					North Totals (Mayfield to North of Queen)					South Totals (Queen to Bram.-Miss. Boundary)									
	Volume	Capacity	V/C Ratio	Transit Vol		Volume	Capacity	V/C Ratio	Transit Vol		Volume	Capacity	V/C Ratio	Transit Vol		Volume	Capacity	V/C Ratio	Transit Vol						
WESTBOUND																									
Brampton / Halton	2,500	6,100	0.41	0		11,000	13,500	0.81	0		2,400	6,800	0.35	110		2,600	4,900	0.53	60						
Credit River (WB & NB)*						15,600	10,640	1.45	610		8,100	11,800	0.69	3,130		7,100	10,400	0.68	2,460						
East of Highway 10	11,600	12,700	0.91	810		14,500	12,900	1.12	4,880		9,400	11,700	0.80	1,660		2,200	3,300	0.67	3,460						
East of Highway 410 / Heartlake Road	12,900	12,600	1.02	940		19,800	18,400	1.08	3,230		7,000	12,700	0.55	790		5,500	9,100	0.60	4,570						
East of Airport Road	11,300	13,000	0.87	370		5,400	5,300	1.02	3,330		5,900	12,900	0.46	300		4,100	5,100	0.80	2,630						
West of Highway 50	8,000	9,900	0.81	40		6,500	7,200	0.90	1,720							4,100	6,600	0.62	470						

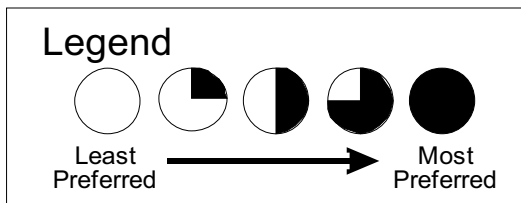
Table 5-5: Evaluation of Transportation Alternatives

Criterion	Transportation Planning Alternatives	Alternative 1 – Do Nothing	Alternative 2 – Transit Only	Alternative 3 – Currently Planned Transit and Road Network Improvements	Alternative 4 – TTMP Update Transit and Road Network Improvements
Supporting sustainable development	Not supportive, will shift the inevitable costs of growth to future generations; May prevent growth from occurring by lowering the attractiveness of the area to residential and industrial investors and the public.	Total number of auto trips: 86,600 Total number of transit trips: 7,700 Average modal split: 8.2%	Supportive to sustainable development but not supportive to intensification targets. Unless transit service is improved to be competitive to the automobile for strong OD pairs across the entire GTA, traffic congestion will strangle the City of Brampton if no road improvements are made.	Supportive of sustainable development and intensification principles. Provides a balanced system that will allow for more choice without constraining auto travel. Recent policy initiatives require updating Alternative 3 plans.	Fully supporting sustainable development in light of recent planning initiatives and policies. Supports intensification policies and provides an array of travel choices to Brampton residents. Average modal split at 16.6% a substantial increase over other Alternatives.
Protecting natural environment	Adverse impact on natural environment due to congestion. Total annual GHG emissions produced during the peak periods of travel: 556,300 tonnes/year	Total number of auto trips: 161,500 Total number of transit trips: 24,500 Average modal split: 13.2%	Adverse impact on natural environment and air quality due to congestion. Total annual GHG emissions produced during the peak periods of travel: 532,300 tonnes/year	Total annual GHG emissions produced during the peak periods of travel: 399,100 tonnes/year	Total annual GHG emissions produced during the peak periods of travel: 384,600 tonnes/year
Supporting economic vitality	Does not support economic vitality of the City and undermines quality of living	Does not support economic vitality of the City and undermines quality of living, unless significant transit service improvements are made as stated above.	Support economic vitality of the Town and maintains quality of living		Provides additional roadway capacity for goods movement by shifting person travel demand to transit and TDM. Economic vitality and quality of living is further maintained.
Providing efficient and multimodal transportation for people and goods	Percentage of screenlines at or approaching capacity during AM Peak Hour => 90% Total VKT at 1,808,400 Average percentage of congested network (peak direction of travel): 90%	Percentage of screenlines at or approaching capacity during AM Peak Hour => 90% Total VKT at: 1,754,500 Average percentage of congested network (peak direction of travel): 90%	Percentage of screenlines at or approaching capacity during AM Peak Hour => 62% Total VKT at: 1,862,800 Average percentage of congested network (peak direction of travel): 62%	Percentage of screenlines at or approaching capacity during AM Peak Hour => 38% Total VKT at: 1,828,300 Average percentage of congested network (peak direction of travel): 38%	
Maintaining cost effectiveness	Limited costs of Capital Infrastructure Increased capital and operating costs necessary to meet planned service levels of Brampton transit and BRT. Expected fast deterioration of the existing roadways and intersections.	Cost effective transit investments to meet the goals and objectives of growth management strategies are easier to maintain in the long run.	Both road and transit improvements will require extensive infrastructure investment directed to support transit and other non-auto travel modes.	Will require extensive infrastructure investment directed to support transit and other non-auto travel modes.	

Table 5-6 shows the preference rating and the results of the evaluation of the planning alternatives. Alternative 4, Towards a Sustainable Multi-Modal Network, clearly emerged as the “most preferred alternative” with high scores for each criterion.

Table 5-6 Evaluation of the Planning Alternatives

	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Supporting Sustainable Development				
Protecting Natural Environment				
Supporting Economic Vitality				
Providing Efficient and Multi-modal Transportation for People and Goods				
Maintaining Cost Effectiveness				
Overall				



- The key advantages of the preferred alternative are that it offers the best opportunity to:
- Address the issues at the root cause of the current and future transportation challenges
 - Satisfy Provincial, Regional, and Municipal growth objectives
 - Increase transit trips and reduce auto trips
 - Minimize congestion and associated costs of congestion
 - Promote alternative travel modes and choices
 - Reduce emission of green house gases (GHG)
 - Support goods movement and access to employment areas
 - Support Brampton’s growth areas and provide a vision for the Downtown and Central Area

Although the most expensive strategy in terms of capital costs, Alternative 4 will reduce congestion costs and green house gas emissions. Both Alternative 3 and 4 represents a sustainable, long-term transportation strategy for City of Brampton, with Alternative 4 building upon current plans to provide a solution for new growth objectives. The updated plan will manage and reduce the growth in traffic congestion by proactively encouraging travel by other modes and making these other modes, in particular public transit, more attractive.

6. TRANSIT NETWORK ALTERNATIVES

6.1 Methodology and Land Use Assumptions

The TTMP update builds on the road-network vision proposed above and extends the horizon from 2021 to 2031. The improvements include:

- Extending the Hurontario Street BRT further north
- Adding a BRT route along Mississauga Road providing connections to the Lisgar GO station and other BRT routes in the City of Mississauga
- Adding a BRT route along the Airport Road corridor or another north-south corridor east of Highway 410, between Bovaird Drive and Pearson International Airport
- Extending the Bovaird Drive BRT line west to connect with BRT services on Mississauga Road
- Extending the Queen Street BRT west to connect to BRT services on Mississauga Road
- Extending the Steeles Avenue BRT west to connect to BRT on Mississauga Road and potentially the Lisgar GO Station in the City of Mississauga
- Extended primary transit corridors to new growth areas such as Bram-West, North-West Brampton, and North-East Brampton

Land use assumptions provided by the City are generally supportive of the improved transit services listed above.

Various alternatives are analyzed for the improvements listed above, and are summarized in this Chapter.

6.2 Steeles Avenue BRT

The 2004 TTMP illustrated proposed BRT on Steeles Avenue terminating at James Potter Road / New Creditview Road. The TTMP update proposes a new terminus further west at either Mississauga Road or at the Lisgar GO Station at Argentia Road and 10th Line near the north-western boundary of the City of Mississauga.

The study team identifies Lisgar GO as the western terminus for BRT services on Steeles Avenue, and proposed the following two routing options:

- **Option 1:** Extend the Steeles BRT route west on Steeles Avenue to Winston Churchill Boulevard, continuing south on Winston Churchill Boulevard and accessing the Lisgar GO station via Argentia Road; or
- **Option 2:** Extend the Steeles BRT route west on Steeles Avenue to Mississauga Road, proceeding south on Mississauga Road to Derry Road, west on Derry Road to Argentia Road, and continuing west on Argentia Road to the Lisgar GO station.

The two proposed routing options are illustrated in .



Exhibit 6-1: Steeles Avenue BRT Alternatives

Option 1 is more direct and 2 km shorter than Option 2. Option 1 better supports the potential for increased intensification along the route. The intensification corridor for Option 1 is 2.8 km while the second alternative has an intensification corridor of 1.2 km. Option 2 provides transfer opportunities with the proposed Erin Mills / Mississauga Road BRT in the City of Mississauga. However, neither alternative will serve high density development. Since option 1 is considered more direct and supports a larger intensification corridor in Brampton, it is the preferred alternative. **Table 6-1** provides a summary of both options..

Table 6-1: Summary of Steeles BRT Alternatives

	Option 1 (via Steeles, WCB, Argonia)	Option 2 (via Mississauga, Derry, Argonia)
Support Transit Supportive Nodes	Yes	Yes
Support Intensification Corridors	Steeles Avenue (2.8 km)	Mississauga Road (1.2 km)
Directness of Route	Direct (6.4 km)	Indirect (8.4 km)
Connect with GO	Yes	Yes
Serve High Density Development	No	No
Connect with rapid transit outside of Brampton	No	Mississauga Road / Erin Mills BRT

Overall

Preferred

6.3 Queen Street BRT

Improvements to the Queen Street BRT line include extending the western terminus from Chinguacousy Road identified in the 2004 TTMP to Mississauga Road, to connect to the proposed Mississauga BRT corridor. No alternatives were tested for this improvement.

6.4 Hurontario Street BRT

Improvements to the Hurontario Street BRT line based on the original route identified in the 2004 TTMP include extending the Hurontario Street BRT's northern terminus from Sandalwood Parkway to Mayfield Road to connect with the primary transit corridor on Mayfield Road and to service neighbourhoods north of Mayfield Road. No alternatives were tested for this improvement.

6.5 Mississauga Road BRT

The proposed Mississauga Road BRT will service development in Bram-West and North-West Brampton and will provide key connections to BRT in the City of Mississauga. No alternatives were tested for this improvement.

6.6 Brampton East BRT Corridor

Four different scenarios were tested for a north / south bus rapid transit corridor east of Hurontario Street to serve as a parallel service to the Hurontario BRT. Dixie Road, Bramalea Road, Torbram Road, and Airport Road were studied as potential corridors for this service. The southern terminus for all routes was Lester B. Pearson International Airport while the northern terminus for all routes was Bovaird Drive to connect with the Bovaird BRT (see **Section 6.7**). All four BRT lines were routed via Airport Road south of Steeles Avenue to access Lester B. Pearson International Airport and Steeles Avenue East to access the appropriate north-south corridor.

In all four cases, the respective transit mode shares were modified for traffic zones along each corridor to appropriate model the transit network and to better estimate potential ridership along all four corridors.

6.6.1 Dixie Road

This route will travel between Lester B. Pearson Airport and the intersection of Bovaird Drive and Dixie Road via Airport Road, Steeles Avenue, and Dixie Road. This route serves high employment industrial lands east of Highway 410 between Steeles Avenue and Queen Street, Bramalea City Centre, and residential neighbourhoods in Bramalea between Queen Street and Bovaird Drive. Note for all the following tables, the lightest shade of grey

highlight indicates the BRT corridor, the darkest grey denotes the least favourable total amongst alternatives, and medium grey indicates the most favourable alternative.

Table 6-2: Northbound PM Transit Riders with BRT on Dixie Road

	DIXIE	BRAMALEA*	TORBRAM	AIRPORT	NB TOTAL
MAXIMUM LOAD	2,854	4,067	1,171	690	8,781
AVERAGE LOAD	2,270	2,215	828	535	5,848
BOARDINGS	2,496	1,659	207	364	4,726

6.6.2 Bramalea Road

This route travels between Lester B. Pearson Airport and the intersection of Bovaird Drive and Bramalea Road via Airport Road, Steeles Avenue, and Bramalea Road. This route connects with the Bramalea GO Station and serves residential neighbourhoods in Bramalea between Dearbourne Boulevard and Bovaird Drive. Advantages to this route include serving the North-South demand around the existing transit hub at Bramalea City Centre as well as the high density development surrounding the Bramalea City Centre shopping mall.

Table 6-3 Northbound PM Transit Riders with BRT on Bramalea Road

	DIXIE	BRAMALEA*	TORBRAM	AIRPORT	NB TOTAL
MAXIMUM LOAD	1,746	5,516	1,024	591	8,876
AVERAGE LOAD	1,265	3,672	682	444	6,064
BOARDINGS	905	4,184	187	247	5,523

6.6.3 Torbram Road

This route travels between Lester B. Pearson Airport and the intersection of Bovaird Drive and Torbram Road via Airport Road, Steeles Avenue, and Torbram Road. This route serves both high employment industrial areas on the east side of Torbram Road and residential areas on the west side of Torbram Road between Steeles Avenue and Bovaird Drive.

Table 6-4: Northbound PM Transit Riders with BRT on Torbram Road

	DIXIE	BRAMALEA*	TORBRAM	AIRPORT	NB TOTAL
MAXIMUM LOAD	2,272	4,389	1,658	585	8,904
AVERAGE LOAD	1,578	2,356	1,449	435	5,818
BOARDINGS	1,245	1,748	1,675	221	4,889

6.6.4 Airport Road

This route travels between Lester B. Pearson Airport and the intersection of Bovaird Drive and Airport Road via Airport Road. This route serves high employment industrial lands along Airport Road between Steeles Avenue and Bovaird Drive. A new shopping centre located at North Park Drive and Airport Road will also be served by this BRT route.

Table 6-5: Northbound PM Transit Riders with BRT on Airport Road

	DIXIE	BRAMALEA*	TORBRAM	AIRPORT	NB TOTAL
MAXIMUM LOAD	2,007	3,958	739	2,700	9,404
AVERAGE LOAD	1,418	2,128	483	2,120	6,149
BOARDINGS	1,147	1,561	243	2,704	5,654

6.6.5 Analysis of Alternatives

Based on ridership analysis, BRT on Airport Road and Bramalea Road will provide the largest gains in ridership. **Table 6-6** shows increases to PM Peak direction maximum load, average load, and boardings with bus rapid transit on each respective corridor. Light gray highlights represent the highest ridership while the dark gray highlighting represents the lowest ridership.

Table 6-6: Ridership Increase on Potential BRT Corridors

	DIXIE	BRAMALEA	TORBRAM	AIRPORT
MAXIMUM LOAD	846	1,378	680	2,079
AVERAGE LOAD	849	1,439	784	1,648
BOARDINGS	1,397	2,527	1,462	2,426

Airport Road BRT will clearly see the largest gain in transit trips for a few specific sections, but Bramalea Road BRT will have the highest total boardings at 2,500, slightly higher than the Airport Road route at 2,400. Dixie Road and Torbram Road will capture significantly less transit riders compared to Bramalea and Airport Road routes.

Northbound transit ridership across screenlines is summarized below in **Table 6-7**. Yellow highlights indicate volumes that include BRT, light gray highlights indicate the highest screenline total volume across all alternatives, while dark gray highlights indicate the lowest total volumes across all alternatives.

Table 6-7: Screenline Transit Ridership, PM Peak Northbound

SCREENLINE / BRT on:	Dixie	Bramalea	Torbram	Airport
North of Bovaird Drive / Castlemore Road				

Dixie Road North of Bovaird Drive	1,360	1,370	1,530	1,380
Fernforest Drive North of Bovaird Drive	410	340	230	430
Bramalea Road North of Bovaird Drive	1,090	1,550	1,120	1,040
Sunny Meadows Blvd. North of Bovaird Drive	20			
Torbram Road North of Bovaird Drive	930	760	1,190	1,130
Airport Road North of Bovaird Drive	520	510	520	600
TOTAL	4,330	4,530	4,590	4,580
TWO-WAY TOTAL	4,970	5,160	5,200	5,220
North of Queen Street / Embleton Road				
Dixie Road North of Queen Street	2,850	1,750	2,270	2,010
Central Park Drive North of Queen Street	460	290	470	480
Bramalea Road North of Queen Street	1,290	2,910	1,330	1,230
Glenvale Blvd. North of Queen Street	360	320	370	370
Torbram Road North of Queen Street	950	760	1,550	570
Airport Road North of Queen Street	590	530	520	1,970
TOTAL	6,500	6,560	6,510	6,630
TWO-WAY TOTAL	7,350	7,390	7,370	7,720
North of Steeles Avenue				
Dixie Road North of Steeles Avenue	1,680	740	890	840
Bramalea Road North of Steeles Avenue*	3,920	5,340	4,220	3,790
Torbram Road North of Steeles Avenue	520	400	1,220	240
Airport Road North of Steeles Avenue	540	420	420	2,110
TOTAL	6,660	6,900	6,750	6,980
TWO-WAY TOTAL	8,040	8,280	8,220	8,590
Brampton/Mississauga				
Dixie Road at Brampton/Mississauga Boundary	1,090	970	1,080	1,030
Bramalea Road at Brampton/Mississauga Boundary	1,820	1,770	1,800	1,770
Torbram Road at Brampton/Mississauga Boundary	180	140	180	130
Airport Road at Brampton/Mississauga Boundary	2,180	2,510	2,190	2,650
TOTAL	5,270	5,390	5,250	5,580
TWO-WAY TOTAL	6,130	6,260	6,130	6,560

The Airport Road BRT option captures the highest transit ridership across all screenlines.

The impacts of each alternative on road network operations, screenline auto volumes are summarized in **Table 6-8**. Light gray highlights applied to volume and capacity values indicate BRT corridors and HOV lanes, while the light, medium and dark gray highlights applied to v/c ratio statistics indicate ratios between 0.8 and 0.9, between 0.9 and 1.0, and greater than 1.0 respectively.

Table 6-8: Screenline Auto Volumes, BRT Alternatives

	DIXIE BRT			BRAMALEA BRT			TORBRAM BRT			AIRPORT BRT		
	Capacity	Volume	v/c	Capacity	Volume	v/c	Capacity	Volume	v/c	Capacity	Volume	v/c
North of Bovaird Drive / Castlemore Road												
Great Lakes Drive	500	710	1.42	500	790	1.58	500	660	1.32	500	690	1.38
Dixie Road	2,700	2,450	0.91	2,700	2,450	0.91	2,700	2,620	0.97	2,700	2,530	0.94
Fernforest Drive	500	570	1.14	500	590	1.18	500	600	1.2	500	550	1.1
Bramalea Road	1,600	1,600	1	1,600	1,580	0.99	1,600	1,580	0.99	1,600	1,740	1.09
Sunny Meadows Blvd	1,000	670	0.67	1,000	650	0.65	1,000	610	0.61	1,000	640	0.64
Torbram Road	2,400	2,240	0.93	2,400	2,210	0.92	2,400	2,170	0.9	2,400	2,160	0.9
Airport Road	2,700	2,400	0.89	2,700	2,420	0.9	2,700	2,410	0.89	2,700	2,370	0.88
Totals	11,400	10,640	0.93	11,400	10,690	0.94	11,400	10,650	0.93	11,400	10,680	0.94
North of Queen Street / Embleton Road												
Laurelcrest Street	1,000	860	0.86	1,000	840	0.84	1,000	860	0.86	1,000	930	0.93
Dixie Road	2,070	2,060	1	2,700	2,620	0.97	2,700	2,680	0.99	2,700	2,660	0.99

Central Park Drive	1,400	1,560	1.11	1,400	1,670	1.19	1,400	1,570	1.12	1,400	1,520	1.09
Bramalea Road	1,600	1,530	0.96	1,040	1,150	1.11	1,600	1,510	0.94	1,600	1,560	0.98
Glenvale Blvd	800	660	0.83	800	640	0.8	800	670	0.84	800	650	0.81
Torbram Road	2,400	2,250	0.94	2,400	2,350	0.98	1,840	1,750	0.95	2,400	2,300	0.96
Chrysler Drive	1,000	850	0.85	1,000	850	0.85	1,000	850	0.85	1,000	850	0.85
Airport Road	2,700	3,110	1.15	2,700	2,980	1.1	2,700	3,190	1.18	2,070	2,340	1.13
Totals	12,970	12,880	0.99	13,040	13,100	1	13,040	13,080	1	12,970	12,810	0.99
North of Steeles Ave.	Capacity	Volume	v/c	Capacity	Volume	v/c	Capacity	Volume	v/c	Capacity	Volume	v/c
West Drive	1,400	1,300	0.93	1,400	1,300	0.93	1,400	1,290	0.92	1,400	1,300	0.93
Dixie Road	2,070	1,590	0.77	2,700	2,000	0.74	2,700	2,030	0.75	2,700	1,930	0.71
Bramalea Road	2,400	3,240	1.35	1,840	2,640	1.43	2,400	3,120	1.3	2,400	3,260	1.36
Torbram Road	2,400	2,390	1	2,400	2,460	1.03	1,840	1,990	1.08	2,400	2,400	1
Airport Road	2,700	2,680	0.99	2,700	2,670	0.99	2,700	2,720	1.01	2,070	2,310	1.12
Totals	10,970	11,200	1.02	11,040	11,070	1	11,040	11,150	1.01	10,970	11,200	1.02

Brampton/Mississauga	Capacity	Volume	v/c	Capacity	Volume	v/c	Capacity	Volume	v/c	Capacity	Volume	v/c
Tomken Road	1,400	990	0.71	1,400	1,000	0.71	1,400	990	0.71	1,400	1,000	0.71
Dixie Road	2,700	3,130	1.16	2,700	3,160	1.17	2,700	3,110	1.15	2,700	3,150	1.17
Bramalea Road	1,600	890	0.56	1,600	760	0.48	1,600	910	0.57	1,600	1,010	0.63
Torbram Road	1,600	1,470	0.92	1,600	1,480	0.93	1,600	1,420	0.89	1,600	1,460	0.91
Airport Road	2,070	1,650	0.8	2,070	1,580	0.76	2,070	1,640	0.79	2,070	1,540	0.74
Totals	9,370	8,130	0.87	9370	7980	0.85	9,370	8,070	0.86	9,370	8,160	0.87

Based on **Table 6-8**, no clear conclusion can be made as the differences in screenline volumes are minimal in most cases.

6.7 Bovaird Drive BRT

Improvements to the Bovaird Drive BRT's include extending the western terminus from Mount Pleasant GO station, as recommended in the 2004 TTMP, to Mississauga Road, to connect to the proposed Mississauga BRT corridor. No alternatives were tested for this improvement.

6.8 Support Services

The network of support corridors to the proposed BRT services is similarly enhanced to match the improvement to BRT service.

6.9 Transit Nodes

Proposed transit nodes within the City are based on the following hierarchy:

- **Major Transit Station Area:** Identified in the Growth Plan as the area including and around any existing or planned higher order transit station within a settlement area, or a major bus depot in an urban core.
- **Mobility Hub:** Major transit station areas identified in the Metrolinx RTP that are particularly significant given the level of transit service that is planned for them and the development potential around them. They are places of connectivity where different modes of transportation – from walking to high-speed rail – come together seamlessly and where there is an attractive, intensive concentration of employment, living, shopping and recreation around a major transit station.
- **Future Mobility Hub:** Major transit station areas that are being planned as Mobility Hubs by the City, but that have not yet been designated as such in the Metrolinx RTP.
- **407 Transitway Station:** Identified by MTO and are transit nodes that connect to the 407 Transitway.

6.10 Future HOT / LRT Corridors

While the high-order transit corridors identified throughout the TTMP documents call for BRT technology, the overall transit objectives as stated in the Brampton Official Plan support protecting for BRT corridors to be operated as LRT corridors in the future. This is important to serve Brampton's needs in coordination with other initiatives in the GTA to achieve convenient and appropriate transit service integration. As transit supportive land uses continue to be implemented, transit ridership grows, and funding becomes available, the City should aggressively move towards dedicated transit lanes in centre median right-of-ways and seriously consider LRT technology.

While all BRT corridors should be implemented in such a manner so as to be flexible for the potential future implementation of light rail, at a minimum those corridors identified in the Metrolinx RTP should be studied as candidates for LRT. Corridors identified in the Metrolinx RTP include Hurontario Street, Queen Street, and Steeles Avenue.

Of note is the on-going Hurontario/Main Street Study that is assessing the corridor's potential for higher-order transit, land use, and urban design. The results of this study will have an impact upon the City of Brampton's final vision and implementation of its high-order transit corridors.

6.11 Transit Service Level

DC cost calculations for transit assume the same level of service in the future as today. However if level of service for the overall transportation network deteriorates, more money will have to be spent to provide enough transit service to meet the level of service. This increase in spending is covered using a congestion factor that is applied where future road network analysis shows congestion.

This is only a rough estimate for DC purposes – further detailed financial analysis is needed to determine the investment needs to fully realize the transit vision.

Detailed discussion on development charge calculations is provided in the Development Charge Background Study

7. WEST BRAMPTON ROAD NETWORK

7.1 Projected Growth in West Brampton

The City of Brampton is projected to grow from its current (2006) total of 452,000 people and 155,000 jobs to 760,000 people and 320,000 jobs by the year 2031 based on the projected growth listed in **Chapter 4**. As the City's urban envelope has "filled-out" over the years, the concentration of this projected growth between now and 2031 will occur in west and north east Brampton – but specifically in the areas known as Northwest Brampton and Bram-West. **Table 7-1** summarizes the projected growth for West Brampton and its surrounding area.

Table 7-1: Projected Growth in West Brampton and Surrounding Area

Area	Population		Employment	
	2006	2031	2006	2031
Mayfield West	4,200	32,800	1,100	10,600
North West Brampton	1,200	60,400	100	3,100
Bram-West	6,400	39,600	5,500	27,000
401-407 Employment Area	400	50,500	2,600	52,200
Total Area	12,200	183,300	9,300	92,900
Growth		171,100		83,600

Within Brampton itself (North-West Brampton, Bram-West), 92,400 new residents and 24,500 new jobs are projected for 2031. When including the Mayfield West development area in Caledon to the north, and the Hwy 401-407 Employment Area in Mississauga to the south, these totals rise to 171,100 new residents and 83,600 new jobs.

The future transportation challenges for this area are evident, and a number of studies have been undertaken in the past to address them. The most recent study, the Halton-Peel Boundary Area Transportation Study (H-P BATS) is still on-going although has not produced recommendations yet. Numerous other studies completed up to this point have identified a North-South Transportation Corridor (NSTC) as a necessary prerequisite for development in the west part of the City.

7.2 North-South Transportation Corridor (NSTC) Alternatives

The Halton-Peel Boundary Area Transportation Study is a joint study between the Region of Peel, Halton Region, City of Brampton, Town of Caledon, and the Town of Halton Hills. The study has been initiated to identify the long-term (2021 and 2031) transportation network

required to support provincial and inter-municipal planning goals, and to serve future transportation demands within the Study Area.

Specific goals and objectives of the Halton-Peel Boundary Area Transportation Study are to:

- Support current and future municipal planning objectives by providing transportation capacity to accommodate future travel demands generated by planned growth in west Brampton and Halton Hills.
- Develop a coordinated interconnected roadway network system along the Halton / Peel boundary.
- Identify opportunities for transportation mode choices, including public transit, carpooling / vanpooling, and High Occupancy Vehicle (HOV) lanes across the study area.
- Identify solutions to serve long-distance truck traffic travelling in the study area between Halton Region and Peel Region.
- Identify improvements that will serve inter-regional traffic including longer-distance, cross-boundary traffic from Halton Region (and areas west of Halton Region), travelling through west Brampton and southwest Caledon to destinations to the south and east in Peel Region, York Region, and Toronto.
- Review potential to improve connections with the existing Provincial 400-series highway network and possible future Provincial transportation facilities including the GTA West Corridor Planning and Environmental Assessment Study in support of the Province's growth objectives as set out in the Provincial Growth Plan for the Greater Golden Horseshoe.
- Explore opportunities to reduce dependency on the automobile through Travel Demand Management (TDM) / transit supportive measures.

The study is being conducted in accordance with the transportation master planning process in the Municipal Class EA guidelines.

However, since the H-P BATS study has not arrived at its recommendations yet, the Brampton TTMP performed a number of study specific analyses to conceptualize the role, function, geographical limits, costs, and connectivity of NSTC if located only within the limits of the City of Brampton and Peel Region. The authors of this report and the project team would like to stress that the TTMP analysis does not preclude the evaluations and recommendations of the H-P BATS. It is our understanding that it is within the H-P BATS scope and mandate to make further recommendations on the NTSC, in addition, a corridor Environmental Assessment Study will be required to devise and recommend the corridor alignment.

The alternatives tested during the course of the 2009 TTMP Update include:

- Brampton Super Arterial, 8 to 6 lanes; with terminus at Sandalwood and Mayfield; with and without the connection to Hwy 401 via Winston Churchill Blvd; with and without the connection to future GTA West corridor
- Brampton-only Freeway, 6 lanes

Transit modal split applied to this exercise were discussed in **Chapter 3**. Major road improvements in the original 2031 base road network used in NSTC analyses included the following:

- Extension of Highway 410 from Bovaird Dr. to Mayfield Rd. and then continuing west to Hurontario St
- Widening of Highway 401 to 12 lanes east of Mississauga Rd and 10 lanes from there to Trafalgar Rd
- Widening of Highway 407 to 10 lanes to Hwy 407 / 401 interchange and to 6 lanes south to Hwy 403
- Connection of Creditview Rd. north of Bovaird Drive to James Potter Road south of Bovaird Drive
- Widening of Chinguacousy to 6 lanes from the Mississauga-Brampton boundary to Bovaird Drive
- Widening of Steeles to 6 lanes through west Brampton to the Halton boundary
- Widening of Winston Churchill to 4 lanes south of 10th Sideroad
- Widening of Bovaird Drive to 6 lanes east of the North-South corridor
- Addition of Bramwest Parkway south of the Credit River with a new interchange at the 407 ETR

7.2.1 Brampton Super Arterial

The Brampton Super Arterial concept envisions high speed and high capacity corridor located within Brampton. The corridor will serve the “new growth” areas of Bram-West and North-West Brampton, which includes the Secondary Plan Areas of Huttonville, Huttonville North, Mount Pleasant, and Mount Pleasant West. The corridor will require the “super arterial standard” which entails a lane capacity of 1000 vehicles per hour (vph) and a speed limit of 80 kilometres per hour (km/h). Such “super arterial” will provide 8 lanes between Highway 407 and Bovaird Drive, and 6 lanes between Bovaird Drive and Sandalwood or Mayfield Road.

The southern terminus of the NSTC will be at Heritage Road just south of Highway 407 and the road will veer to the north with a freeway to arterial interchange at Highway 407. The road will generally follow the proposed Bramwest Parkway alignment in between Winston Churchill Boulevard and Heritage Road. Just north of Embleton Road, the road will run north to connect with Williams Pkwy and Bovaird Drive. North of Bovaird Drive, it is anticipated that the NSTC will locate somewhere between Winston Churchill Blvd and Mississauga Rd. To expedite the evaluation process and decrease the number of sensitivity runs, the NSTC was placed between Heritage Rd and Mississauga Rd however this “intermittent” location was not intended to preclude or in any way influence H-P BATS or the future Environmental Assessment process required for the corridor. All roads that cross the Brampton Super Arterial will have at grade intersections.

Previous studies done in 2006 by Northwest Brampton Landowners Group confirmed the need for the NSTC from Hwy 407 to Sandalwood Parkway for 2021 to 2026 and stated that no further extension of the corridor were required beyond 2031. This recommendation was

subsequently adopted by Peel Region and included in the Regional Capital Plan and Development Charge. Since 2006 the vision for growth in the GTA West has changed. New and profound changes, spurred by the provincial “Places to Grow” legislation, will affect Halton and Peel and, from the perspective of travel demand forecasting, are visibly reverberating across Brampton and its road and transit networks. To be fair to previously completed efforts, we assessed the impact of NSTC terminating at either Mayfield Road, Sandalwood Parkway, and the GTA West corridor. The results of the evaluation are presented in the following sections.

Brampton Super Arterial will also have an effect on existing and proposed Highway 407 operations. The planned 407 Transitway will have to be shifted to the south to make room for the planned interchanges with Highway 407 and the NSTC facility. Traffic operations on Highway 407 between Highway 401 and Mississauga Road may be affected due to the extra demand placed along this stretch of highway. Another issue facing this alternative is the spacing of interchanges between Highway 401 and Mississauga Road due to the planned interchanges for Brampton Super Arterials. If interchanges are closely-spaced, they can create potentially dangerous conditions due to weaving patterns between lanes.

7.2.1.1 Evaluation Results

Screenline results from the model assignment for the NSTC terminating at Mayfield Road indicate high degree of congestion and screenline volume to capacity ratios at or slightly over 1 for the northbound traffic. Credit River screenline is the most critical point within the network. It consistently maintains the v/c ratio of 0.98 to 1.0 regardless of the northern terminus being at Sandalwood Pkwy or Mayfield Rd. Besides the Credit River screenline however, the rest of the road network in Brampton appears to be operating at a reasonable level of service.

Extension of NSTC to Mayfield Rd has positive effects across the entire network providing some minor relief to east west roads across the City. The Mayfield Rd terminus provides more convenient access for the traffic destined to areas of Mt. Pleasant community and southern Caledon adjacent to Mayfield Rd.

Screenline V/C ratios for testing the link between the NSTC and the proposed GTA West Corridor (see **sections 8.1.3** and **8.2**).

Table 7-2: NB Screenline, NSTC 407 ETR to GTA West Corridor

Screenline	Volume	Capacity	V/C
Caledon/Brampton	3,340	7,700	0.43
North of Bovaird Drive	5,520	6,800	0.81
North of Queen Street / Embleton Road	8,520	9,670	0.88
North of Steeles Avenue	8,610	9,670	0.89
Brampton/Mississauga	5,810	9,540	0.61

NSTC option of connecting the corridor to Hwy 401 via Winston Churchill Blvd assumes that the corridor diverts to the west south of Embleton Ave and Maple Lodge Farms to link up with Winston Churchill Blvd just north of Steeles Avenue. The joined road then would continue to the south (8-lanes with 1000 / lane capacity) to connect to Highway 401 at the existing interchange. BramWest Parkway would provide connectivity with Hwy 407.

This connection would allow for a direct high-capacity arterial connection to Highway 401 without requiring a diversion along Steeles Avenue. The alignment enables Highway 401 access without impacting employment land in Halton however may affect Maple Lodge Farm lands and would require additional land and realignment of Winston Churchill Blvd south of 5th Sideroad / Embleton Rd.

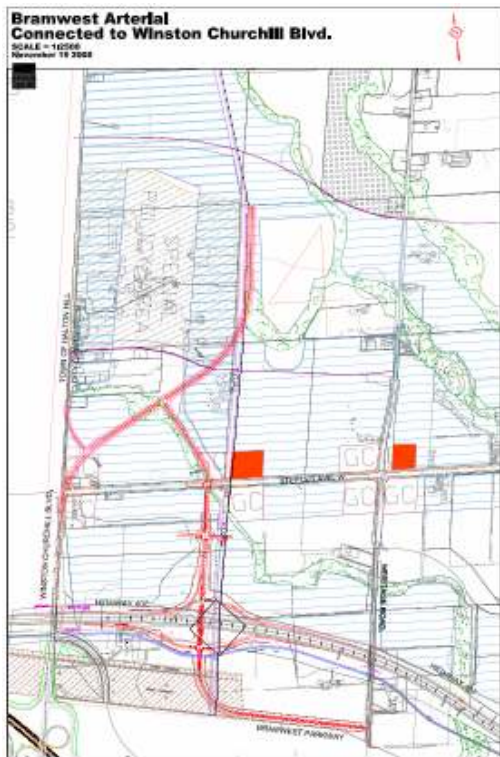


Exhibit 7-1: NSTC Connection to Hwy 401

Assuming that the GTA West Corridor is built, more NB traffic is attracted to the screenline, but the screenline maintains a satisfactory level of service. Looking at the plot however, congestion occurs on the NSTC and Heritage Road.

NSTC options were also evaluated for overall road network performance by examining arterial roads in the North West Brampton and Bram-West areas.

Table 7-3: Network Performance for NSTC Options

Performance measure	Mayfield	Sandalwood	WCB Link	GTA West
% Network congested (by lane km)	16%	18%	13%	17%
Total travel time (hours)	5,100	5,100	5,000	5,000
Vehicle-kilometres travelled	330,400	327,000	331,500	319,400
Annual GHG (tonnes)	74,700	74,200	74,000	72,900
Annual hours of congestion	2,604,000	2,591,800	2,291,500	2,520,100

Based on the previous discussion, it appears that the WCB Link option is preferred over the other NSTC arterial options. The case for including a WCB link is strengthened because it is the only alternative that provides a direct connection to both Highway 401 and Highway 407.

7.2.2 Brampton-only Freeway

The Brampton-only Freeway is an 8-lane freeway option with service roads following the same alignment as the super arterial alternative from Highway 407 to Mayfield Road. Since this is a freeway option, all roads crossing this freeway must be grade separated and access will be limited to interchanges only. The freeway's lane capacity is coded as 1800 vphpl and the freeway's speed is coded at 100 km/h in the emme/2 model. A direct connection with Highway 401 is not possible due to inadequate interchange spacing between Winston Churchill Boulevard and Mississauga Road.

As with the Brampton Super Arterial option, traffic operations on Highway 407 between Highway 401 and Mississauga Road will be affected due to the installation of the new freeway-to-freeway interchange due to extra demand. The issue of interchange spacing, as discussed with the Brampton Super Arterial, remains an issue with this alternative. The 407 Transitway will also have to be shifted south to take into account for the interchange.

Using base scenario trip rates and mode share the results from the model assignment, the resulting volume-to-capacity ratio's for this alternative are listed in **Table 7-4**.

Table 7-4: Northbound traffic volumes for Brampton-only Freeway

Screenline	Vol	Capacity	v/c
N. of Steeles Ave	4,058	5,400	0.75
Credit River	6,130	5,400	1.14
N. of Bovaird Dr	4,211	5,400	0.78
N. of Sandalwood Pkwy	3,516	5,400	0.65

Although the stretch over the Credit River appears to be congested, this is the only stretch of freeway where volume exceeds the roadway capacity. Compared to other alternatives, this alternative does not have the same effect on surrounding north/south arterials because of the extra capacity on the freeway compared to the super arterial, and therefore can accommodate increased demands should development in Caledon and Halton occur.

Despite the obvious capacity related to providing a freeway over an arterial, the Brampton-only freeway is not preferred due to impacts on the Bram West Secondary Plan Area, and the lack of a direct connection to Highway 401.

7.2.3 NSTC Connectivity Improvements

Improvements for NSTC connectivity are based on the results for the need and timing of the recommended NSTC alternative. The following improvements are considered:

- Sandalwood Parkway extension from Chinguacousy to Winston Churchill Boulevard
- Wanless Road and Mississauga Road widenings
- Heritage Road widening

Sandalwood Parkway Extension

The current terminus for Sandalwood Parkway is currently at Chinguacousy Rd, the Sandalwood extension will extend the road to the boundary shared with Halton Region at Winston Churchill Boulevard. This improvement will serve the needs for future Northwest Brampton development. With the addition of the NSTC, it will be necessary to construct a high-order east-west link through Northwest Brampton to relieve congestion on other east-west arterials such as Mayfield Road and Bovaird Drive. The timing for the extension of Sandalwood Parkway is recommended in **Table 7-5**.

Table 7-5: Timing of Sandalwood Parkway Extension

Western Terminus (Extend to)	Year
Mississauga Road	2016
Heritage Road	2021
Winston Churchill Boulevard	2031

Wanless Road and Mississauga Road Widenings

This improvement includes the widening of Wanless Road to four lanes between Mississauga Road and Winston Churchill Boulevard from its current configuration of two, as well as the widening of Mississauga Road to four lanes north of Bovaird Drive to the northern city limits. These improvements will provide extra capacity to relieve the congestion created by future traffic demand due to Northwest Brampton development and the NSTC. The Wanless Road widening is recommended for 2016 and the Mississauga Road widening is recommended for 2013 as per Peel Region DC. The widening of this same section of Mississauga Road to six lanes by 2023 however, is not recommended by this Brampton TTMP. The inclusion of the NSTC north of Bovaird provides sufficient capacity such that Mississauga Road does not need to be widened by 2023, nor 2031. Beyond 2031 however, Mississauga Road should be protected for six lanes.

Heritage Road Widening

The planned widening of Heritage Road from 2 lanes to 4 lanes will increase capacity for the west Brampton road network and will relieve congestion on adjacent north-south arterial streets, including the NSTC. This improvement is recommended to be implemented in stages; the first stage will be between Bovaird Drive and Wanless Road and has a recommended timing of 2021. The second stage of widening between Wanless Road and Mayfield Road is recommended for 2031.

7.2.4 NSTC Conclusions

Based on this analysis, Brampton should at this time plan and protect for a minimum as presented in **Table 7-6**.

Table 7-6: NSTC implementation timing

Southern Terminus	Northern Terminus	Number of Lanes	Year
Heritage & Highway 407 (Meadowvale Blvd)	Steeles Avenue	6	2012
Steeles Avenue	Embleton Road	6	2014
Embleton Road	Bovaird Drive	6	2016
Heritage & Highway 407 (Meadowvale Blvd)	Steeles Avenue	8	2018
Steeles Avenue	Embleton Road	8	2019
Embleton Road	Bovaird Drive	8	2020
Bovaird Drive	Mayfield Road	6	2021

The above infrastructure performs a regional and even interregional function but should be protected for at a minimum to accommodate growth planned in Brampton. However, further study (H-P BATS) should continue to look at all options on both sides of boundary including freeway options, and on this basis Brampton should also continue to protect for the NSTC north of Embleton Road at a width sufficient to accommodate a freeway.

Potential future connections to a GTA West corridor, GTA freeway network and a goods movement corridor should be protected for.

8. OTHER ROAD NETWORK ALTERNATIVES

8.1 North-East Brampton Network Alternatives

8.1.1 Base-case Option (Recommended 2009 YP BATS)

The base-case option, as recommended in the 2009 YP BATS, consists of the extension of Highway 427 in York Region extended to end at Major Mackenzie Drive. Major Mackenzie Drive will be extended into Brampton from its current terminus at Highway 50 to The Gore Road. A four lane connector road from the intersection of Major Mackenzie and Highway 50 will be constructed to extend northwest to Mayfield Road just east of Clarkway Drive. This link will serve communities in the North-East Brampton area who will have used Highway 427. This improvement is recommended to be implemented by 2016.

Exhibit 8-1 and **Exhibit 8-2** demonstrate the forecasted 2031 auto volumes and volume-to-capacity ratios in North-East Brampton. **Table 8-1** and **Table 8-2** are screenline summaries for the North-East Brampton area.

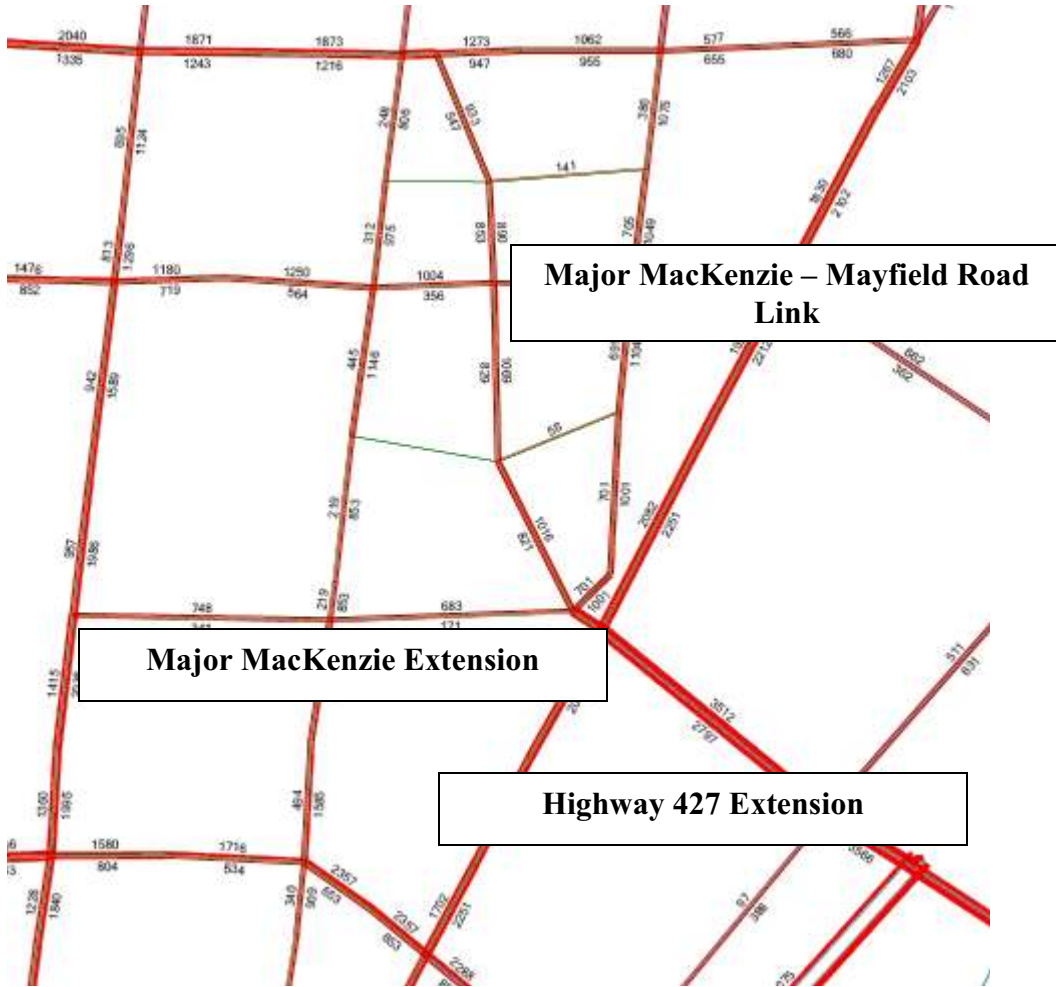


Exhibit 8-1: Auto Volume Plot, 2009 YP BATS Recommended Alternative



Exhibit 8-2: V/C Ratio Plot, 2009 YP BATS Recommended Alternative

Table 8-1: North-South Screenline Summary, 2009 YP BATS Recommended Alternative

East Totals (Hwy 410 to Highway 50)				
	Volume	Capacity	V/C Ratio	Transit Vol
NORTHBOUND				
Caledon / Brampton	11,000	19,600	0.56	840
North of Bovaird Drive / Castlemore Road	21,300	24,500	0.87	1,040
SOUTHBOUND				
	Volume	Capacity	V/C Ratio	Transit Vol

Caledon / Brampton	5,000	19,600	0.26	1040
North of Bovaird Drive / Castlemore Road	9,100	24,500	0.37	3490

Table 8-2: East-West Screenline Summary, 2009 YP BATS Recommended Alternative**North Totals (Mayfield to North of Queen)**

WESTBOUND	Volume	Capacity	V/C Ratio	Transit Vol
East of Airport Road	10,400	12,700	0.82	470
West of Highway 50	9,000	12,900	0.70	200
EASTBOUND	Volume	Capacity	V/C Ratio	Transit Vol
East of Airport Road	7,000	12,700	0.55	900
West of Highway 50	5,900	12,900	0.46	480

Under this scenario, the road network in North-East Brampton is not congested. With the exception of Clarkway Drive between Castlemore Road and the Major MacKenzie Drive extension, all roads under the jurisdiction of the City of Brampton have volume-to-capacity ratios of well under 1.00. However, in Vaughan, Major MacKenzie Drive is highly congested in both directions.

8.1.2 Triggers for Major MacKenzie - Mayfield Link

The link planned between Major MacKenzie Drive and Mayfield Road is recommended by the 2009 YP BATS to facilitate an increase in traffic in North-East Brampton due to the Highway 427 extension. This road will open up employment lands in North East Brampton by providing extra capacity in North-East Brampton and along with Major MacKenzie Drive, this link will serve as a continuous route from Highway 427 to the newly planned development.

To fully comprehend the impact that this link will have on the road network in North-East Brampton, a model run was performed with the 2009 YP BATS recommended network without the Major MacKenzie Drive – Mayfield Road link. Traffic assignment results are illustrated in **Exhibit 8-3**. Volume-to-capacity ratios for the North-East Brampton road network are shown in **Exhibit 8-4**.



Exhibit 8-3: Auto Volume Plot, 2009 YP BATS Recommended Alternative - No Major MacKenzie Drive - Mayfield Road Link



Exhibit 8-4: V/C Ratio Plot, 2009 YP BATS Recommended Alternative - No Major MacKenzie Drive - Mayfield Road Link

Table 8-3: North-South Screenline Summary, 2009 YP BATS Recommended Alternative - No Major MacKenzie Drive - Mayfield Road link

NORTHBOUND	East Totals (Hwy 410 to Highway 50)			
	Volume	Capacity	V/C Ratio	Transit Vol
Caledon / Brampton	10,700	18,000	0.59	840
North of Bovaird Drive / Castlemore Road	21,300	24,500	0.87	1,040
SOUTHBOUND	Volume	Capacity	V/C Ratio	Transit Vol
Caledon / Brampton	5,000	18,000	0.28	1040
North of Bovaird Drive / Castlemore Road	9,100	24,500	0.37	3490

Table 8-4: East-West Screenline Summary for NE Brampton Recommended Alternative

WESTBOUND	North Totals (Mayfield to North of Queen)			
	Volume	Capacity	V/C Ratio	Transit Vol
East of Airport Road	4,800	5,100	0.94	100
West of Highway 50	5,700	6,600	0.86	90
EASTBOUND	Volume	Capacity	V/C Ratio	Transit Vol
East of Airport Road	4,100	5,100	0.80	560
West of Highway 50	4,100	6,600	0.62	620

Compared to the 2009 YP BATS recommended scenario, the road network in North-East Brampton experiences higher volume-to-capacity ratios along all links. Coleraine Drive experiences the greatest difference in traffic volumes, while smaller sections of Clarkway Drive and The Gore Road experience increases as well. The east-west screenlines of Airport Road and Highway 50 begin to approach capacity due to traffic being forced to use alternate routes to reach North-East Brampton such as Mayfield Road, Countryside Drive, and Castlemore Road.

None of the roads in North-East Brampton are congested without this link, however this link will provide opportunities to further develop areas in North-East Brampton.

8.1.3 Hwy 427 extension to Mayfield/EW Corridor

This scenario consists of the extension of Highway 427 to Mayfield Road where it will terminate at a newly constructed E-W Corridor freeway. This freeway will stretch from Highway 427 to the City of Guelph north of Mayfield Road in Caledon and the Region of Halton. The E-W corridor will be have a six lane cross section from Highway 427 to

Hurontario Street and then will be four lanes from Hurontario Street to Guelph. It will have interchanges at all major roads as well as an interchange with Highway 410. The Major MacKenzie extension to Clarkway Drive and the link from Major MacKenzie to Mayfield Road, as discussed in **Section 8.1.1**, will also be constructed to serve communities in North-East Brampton.

Exhibit 8-5 and **Exhibit 8-6** demonstrate the forecasted 2031 auto volumes and volume-to-capacity ratios in North-East Brampton.

Table 8-5 and Table 8-6 are screenline summaries for the North-East Brampton area.

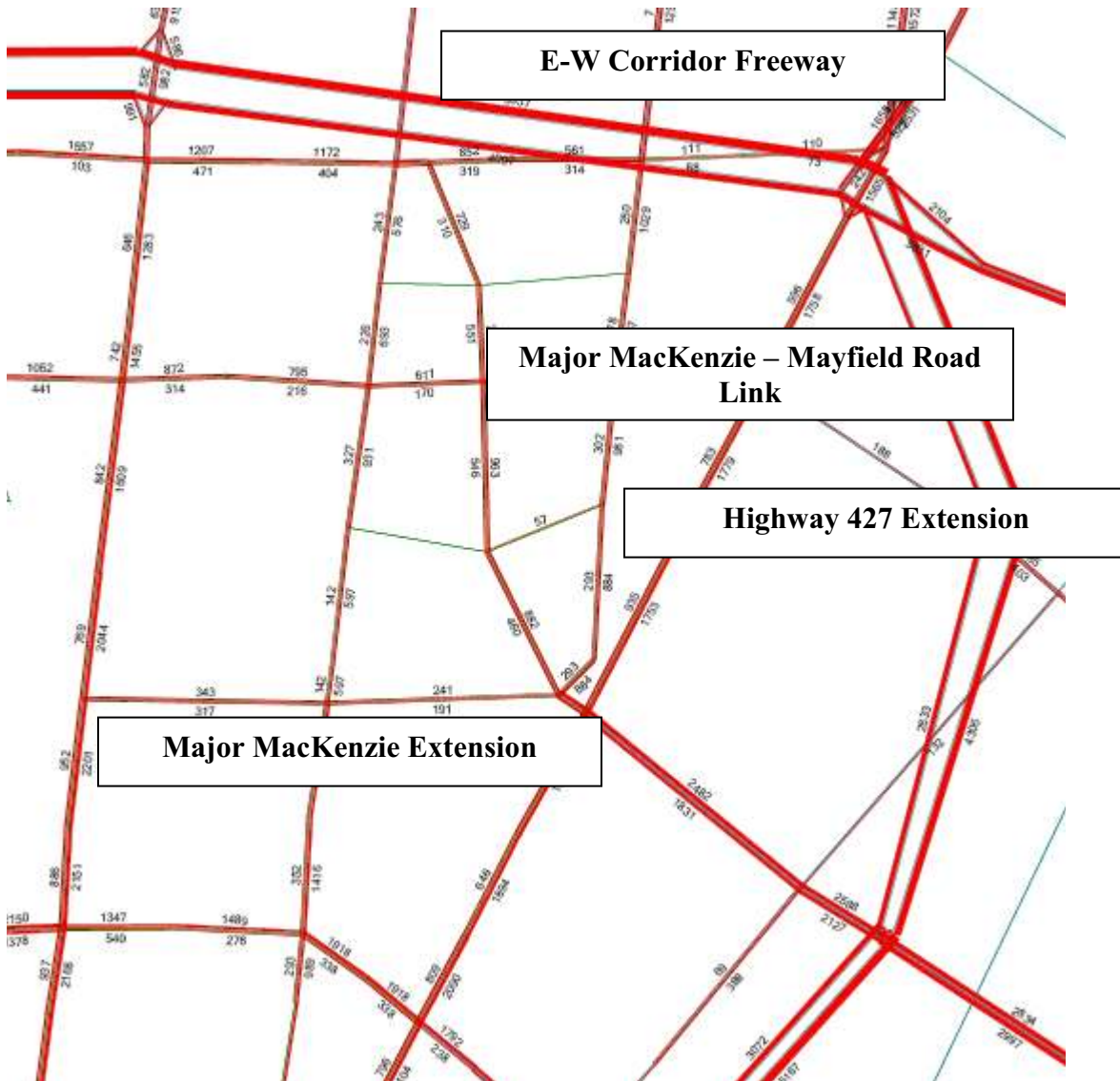


Exhibit 8-5: Auto Volume Plot, NE Brampton with Hwy 427 Extension and East-West Corridor

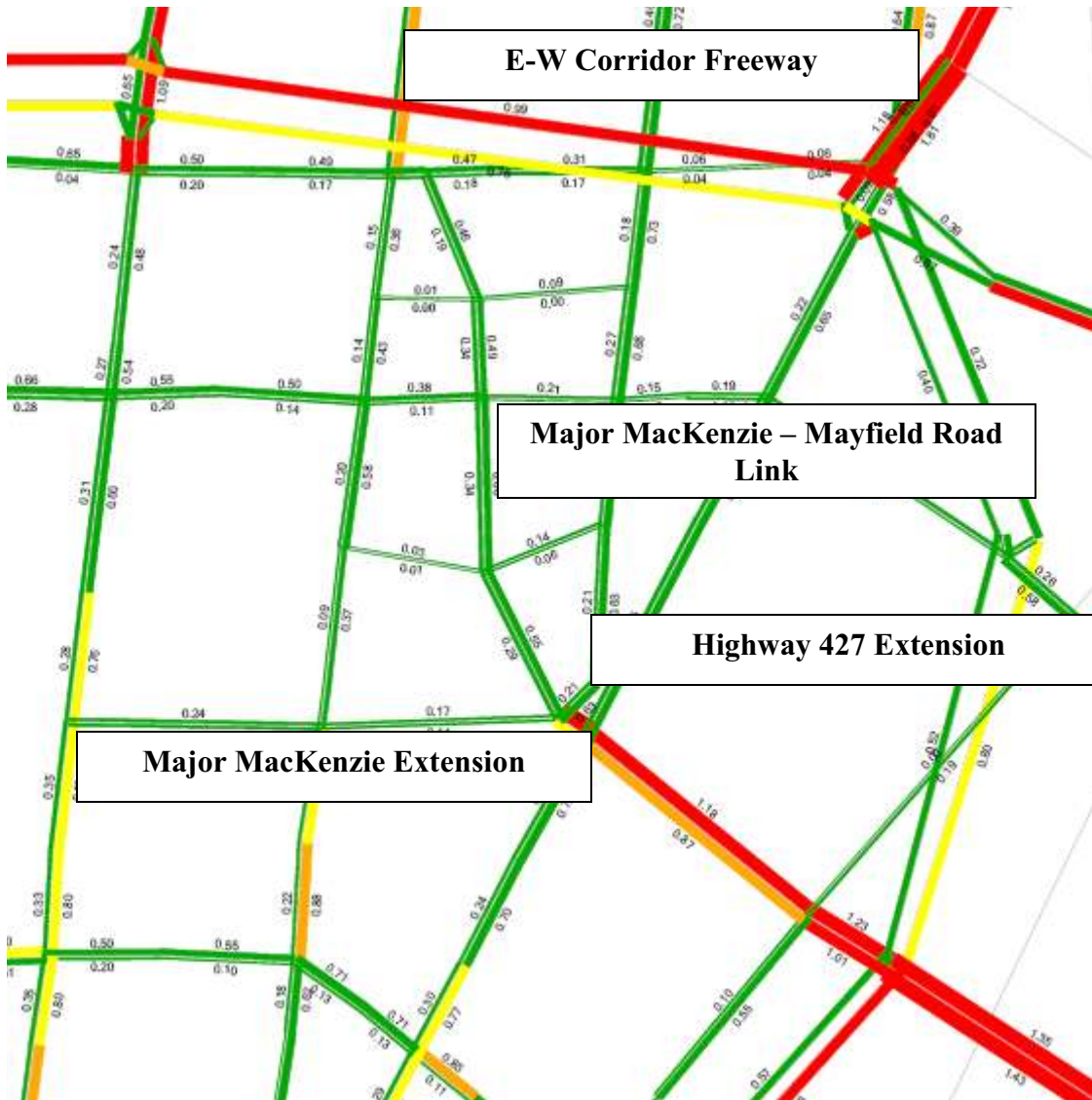


Exhibit 8-6: V/C Ratio Plot, NE Brampton with Hwy 427 Extension and East-West Corridor

Table 8-5: North-South Screenline Summary for NE Brampton with Hwy 427 Extension and East-West Corridor

	East Totals (Hwy 410 to Highway 50)			
	Volume	Capacity	V/C Ratio	Transit Vol
NORTHBOUND				
Caledon / Brampton	10,300	19,600	0.53	840
North of Bovaird Drive / Castlemore Road	20,800	24,500	0.85	1,040
SOUTHBOUND				
Caledon / Brampton	4,300	19,600	0.22	1040
North of Bovaird Drive / Castlemore Road	7,500	24,500	0.31	3490

Table 8-6: East-West Screenline Summary for NE Brampton with Hwy 427 Extension and East-West Corridor

	North Totals (Mayfield to North of Queen)			
	Volume	Capacity	V/C Ratio	Transit Vol
WESTBOUND				
East of Airport Road	9,000	12,700	0.71	470
West of Highway 50	6,900	12,900	0.53	200
EASTBOUND				
East of Airport Road	5,200	12,700	0.41	900
West of Highway 50	4,400	12,900	0.34	480

Like the scenario without the E-W corridor, this scenario will bring very little congestion to the road network in North-East Brampton. The stretch of Clarkway Drive between Castlemore Road and the Major MacKenzie extension is no longer congested. It should be noted that Major Mackenzie Drive in Vaughan is still very congested.

About 5250 trips will use the E-W corridor between Highway 427 and The Gore Road making this stretch freeway very congested. However, this will mean a large reduction of trips using Mayfield Road and Countryside Drive.

8.1.4 Recommended Alternative

The road network in North-East Brampton is not congested under the first scenario as there will be sufficient capacity with improvements that are already planned. Therefore, the construction of the E-W corridor is unnecessary. The recommended alternative is the recommendation of the York-Peel BATS.

8.2 Impacts of East-West GTA Corridor

As discussed previously, the GTA East-West corridor was coded in the model as a freeway north of Mayfield Road that begins at Highway 427 and ends in the City of Guelph. Between Highway 427 and Highway 10, the freeway will have a six lane cross-section. West of Highway 10, the freeway will be four lanes. This corridor was added to the 2031 horizon year road network to analyze its potential impacts.

Across the majority of screenlines, there is a significant reduction of traffic volumes inside the boundaries in the City of Brampton. As expected, the largest reductions in traffic volumes occur to east-west traffic screenlines between Queen Street and Mayfield Road. In the case of the westbound screenline to the east of Highway 410, the V/C ratio decreases from 1.00 in the base case to 0.86 with the Corridor.

Overall, the potential impact of the GTA East-West Corridor directly to the north of the City of Brampton is likely a positive one as it will relieve major arterial roads of traffic volumes and in following, traffic congestion. The corridor will also likely help to serve the significant heavy truck traffic that is prevalent in the area. While obviously beneficial to accommodating growth in Brampton and reducing congestion, it does not appear to be absolutely necessary to the City's currently planned transportation infrastructure to serve future travel demand.

8.2.1 Impacts on the City of Brampton

Table 8-7: Screenline Summary Comparison between Base Case Scenario and Scenario with E-W Corridor

	Scenario 1 - Base Case Scenario - Base Network; Base LU							Scenario 2 - East - West Corridor Scenario - Base Network with E-W Corridor; Base LU								
	West Totals (Winston Churchill to west of Hwy 410)				East Totals (Hwy 410 to Highway 50)			West Totals (Winston Churchill to west of Hwy 410)				East Totals (Hwy 410 to Highway 50)				
	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
NORTHBOUND																
Caledon / Brampton	5,536	17,700	0.31	25	10,974	19,600	0.56	841	6,629	17,700	0.37	25	10,258	19,600	0.52	841
North of Bovaird Drive / Castlemore Road	15,907	20,300	0.78	252	21,292	24,500	0.87	1,042	16,728	20,300	0.82	252	20,834	24,500	0.85	1,042
North of Queen Street / Embleton Road	19,374	19,870	0.98	164	22,828	22,470	1.02	579	19,364	19,870	0.97	164	22,640	22,470	1.01	579
North of Steeles Avenue	19,201	23,270	0.83	432	16,714	16,070	1.04	234	19,494	23,270	0.84	432	16,258	16,070	1.01	234
Brampton / Mississauga	14,909	19,340	0.77	273	10,942	12,350	0.89	342	15,006	19,340	0.78	273	11,000	12,350	0.89	342
	West Totals (Winston Churchill to west of Hwy 410)				East Totals (Hwy 410 to Highway 50)			West Totals (Winston Churchill to west of Hwy 410)				East Totals (Hwy 410 to Highway 50)				
SOUTHBOUND																
Caledon / Brampton	4,341	17,700	0.25	1,823	4,972	19,600	0.25	1,040	4,464	17,700	0.25	1,823	4,323	19,600	0.22	1,040
North of Bovaird Drive / Castlemore Road	8,622	20,300	0.42	2,797	9,104	24,500	0.37	3,487	8,724	20,300	0.43	2,797	7,520	24,500	0.31	3,487
North of Queen Street / Embleton Road	9,521	19,870	0.48	1,066	9,105	22,470	0.41	4,180	9,399	19,870	0.47	1,066	8,346	22,470	0.37	4,180
North of Steeles Avenue	10,418	23,270	0.45	1,578	8,096	16,070	0.50	959	10,132	23,270	0.44	1,578	7,495	16,070	0.47	959
Brampton / Mississauga	9,565	19,340	0.49	203	4,728	12,350	0.38	1,486	9,580	19,340	0.50	203	4,595	12,350	0.37	1,486
	North Totals (Mayfield to North of Queen)				South Totals (Queen to Bram.-Miss. Boundary)			North Totals (Mayfield to North of Queen)				South Totals (Queen to Bram.-Miss. Boundary)				
WESTBOUND																
Brampton / Halton	3,161	5,900	0.54	38	2,812	4,870	0.58	1	2,501	5,900	0.42	38	2,697	4,870	0.55	1
Credit River (WB & NB)*					10,397	10,140	1.03	546					10,382	10,140	1.02	546
East of Highway 10	9,909	11,770	0.84	348	3,653	3,270	1.12	242	10,032	11,770	0.85	348	3,578	3,270	1.09	242
East of Highway 410 / Heartlake Road	11,617	11,670	1.00	339	8,536	9,140	0.93	616	10,065	11,670	0.86	339	8,430	9,140	0.92	616
East of Airport Road	10,397	12,700	0.82	466	4,882	5,140	0.95	104	8,978	12,700	0.71	466	4,488	5,140	0.87	104

	9,006	12,900	0.70	203	5,786	6,570	0.88	88	6,909	12,900	0.54	203	5,457	6,570	0.83	88
	North Totals (Mayfield to North of Queen)								South Totals (Queen to Bram.-Miss. Boundary)							
EASTBOUND	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Brampton / Halton	2,401	5,900	0.41	172	2,591	4,870	0.53	1	1,878	5,900	0.32	172	2,456	4,870	0.50	1
Credit River (EB & SB)*					7,107	10,140	0.70	960					6,911	10,140	0.68	960
East of Highway 10	8,059	11,770	0.68	478	2,190	3,270	0.67	3,637	6,880	11,770	0.58	478	2,108	3,270	0.64	3,637
East of Highway 410 / Heartlake Road	9,386	11,670	0.80	605	5,526	9,140	0.60	347	7,025	11,670	0.60	605	5,150	9,140	0.56	347
East of Airport Road	7,036	12,700	0.55	901	4,088	5,140	0.80	562	5,197	12,700	0.41	901	3,831	5,140	0.75	562
West of Highway 50	5,853	12,900	0.45	481	4,114	6,570	0.63	621	4,355	12,900	0.34	481	3,582	6,570	0.55	621

8.3 Brampton Central Analyses

Four potential network improvements have been tested to find opportunities in improving traffic flow and reduce congestion in Central Brampton. Specifically, these improvements aim to improve conditions along Queen Street between McLaughlin Road and Kennedy Road and Main Street north of Queen Street to Vodden Street. The four improvements are:

1. Clark Boulevard – Eastern Avenue Connection (see **section 8.3.1**)
2. John Street Extension (see **section 8.3.2**)
3. Ken Whillans Drive Extension (see **section 8.3.3**)
4. Denison Street – Mill Street Connection (see **section 8.3.4**)
5. Queen Street Access Management Improvements

For each improvement a select link analysis is performed in order to approximate the number of trips each improvement will serve. The select link analyses will also be able to distinguish the origin and destination of all trips making it possible to determine how many trips are local trips to Central Brampton or through trips. For these analyses, Central Brampton is defined by the area bounded by Vodden Street in the north, Clarence Street in the south, Kennedy Road in the east and McLaughlin Road in the west. These trips are also re-distributed into the model without the improvement to examine what links will be used by these trips if the improvement is not implemented. All improvements and the results of the select link analyses are described in greater detail below.

8.3.1 Clark-Eastern Connection

The Clark-Eastern Feasibility Study in 2004 recommended a new 4-lane road connection between Rutherford Road and Hansen Road and widening of Eastern Avenue between Kennedy Road and Hansen Road (shown below in **Exhibit 8-7**) based on detailed modelling, forecasting and benefit-cost analysis. The need for this improvement was also confirmed in the 2004 TTMP as well as the Brampton Central Area Plan Review. This connection is identified in the latest City of Brampton Capital Plan as an improvement for 2018.

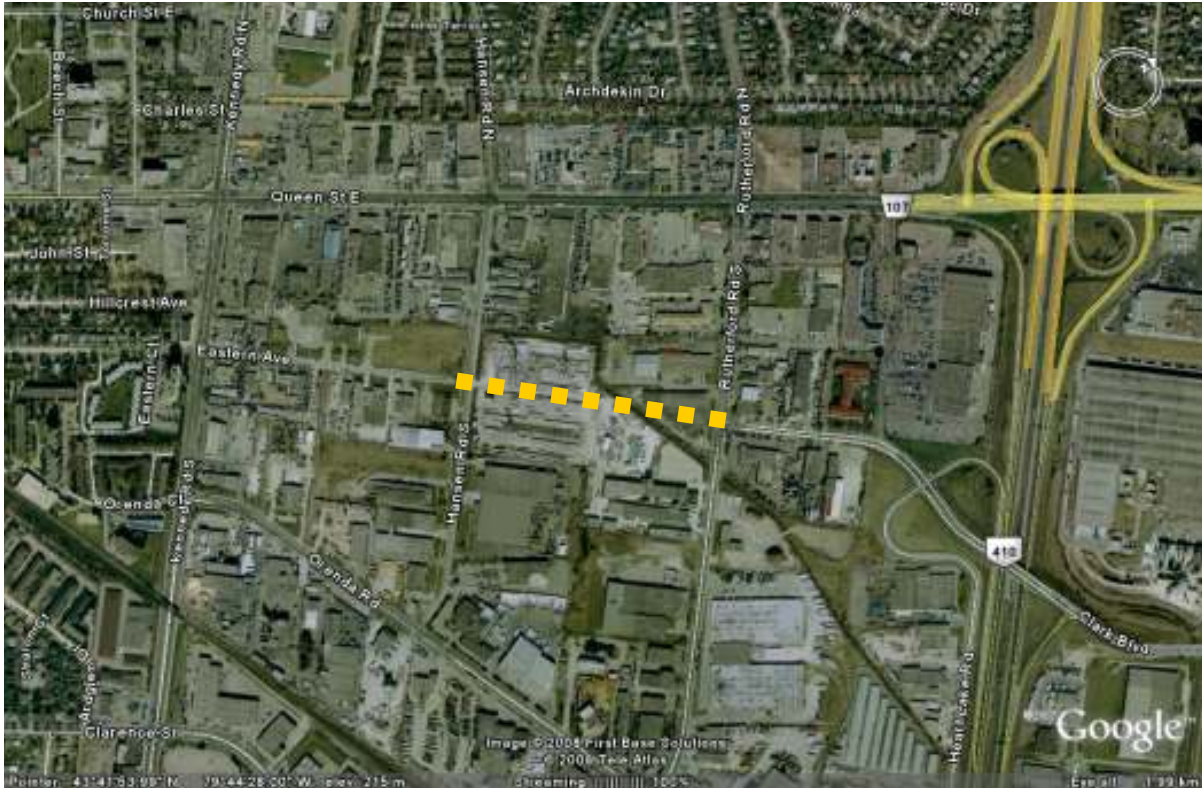


Exhibit 8-7: Clark –Eastern Connection

The TTMP update has reconfirmed the need for this improvement, which will complete the missing link between Hansen Road and Rutherford Road and connect Eastern Avenue and Clark Boulevard in order to create a continuous route linking the Bramalea City Centre (east of Dixie Road) and the Hospital (west of Kennedy Road). Currently Eastern Avenue's eastern terminus is Hansen Road and Clark Boulevard terminates in the west at Rutherford Road. This leaves Orenda Road and Queen Street as the only two options for drivers when travelling between the Bramalea City Centre area and the Central Area.

As a parallel route to Queen Street, this improvement is expected to improve flow on heavily-congested Queen Street by providing an alternative choice for drivers and by providing additional capacity in the Central Area. The recommended timing for the connection should be coordinated with the implementation of the proposed BRT system on Queen Street which will be one of the key steps in achieving the long term vision for Queen Street. The Clark-Eastern connection will accommodate some of the traffic diversion off Queen Street when two lanes on Queen Street will be dedicated to future BRT service.

Forecasts for the year 2031 project almost 750 users will be using this link in the PM peak direction (westbound). Most of these trips begin near the Bramalea City Centre. Only 15 trips are considered local traffic with a destination in Central Brampton. The other trips are considered through traffic. This connection will mean approximately 150 less trips using

Queen Street and an additional 110 less trips using Orenda Road. As expected, users of this Clark-Eastern connection will be forced to use Queen Street and Orenda Road if they need to travel between Central Brampton and Bramalea City Centre if no such improvement exists. See **Exhibit 8-8** and **Exhibit 8-9** for plots that represent auto volumes on streets near the Clark-Eastern connection.

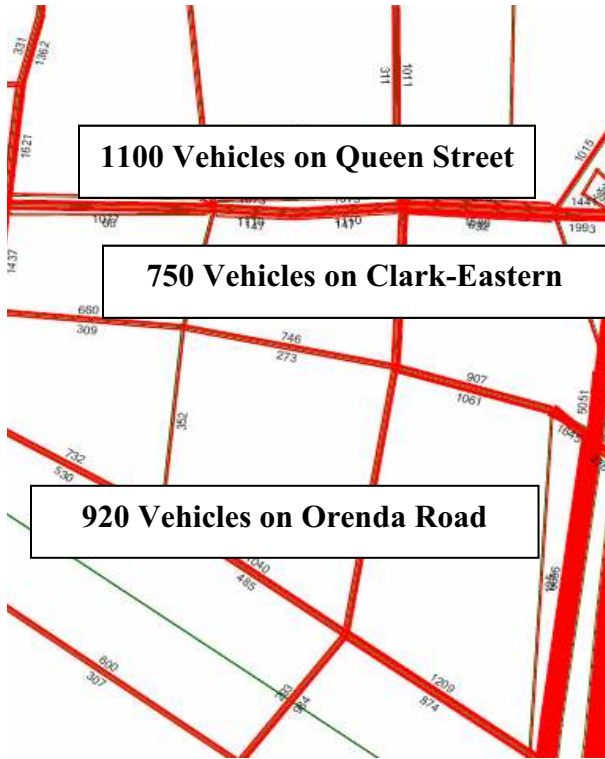


Exhibit 8-8: Auto Volumes with Clark-Eastern Connection

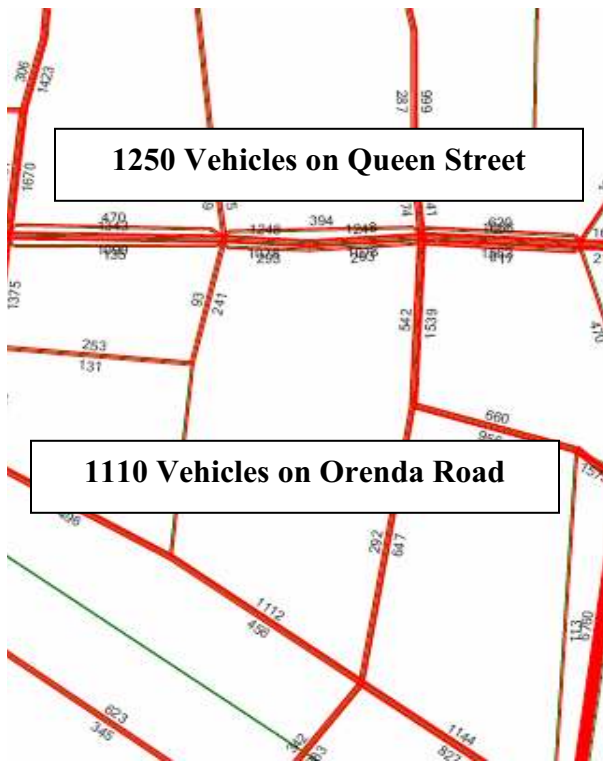


Exhibit 8-9: Auto Volumes without Clark-Eastern Connection

8.3.2 John Street Extension

The John Street extension from James Street to Centre Street, across the Etobicoke Creek is not currently in the Official Plan; however, it has been recommended in the John Street Feasibility Study and its need has been reconfirmed in the TTMP update. The John Street connection is preferred over the proposed Wellington Street extension from James Street to Trueman Street based on the impacts to the Downtown Core and Hospital Area, benefit-cost analysis, and the uncertain redevelopment of the Hospital.

The John Street extension consists of reconstructing John Street to a proper collector road standard, a new 2-lane span structure over Etobicoke Creek, realignment of its intersection with Centre Street to eliminate the current jogged intersection, and new traffic signals at Centre Street. The extension is illustrated in **Exhibit 8-10**.



Exhibit 8-10: John Street Extension

There are a number of benefits to the proposed John Street extension. It firstly fills a gap in the collector road network identified in the Official Plan and provides additional capacity and network flexibility across Etobicoke Creek. Secondly, it is a viable alternative to Queen Street for local traffic destined to redevelopment areas east of Main Street and links the Downtown Core with the rest of the Central Area (Queen Street Corridor Precinct and Bramalea City Centre) in combination with the Clark-Eastern connection. Finally, the extension is beneficial in providing more direct emergency access and additional neighbourhood linkage to promote redevelopment growth but without attracting too much traffic (compared with a Wellington connection) due to its indirect alignment, its two-lane cross section, and the constraints surrounding the hospital area.

In the year 2031, forecasts approximate 480 users will be using this link in the PM peak direction (westbound). As in the case for the Clark-Eastern connection, this extension will generally serve local traffic between Central Brampton and Highway 410 as 321 trips have origins or destinations in Central Brampton. The extension will divert 90 users from Queen

Street and almost 100 users will be taken off Vodden Street. See **Exhibit 8-11** and **Exhibit 8-12** for plots that represent traffic volumes on streets around the John Street extension.

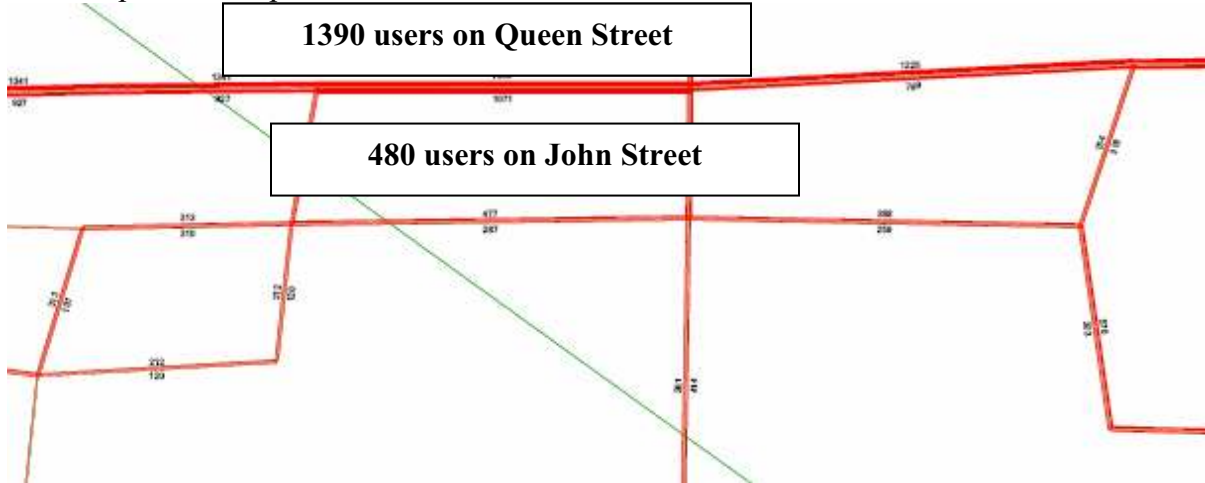


Exhibit 8-11: Auto Volumes with John Street Extension

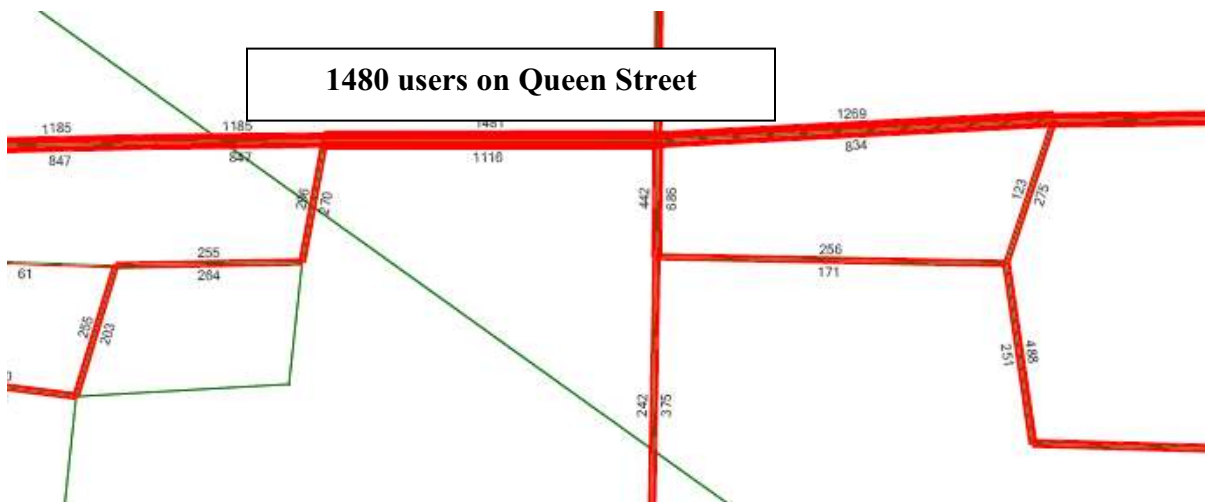


Exhibit 8-12: Auto Volumes without John Street Extension

Despite the benefits, concerns have been expressed by the Brampton Downtown Development Corporation regarding the following items listed in their letter to City Council, September 30, 2008:

- John Street is not a viable alternative to Queen, since it is one-way eastbound between Main and Chapel Street.
- Queen and James intersection would be too close to a John extension and James intersection.
- Negative impact on other streets in the downtown area – especially potential doubling of traffic on Wellington Street and Mary Street.
- Potential negative impact on desirability of new developments in the area.

- Potential negative impact on attracting businesses both to the Downtown area and the City as a whole.

It is expected that these and other issues would be considered in detail through an EA that would be required and that all options would be fully explored including the do-nothing alternative. In regards to the first three traffic-related concerns, a preliminary response is provided below based on the analyses undertaken in the John Street Feasibility Study and the TTMP update.

John Street is a viable alternative to Queen Street if the connection is implemented as part of a network solution for the Central Area to support intensification and redevelopment. This network solution includes the Clark-Eastern connection, the proposed BRT on Queen Street, as well as all the supporting policies that will assist in reducing trip making and the single-occupant vehicle throughout Brampton. John Street is also part of the existing collector road network based on the OP and will connect to Main Street through the use of Wellington Street. The one-way eastbound operation on John Street today is not and should not be a deterrent for extending John Street over Etobicoke Creek to connect to Centre Street. Many of the origins and destinations of trips using the John Street connection are located in the neighbourhood east of Main Street and south of Queen Street; therefore, John Street will serve the local traffic generated by existing and future developments in this area.

Both the Queen/James and James/John intersections are unsignalized intersections and the spacing between them (approximately 100 m) will not be an issue based on the forecast traffic volumes. The James Street realignment proposal supported by the BDDC does not and should not preclude the John Street connection.

The anticipated increase in traffic on Wellington Street and Mary Street can be accommodated by these roads as the volumes will be within the range of a collector road (up to 500 vph). As explained above, many vehicles using the John Street connection will be local to this neighbourhood and comprise part of the potential doubling of traffic.

At this time it is recommended that this connection be included particularly for DC purposes. Assuming these concerns are addressed, the John Street Extension is recommended for the year 2018.

8.3.3 Ken Whillans Extension

The proposed Ken Whillans extension provides an alternate route to Main Street for access to the northeast quadrant of the Downtown Core.

An Environmental Assessment is currently being undertaken for the proposed Ken Whillans extension from Church Street to the intersection of Union and Nelson Streets. The proposed extension is shown in **Exhibit 8-13**.

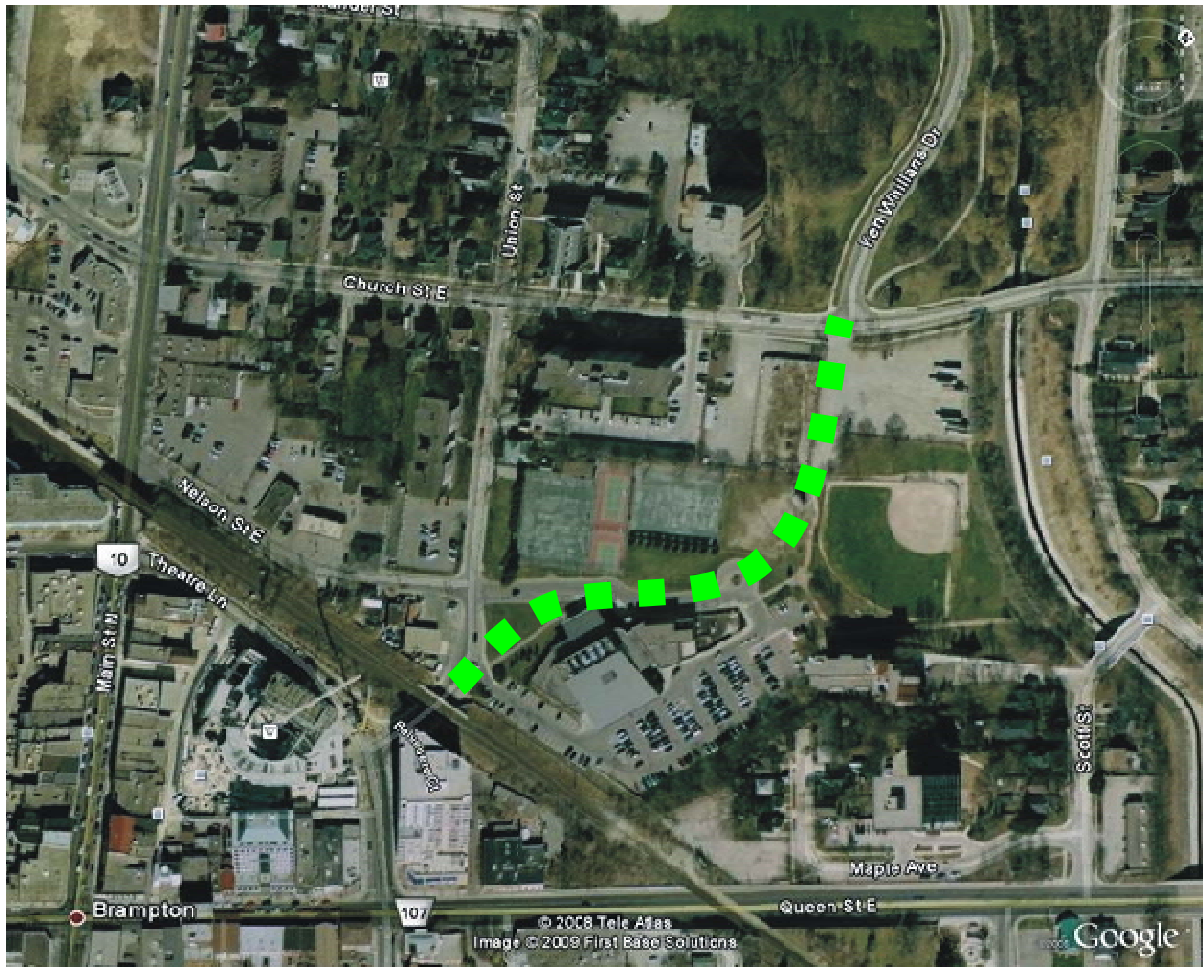


Exhibit 8-13: Ken Whillans Extension

The extension is identified in the Brampton 10-year Capital Programme for 2011, but unless the needs assessment for the ongoing EA process shows a significant need beyond what this City Wide network analysis has shown, then a deferral in the timing to the longer term could be contemplated from a transportation network perspective given these issues, including drainage and impacts on Roselea Park.

From a traffic operations perspective, the extension will accommodate peak demands during Theatre events and provide a more direct access between the Downtown and neighbourhoods to the north and west. The extension will also provide relief to Main Street during weekday peak commuting periods.

The Brampton EMME/2 model for the year 2031 assigns 220 trips to Ken Whillans in the PM peak direction (northbound), where 181 trips are considered local trips. This extension

will have its biggest effect on Main Street north of Nelson Street where there is a reduction of 99 trips. This improvement also relieves traffic levels on Church Street eastbound by approximately 90 users. More than half, or 116 trips, are destined for a traffic zone immediately north of Church Street and east of Etobicoke Creek. See **Exhibit 8-14** and **Exhibit 8-15** for plots that represent traffic volumes on streets around the Ken Whillans extension.

The extension is identified in the Brampton 10-year Capital Programme for 2011, but unless the needs assessment for the ongoing EA process shows a significant need beyond what this City Wide network analysis, then a deferral in the timing to the longer term could be contemplated from a transportation network perspective given these issues..



Exhibit 8-14: Auto Volumes with Ken Whillans Extension

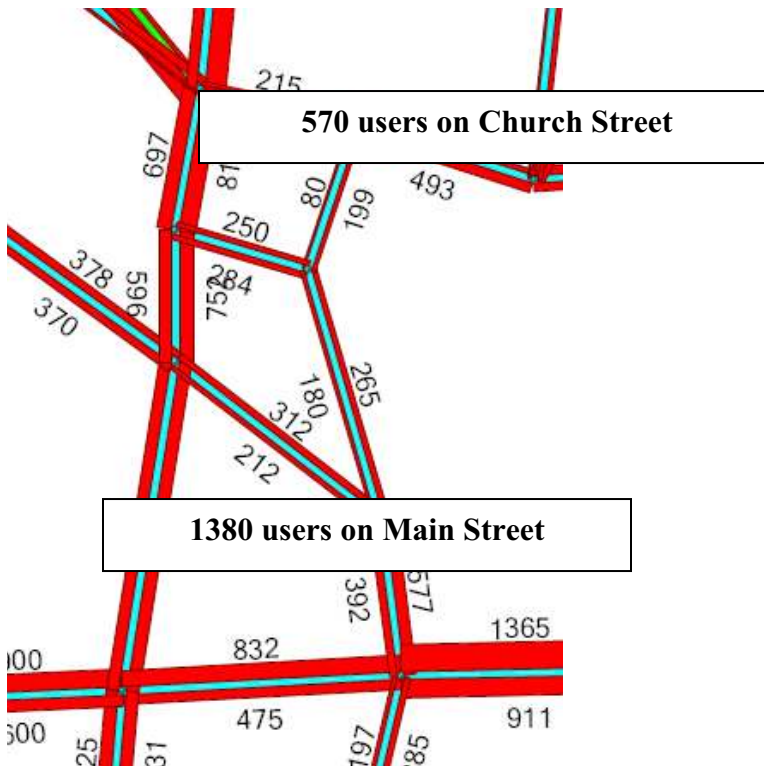


Exhibit 8-15: Auto Volumes without Ken Whillans Extension

8.3.4 Denison-Mill Connection

The potential Denison Avenue to Mill Street connection provides a continuous link for Denison Avenue and Church Street via Mill Street. This connection is advantageous to Railroad Street because the existing Railroad Street connection is less direct. Providing the Denison-Mill connection will draw traffic away from Queen Street, Railroad Street, Nelson Street, and McMurchy Avenue. The potential alignment of this connection, shown in **Exhibit 8-16**, below, will be located very close to an existing heritage structure (Dominion Skate). A current application for redevelopment of the property provides an opportunity for the alignment to be protected.



Exhibit 8-16: Potential Denison Avenue to Mill Street Connection

Construction for a connection between Haggert Avenue and McMurchy Avenue is underway, and is circled in green below in **Exhibit 8-17**. The proposed extension to Mill Street further facilitates Denison Avenue as a viable alternative route parallel to Queen Street, in providing more direct access to Church Street (via Mill Street) and the Brampton GO station. It is expected such a connection will reduce volumes on a busy section of Queen Street between Main Street and McMurchy Avenue.



Exhibit 8-17: Denison-Mill Connection

Using the City's EMME/2 model, approximately 445 vehicles use the Denison improvement in the PM peak direction (westbound) with 280 trips considered local traffic. This extension will divert more than 220 users on Queen Street between Mill Street and McMurchy Avenue, as seen in **Exhibit 8-18** and **Exhibit 8-19** below. Without the improvement, the model assigns trips westbound via Queen Street, Railroad Street / McMurchy Avenue and Vodden Street.

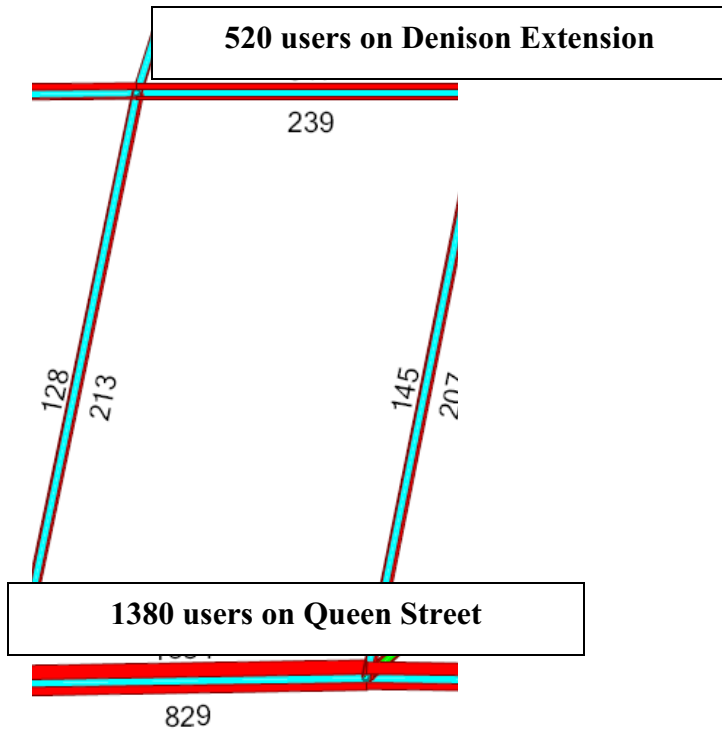


Exhibit 8-18: Auto Volumes with Denison Avenue Extension

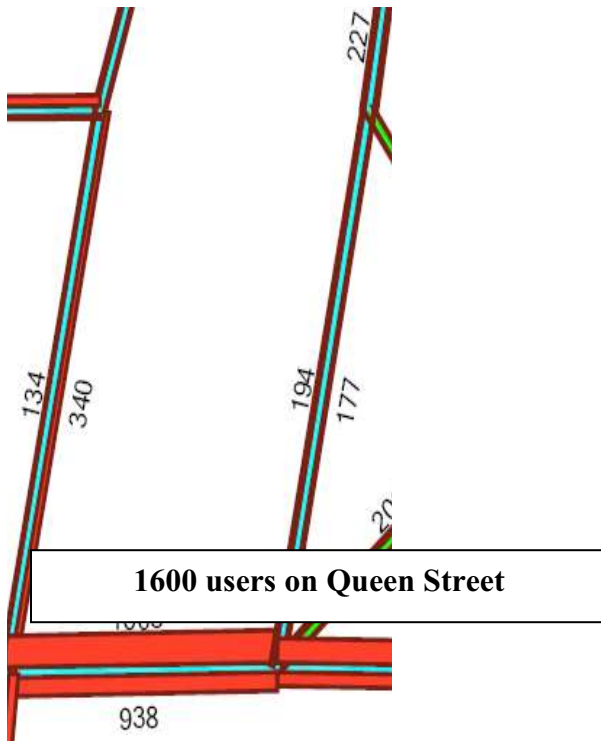


Exhibit 8-19: Auto Volumes without Denison Avenue Extension

The Denison Avenue to Mill Street Connection is recommended as a long-term improvement.

8.3.5 Queen Street EA and Capital Improvements

The Queen Street Class Environmental Assessment for Centre Street to Highway 410 recommended improvements necessary in the interim (2010) leading up to the ultimate long-term BRT / LRT objectives.

Between Centre and Kennedy, a minor widening will be provided, increasing lane and boulevard widths to accommodate increased bus service in the corridor. Widening of the Kennedy Road to Rutherford Road section is needed to accommodate future traffic growth and improve transit service for the planned BRT service, since the corridor has been designated as Transit Priority corridor and urban growth centre in various plans. The centre two-way left turn lane will be maintained to allow access to/from driveways/properties. From Rutherford Road to Highway 410, the existing 7-lane cross section is maintained while the existing lane widths would be reconfigured to provide an alignment and lane widths that are consistent with the widened section between Kennedy Road and Rutherford Road, and include HOV in the westbound curb lane

The need for the capacity improvement between Kennedy Road and Rutherford Road is reconfirmed in this Brampton TTMP update. **Exhibit 8-20** below illustrates 2031 traffic volumes on Queen Street.

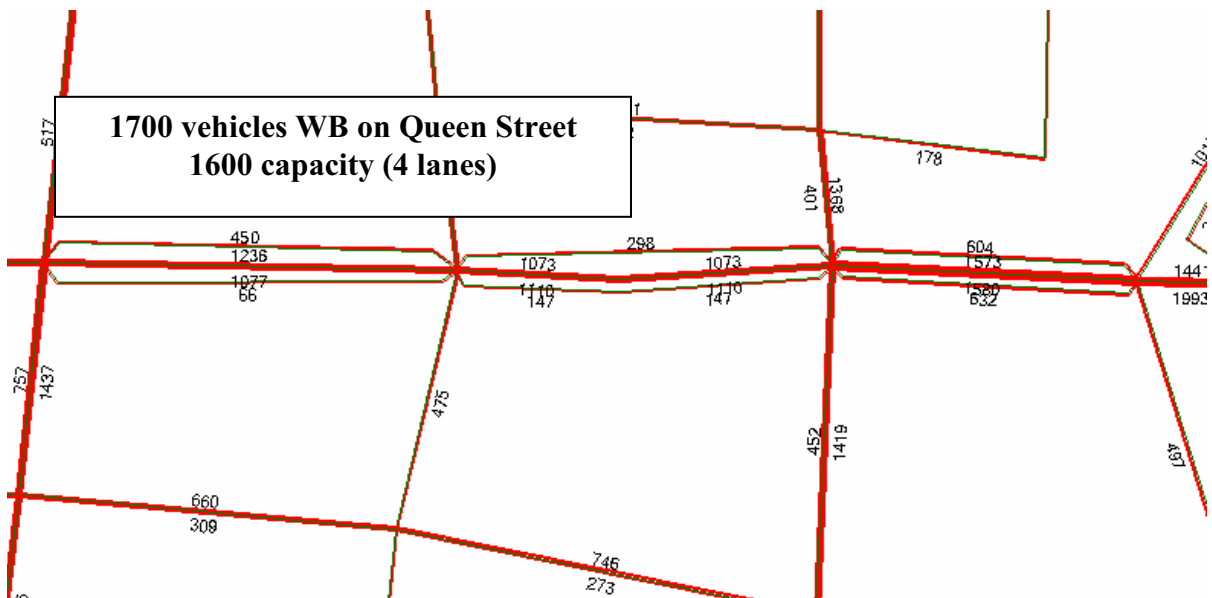


Exhibit 8-20: Queen Street 2031 Traffic Forecast, Kennedy to Rutherford

Traffic forecasts for 2031 show a demand greater than the four lane capacity of 1600 vehicles per hour, per lane. Despite being an interim solution, demand and transit service will definitely require a solution, and attempting to provide increased bus service in congested

conditions would likely be ineffective. The widening for HOV and transit then firstly alleviates the congestion experienced by auto users, secondly will allow for more reliable transit service and thirdly promote high occupancy vehicular travel.

8.3.6 Queen Street Access Management Improvements

Further to the interim lane, boulevard, and capacity improvements discussed in the previous section, access management on Queen Street is identified as an important improvement in support of the ultimate vision of Queen Street and accommodation of future BRT or LRT. A conceptual interpretation of the vision for Queen Street is illustrated below in **Exhibit 8-21** where the BRT system would be operating in the median lanes along Queen Street. Access and travel across the BRT median lanes would not be permitted except at signalized public road intersections where there would be transit stops for the BRT. As such, all private driveways along Queen Street will be restricted to right turns only in the future.

Even if all existing private driveways were restricted to right turns only, there are too many driveways along Queen Street to effectively move traffic and to safely accommodate pedestrian/cycling movements. Accordingly, consolidations and relocations of driveways to sideroads/cross streets are recommended to minimize the number of conflict points along Queen Street.



Exhibit 8-21: Ultimate Vision for Queen Street

The existing situation on Queen Street between Centre Street and Highway 410 has also been identified as high-risk for collisions based on TAC guidelines for access points per kilometre. A summary of the existing access points is provided in **Table 8-8**.

Table 8-8: Queen Street Existing Access Points Summary Table

Midblock Segment	Segment Length (m)	Driveway Frequency		
		Driveways	Intersections	Accesses / km
Centre Street to Kennedy Road	545	33	6	72
Kennedy road to Hansen Road	460	23	0	50
Hansen Road to Rutherford Road	425	15	0	35
Rutherford Road to Highway 410 SB Off-ramp	470	11	1	26
TOTAL	1,900	82	7	47

An Environmental Assessment for Queen Street identified short term driveway consolidations as part of widening improvements for HOV and queue jumping. An Access Management Guidelines Study, recommended in the short to mid term, will identify appropriate driveway spacing for Queen Street, and preliminary recommendations and plans to show potential consolidated driveways and side or rear lane access to local cross streets as part of redevelopment along Queen Street.

8.3.7 Previously Considered Improvements

Seven other road improvements were previously considered but not recommended:

1. Wellington extension over Etobicoke Creek
2. Wellington - Fleming Connection (jog elimination and at grade CN crossing)
3. Royce Avenue extension over Fletchers Creek
4. Scott Street connection to Ken Whillans Drive
5. Harold Street/Clarence Street connection
6. McMurphy Avenue/Pleasantview Avenue grade separation
7. Church / Archdekin connection

8.3.8 Final Recommendations

The TTMP Update Study confirms that the following transportation improvements be carried forward in the Central Area:

- Coordinating the construction of the Clark-Eastern connection with the implementation of BRT and general purpose lane reductions on Queen Street
- Include the John Street extension in the DC/Capital Plan and construct the extension between James and Centre Streets after the implementation of the Clark-Eastern connection
- Include the Denison-Mill connection in the DC/Capital Plan and construct when redevelopment of the Dominion Skate property is undertaken by the private sector
- Construct Ken Whillans Extension between Church and Union Streets and associated drainage improvements

The implementation of these four improvements will accommodate and support redevelopment and intensification of the Downtown Core and improve local access between Downtown Core and adjacent neighbourhoods currently constrained by lack of north-south and east-west capacity. The improved road network will benefit emergency vehicle access to the Peel Memorial Hospital and generally support its redevelopment. The recommended improvements will also alleviate Queen Street of traffic congestion and assist in achieving its ultimate vision, improving the level of service for BRT and providing enhanced network flexibility and continuity.

The final recommendations for improvements in Central Brampton are summarized in **Table 8-9** and presented in **Exhibit 8-22**.

Table 8-9: Recommended Central Brampton Improvements

Improvement	From	To	Recommended Timing*
Ken Whillans Extension	Church Street	Nelson Street / Union Street	2011**
Clark – Eastern Connection	Hansen Road	Rutherford Road	2018
John Street Extension	James Street	Centre Street (Crossing Etobicoke Creek and CN Rail Tracks)	2018
Denison – Mill	Park Street	Mill Street	Long-term improvement
Queen Street EA and Capital Improvements	Centre Street	Highway 410	2010
Queen Street Access Management Improvements	Centre Street	Highway 410	Long-term improvement

* Recommended timing based on Brampton 10 year capital programme

** Deferral in timing is suggested based on outstanding issues



Exhibit 8-22: Recommended Central Brampton Road Improvements

9. RECOMMENDATIONS AND IMPLEMENTATION

Recommended transit and road networks resulting from the Brampton TTMP Sustainable Update for the years 2011, 2016, 2021, and 2031 are found within this chapter.

9.1 2009 TTMP Recommended Transit Networks

The recommended 2011, 2016, 2021, and 2031 transit networks are illustrated below in **Exhibit 9-1** through to **Exhibit 9-4**.

2011 and 2021 transit networks are based upon 2004 TTMP recommendations, but can vary based on timing of planned development. Timing of primary corridors and BRT improvements included in DC work are represented in these exhibits. As noted in **Section 6.10**, proposed BRT corridors should be protected for potential improvements to LRT in the future, pending demand and funding.



Exhibit 9-1: Recommended Transit Network by 2011



Exhibit 9-2: Recommended Transit Network by 2016



Exhibit 9-3: Recommended Transit Network by 2021



Exhibit 9-4: Recommended Transit Network by 2031

9.2 2009 TTMP Recommended Road Networks

9.2.1 Projected Screenline Auto Demand

Detailed screenline auto demand versus capacity tables are provided below in **Table 9-1** through to **Table 9-4**, for 2011, 2016, 2021, and 2031. The road networks in these tables include the recommendations of the Development Charges program and the TTMP recommended road networks.

Table 9-1: 2011 Screenline V/C Ratios

NORTHBOUND	West Totals (Winston Churchill to west of Hwy 410)				East Totals (Hwy 410 to Highway 50)			
	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Caledon / Brampton	2,700	9,000	0.30	30	6,000	11,000	0.55	330
North of Bovaird Drive / Castlemore Road	8,400	13,600	0.62	420	12,800	16,400	0.78	1,550
North of Queen Street / Embleton Road	11,700	13,400	0.87	400	19,200	20,500	0.94	600
North of Steeles Avenue	11,400	16,800	0.68	400	12,500	12,000	1.04	500
Brampton / Mississauga	11,100	14,400	0.77	300	10,000	13,400	0.75	550
SOUTHBOUND	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Caledon / Brampton	1,400	9,000	0.16	510	2,700	11,000	0.25	0
North of Bovaird Drive / Castlemore Road	4,100	13,600	0.30	2,200	4,800	16,400	0.28	3,090
North of Queen Street / Embleton Road	4,100	13,400	0.31	1,740	6,800	20,500	0.32	5,050
North of Steeles Avenue	6,100	16,800	0.36	1,610	5,500	12,000	0.46	2,810
Brampton / Mississauga	7,000	14,400	0.49	850	3,900	13,400	0.29	5,220
North Totals (Mayfield to North of Queen)				South Totals (Queen to Bram.-Miss. Boundary)				
WESTBOUND	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Brampton / Halton	1,400	2,500	0.56	0	2,100	2,500	0.84	0
Credit River*					4,800	5,200	0.88	730
East of Highway 10	6,800	10,300	0.64	330	3,700	3,900	0.95	350
East of Highway 410 / Heartlake Road	8,300	11,500	0.72	420	7,400	7,600	0.97	620
East of Airport Road	6,500	9,500	0.68	180	4,400	5,800	0.76	370
West of Highway 50	2,200	6,800	0.33	270	4,700	5,700	0.82	120
EASTBOUND	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Brampton / Halton	1,400	2,500	0.56	0	1,400	2,500	0.56	0
Credit River*					3,500	5,200	0.67	280
East of Highway 10	5,800	10,300	0.54	1,220	1,800	3,900	0.46	560
East of Highway 410 / Heartlake Road	6,800	11,500	0.57	1,430	4,200	7,600	0.55	600
East of Airport Road	4,400	9,500	0.46	840	3,700	5,800	0.64	870
West of Highway 50	2,300	6,800	0.35	260	2,800	5,700	0.46	800
NB TOTAL	45,300	67,200	0.67	1,550	60,500	73,300	0.83	3,530
SB TOTAL	22,700	67,200	0.34	6,910	23,300	73,300	0.32	16,170
WB TOTAL	25,000	40,400	0.62	1,200	26,900	30,700	0.88	2,190
EB TOTAL	20,300	40,400	0.50	3,750	17,200	30,700	0.56	3,110
OVERALL	113,300	215,200	0.53	13,410	127,900	208,000	0.61	25,000

Table 9-2: 2016 Screenline V/C Ratios

NORTHBOUND	West Totals (Winston Churchill to west of Hwy 410)				East Totals (Hwy 410 to Highway 50)			
	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Caledon / Brampton	4,100	10,600	0.39	10	8,400	14,800	0.57	100
North of Bovaird Drive / Castlemore Road	10,500	14,500	0.72	250	16,500	18,000	0.92	960
North of Queen Street / Embleton Road	13,100	13,800	0.95	290	21,200	21,400	0.99	500
North of Steeles Avenue	13,800	21,500	0.64	250	14,700	14,500	1.01	340
Brampton / Mississauga	11,300	14,400	0.78	300	10,700	13,400	0.80	470
SOUTHBOUND	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Caledon / Brampton	2,300	10,600	0.22	620	3,200	14,800	0.22	0
North of Bovaird Drive / Castlemore Road	5,400	14,500	0.37	1450	6,600	18,000	0.37	1240
North of Queen Street / Embleton Road	5,300	13,800	0.38	1210	8,100	21,400	0.38	2430
North of Steeles Avenue	7,700	21,500	0.36	1080	7,800	14,500	0.52	1460
Brampton / Mississauga	8,400	14,400	0.58	430	5,300	13,400	0.40	5180
North Totals (Mayfield to North of Queen)				South Totals (Queen to Bram.-Miss. Boundary)				
WESTBOUND	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Brampton / Halton	1,800	4,000	0.45	0	2,300	3,600	0.64	0
Credit River*					6,100	7,300	0.84	350
East of Highway 10	8,900	11,900	0.75	140	3,700	3,900	0.95	240
East of Highway 410 / Heartlake Road	10,000	12,300	0.81	240	7,900	9,400	0.84	320
East of Airport Road	8,200	11,900	0.69	90	4,500	5,800	0.78	250
West of Highway 50	3,000	9,700	0.31	240	5,400	7,200	0.75	100
EASTBOUND	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Brampton / Halton	1,700	4,000	0.43	0	900	3,600	0.25	0
Credit River*					4,800	7,300	0.66	130
East of Highway 10	6,500	11,900	0.55	600	2,100	3,900	0.54	290
East of Highway 410 / Heartlake Road	7,400	12,300	0.60	630	5,000	9,400	0.53	260
East of Airport Road	5,600	11,900	0.47	330	4,100	5,800	0.71	430
West of Highway 50	2,100	9,700	0.22	210	4,000	7,200	0.56	560
NB TOTAL	52,800	74,800	0.71	1,090	71,500	82,100	0.87	2,370
SB TOTAL	29,100	74,800	0.39	4,770	30,800	82,100	0.38	10,310
WB TOTAL	31,900	49,800	0.64	710	29,900	37,200	0.80	1,260
EB TOTAL	23,300	49,800	0.47	1,770	20,900	37,200	0.56	1,670
OVERALL	137,100	249,200	0.55	8,340	153,100	238,600	0.64	15,610

Table 9-3: 2021 Screenline V/C Ratios

NORTHBOUND	West Totals (Winston Churchill to west of Hwy 410)				East Totals (Hwy 410 to Highway 50)			
	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Caledon / Brampton	4,400	10,800	0.41	20	7,800	16,500	0.47	650
North of Bovaird Drive / Castlemore Road	12,100	16,700	0.72	100	16,000	20,300	0.79	980
North of Queen Street / Embleton Road	17,000	18,600	0.91	140	21,900	22,500	0.97	580
North of Steeles Avenue	17,300	22,000	0.79	390	16,300	16,100	1.01	240
Brampton / Mississauga	14,300	18,500	0.77	280	10,100	12,400	0.81	330
SOUTHBOUND	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Caledon / Brampton	3,000	10,800	0.28	1,770	3,400	16,500	0.21	860
North of Bovaird Drive / Castlemore Road	6,200	16,700	0.37	2,640	6,400	20,300	0.32	3,170
North of Queen Street / Embleton Road	7,400	18,600	0.40	890	8,500	22,500	0.38	4,120
North of Steeles Avenue	9,300	22,000	0.42	1,310	8,700	16,100	0.54	980
Brampton / Mississauga	9,200	18,500	0.50	160	5,000	12,400	0.40	1,450
North Totals (Mayfield to North of Queen)				South Totals (Queen to Bram.-Miss. Boundary)				
WESTBOUND	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Brampton / Halton	2,600	5,600	0.46	30	3,000	4,200	0.71	0
Credit River*					7,700	10,300	0.75	450
East of Highway 10	9,500	11,300	0.84	340	3,900	3,300	1.18	230
East of Highway 410 / Heartlake Road	11,400	11,700	0.97	330	8,200	9,100	0.90	620
East of Airport Road	9,800	11,900	0.82	460	4,400	5,100	0.86	100
West of Highway 50	6,400	9,900	0.65	200	5,000	6,600	0.76	80
EASTBOUND	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Brampton / Halton	2,200	5,600	0.39	120	1,900	4,200	0.45	0
Credit River*					7,300	10,300	0.71	800
East of Highway 10	7,700	11,300	0.68	420	1,900	3,300	0.58	3,250
East of Highway 410 / Heartlake Road	8,600	11,700	0.74	550	5,700	9,100	0.63	350
East of Airport Road	6,500	11,900	0.55	810	3,900	5,100	0.76	540
West of Highway 50	3,300	9,900	0.33	470	3,800	6,600	0.58	610
NB TOTAL	65,100	86,600	0.75	930	72,100	87,800	0.82	2,780
SB TOTAL	35,100	86,600	0.41	6,770	32,000	87,800	0.36	10,580
WB TOTAL	39,700	50,400	0.79	1,360	32,200	38,600	0.83	1,480
EB TOTAL	28,300	50,400	0.56	2,470	24,500	38,600	0.63	5,550
OVERALL	168,200	274,000	0.61	11,530	160,800	252,800	0.64	20,390

Table 9-4: 2031 Screenline V/C Ratios

NORTHBOUND	West Totals (Winston Churchill to west of Hwy 410)				East Totals (Hwy 410 to Highway 50)			
	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Caledon / Brampton	5,600	18,000	0.31	50	10,800	19,600	0.56	840
North of Bovaird Drive / Castlemore Road	14,800	20,600	0.72	100	25,900	24,500	1.06	1,010
North of Queen Street / Embleton Road	19,400	20,200	0.96	140	22,900	22,500	1.02	570
North of Steeles Avenue	19,200	23,600	0.81	400	16,900	16,100	1.05	250
Brampton / Mississauga	15,000	19,300	0.78	280	10,800	12,400	0.87	340
SOUTHBOUND	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Caledon / Brampton	4,300	18,000	0.24	1820	4,900	19,600	0.25	1030
North of Bovaird Drive / Castlemore Road	8,600	20,600	0.42	2820	13,000	24,500	0.53	3470
North of Queen Street / Embleton Road	9,600	20,200	0.48	900	9,300	22,500	0.41	4130
North of Steeles Avenue	10,800	23,600	0.45	1170	8,400	16,100	0.52	970
Brampton / Mississauga	9,900	19,300	0.51	170	5,000	12,400	0.40	1450
North Totals (Mayfield to North of Queen)				South Totals (Queen to Bram.-Miss. Boundary)				
WESTBOUND	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Brampton / Halton	3,200	6,800	0.47	30	2,800	4,900	0.57	0
Credit River*					8,900	10,400	0.86	400
East of Highway 10	9,900	11,800	0.84	820	3,600	3,300	1.09	230
East of Highway 410 / Heartlake Road	11,700	11,700	1.00	640	8,500	9,100	0.93	630
East of Airport Road	10,400	12,700	0.82	710	4,800	5,100	0.94	100
West of Highway 50	8,800	12,900	0.68	190	5,600	6,600	0.85	80
EASTBOUND	Volume	Capacity	V/C Ratio	Transit Vol	Volume	Capacity	V/C Ratio	Transit Vol
Brampton / Halton	2,400	7,700	0.31	130	2,800	4,900	0.53	0
Credit River*					9,100	10,400	0.88	780
East of Highway 10	8,200	11,800	0.69	430	2,200	3,300	0.67	3180
East of Highway 410 / Heartlake Road	9,700	11,700	0.83	760	5,400	9,100	0.59	360
East of Airport Road	7,300	12,700	0.57	1120	4,300	5,100	0.84	540
West of Highway 50	5,800	12,900	0.45	570	4,400	6,600	0.67	600
NB TOTAL	74,000	101,700	0.73	970	87,400	95,100	0.92	3,010
SB TOTAL	43,000	101,700	0.42	6,880	40,800	95,100	0.43	11,050
WB TOTAL	44,000	55,900	0.79	2,390	34,200	39,400	0.87	1,440
EB TOTAL	33,400	58,800	0.59	3,010	28,000	39,400	0.71	5,460
OVERALL	194,400	318,100	0.61	13,250	190,200	269,000	0.71	20,960

9.2.2 Development Charges Program, 2010 to 2031

The recommended long-term (by 2031) transportation strategy will require an estimated \$1.7 billion in capital roads projects over the 22-year period covered by this Transportation Master Plan. The estimates are based on roadway construction costs developed for the 2009 City of Brampton Development Charges by-law.

The overall estimated cost of capital improvements for road reconstruction and widenings is \$759 million. To accommodate new growth the City will have to construct new roads for the total cost of \$286 million, reconstruct and erect new bridges and rail grade separations at an estimated cost of \$122 millions, invest in transit, intersection and upgrade of its traffic operations capabilities. The costs of widening of constructing NSTC (BramWest Pkwy) from Hwy 407 to north of Embelton Road at 8-lane cross-section, widening of NSTC from Embelton Road to Bovaird Drive from 6 to 8-lanes as well as the extension of the facility from Sandalwood Parkwy to Mayfield Road will account for additional \$65 million. Cost of land acquisition for BramWest Pkwy, widening of NSTC to 8-lanes and the extension to Mayfield Road is estimated to total to \$63 million.

The proposed improvements under the City’s Development Charges program are illustrated in **Exhibit 9-5**, with a detailed listing provided in **Table 9-5**.

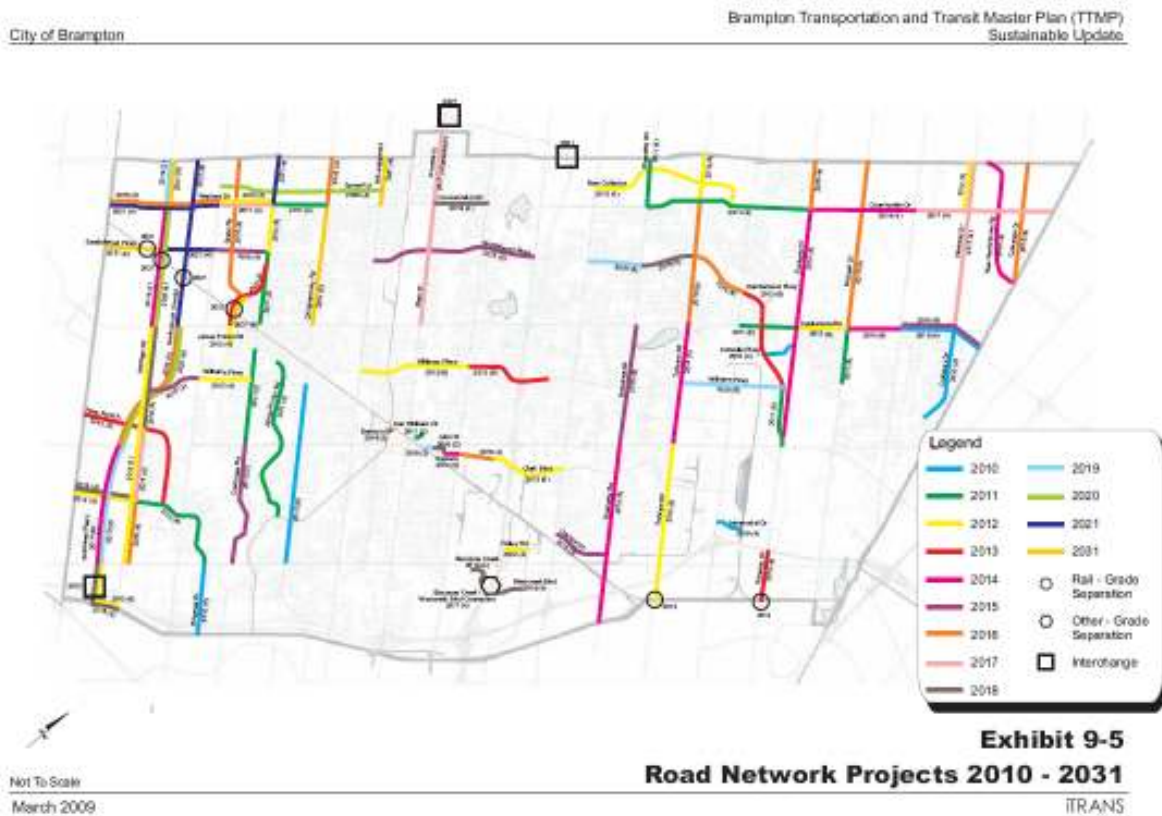


Exhibit 9-5: Road Network Projects 2010 - 2031

Table 9-5: City of Brampton Capital Road Projects, 2011 to 2031

ROAD NAME	DESCRIPTION		IMP TYPE	EXITING No. LANES	FUTURE No. LANES
	FROM	TO			
By 2011					
McVean Drive	Queen Street	Cottrelle Parkway	widening	2	4
Wanless Drive	McLaughlin Road	Chinguacousy Road	widening	2	4
Cottrelle Parkway	McVean Drive	Mid concession	new construction		4
Highway 410 Extension - MTO	-	-	new construction		4
McLaughlin Road	Southern Boundary	Steeles Ave.	widening	2	4
Countryside Drive	Dixie Rd	Bramalea Rd	widening	2	4
Queen Street East	Kennedy Road	Highway 410	widening	4	6
Fogal Road	Highway 50	The Gore Road	widening	2	4
Castlemore Road	The Gore Road	Hwy. #50	widening	2	4
Chinguacousy Road	Steeles Ave.	Queen Street	widening	4	6
Chinguacousy Road	Queen Street	Major William Sharpe	widening	4	6
Intermodal Drive	Airport Road	CNR Bridge	widening	2	4
Cottrelle Parkway	Humberwest Parkway	Goreway	new construction		4
Financial Drive	Southern Boundary	Steeles Ave	widening	2	4
Wexford Road - Extension	West of Hurontario Street	Bovaird Drive	new construction		2
Clarkway Drive	N. of Cottrelle	Clarkway/Hwy 50	new construction		4
Clarkway Drive	Cottrelle Blvd	Castlemore Road	widening	2	4
Ken Whillans Drive	Church Street	Nelson Street	new construction		2
Countryside Drive	Bramalea Road	Torbram Road	widening	2	4
Countryside Drive	Torbram Road	Goreway Drive	widening	2	4

Bramalea Road	Countryside Drive	Mayfield Road	widening	2	4
Castlemore Road	Airport Road	Goreway Drive	widening	4	6
McVean Drive	Cottelle Parkway	Castlemore Road	widening	2	4
Humberwest Pkwy.	Williams Pkwy	Queen St	widening	4	6
Wanless Drive	Creditview Drive	Chinguacousy Road	widening	2	4
Financial Drive	Steeles Ave	Mississauga Road	new construction		4
Financial Drive	Mississauga Road	Heritage Rd	new construction		4
Creditview Rd (Old)	Pleasant Rd/Creditview Rd	Sandalwood Pkwy.	reconstruction	2	2
Creditview Rd (Old)	James Potter Rd	Queen St	reconstruction	2	2
James Potter Rd	Orangeville Railway DC crossing	South of Williams Pkwy	new construction		4
Merging Lanes (Hwy 10 at Hwy 410)	-	-	new construction		2
Grade Separations					
Torbram Road & CN Halton Line			GS-Rail		
By 2016					
Bramwest Parkway	Highway 407 (Meadowvale Road)	Steeles Ave	new construction		6
Clarkway Drive	Countryside Drive	Mayfield Road	reconstruction	2	2
Clark Boulevard	Rutherford Road	Dixie Road	widening	4	6
Creditview Rd	Sandalwood Parkway	Wanless Drive	widening	2	4
James Potter Rd	Ashby Field Rd	Bovaird Dr	new construction		4
Torbram Road	Countryside Drive	Mayfield Road	widening	2	4
Torbram Road	Southern Boundary	Queen Street	widening	4	6
Castlemore Road	Goreway Drive	McVean Drive	widening	4	6
Financial Drive	Heritage Rd	Winston Churchill Blvd	new construction		4
Williams Parkway	Kennedy Rd	McLaughlin Rd	widening	4	6

Heritage Road	Steeles Avenue	New Road A	reconstruction	2	2
Heritage Road	New Road A	Bovaird Rd	reconstruction	2	2
Countryside collector	Dixie Rd	Countryside Drive	new construction		4
Wanless Drive	Creditview Rd	Mississauga Road	reconstruction	2	2
Williams Parkway	Creditview Drive	Mississauga Road	new construction		4
Finley Road	West Drive	Highway 410	widening	2	4
2013					
New Road A	Financial Drive	Winston Churchill Blvd.	new construction		4
Humberwest Pkwy.	Airport Road	Williams Pkwy	widening	4	6
Williams Pkwy.	Kennedy Rd	Howden Boulevard	widening	4	6
New Creditview Rd	Bovaird Drive	Farhill Ave	new construction		4
Eastern Avenue	Kennedy Rd	Truman St	reconstruction	2	2
Bramwest Parkway	Steeles Ave	Embleton Road	new construction		6
Goreway Drive	Humberwest Parkway	Countryside Drive	widening	2	4
Castlemore Road	McVean Drive	The Gore Road	widening	4	6
Bramalea Road	Southern Boundary	Queen Street	widening	4	6
Torbram Rd	Queen St	Bovaird Dr.	widening	4	6
Heritage Road	Hwy. #7	Wanless Drive	reconstruction	2	2
Countryside Drive	The Gore Road	Goreway Rd	widening	2	4
New North/South Road (Major MacKenzie extension)	New East/West Road	Mayfield Rd	new construction		4
Creditview Rd (old)	Steeles Ave	Queen St	reconstruction	2	2
Orenda Road	Dixie Road	Bramalea Road	widening	2	4
Castlemore Road	The Gore Road	Hwy. #50	widening	4	6
Sandalwood Parkway	Creditview Drive	Mississauga Road	new construction		4
Sandalwood Parkway	McLaughlin Road	Heart Lake Rd	widening	4	6

Williams Pkwy	Mississauga Rd	Heritage Rd	new construction		4
Bramalea Rd (for BRT)	Bovaird Dr	Queen St	widening	4	6
McVean Drive	Castlemore Dr	Mayfield Road	widening	2	4
Sandalwood Pkwy	Torbram Rd	Airport Rd	widening	4	6
Coleraine Drive	Highway 50	Mayfield Road	reconstruction	2	2
Goreway Road	Countryside Drive	Mayfield Road	widening	2	4
Chinguacousy Road	Wanless Drive	Mayfield Road	widening	2	4
Torbram Road	Bovaird Drive	Countryside Drive	widening	4	6
Wanless Drive	Mississauga Road	Winston Churchill Blvd.	reconstruction	2	2
Heritage Road	Steeles Ave.	Financial Drive	widening	2	4
North-South Spine Rd	New Creditview Rd	Mayfield Road	new construction		4
Denison St Extension	Park St	Mill St N	new construction		2
Clark Boulevard Extension	Rutherford Road	Hansen Road	new construction		4
Eastern Avenue	Hansen Road	Kennedy Road	widening	2	4
Grade Separations					
New Creditview Road & CN Halton Line			GS-Rail		
Goreway Drive & CN Halton Line	Rail grade separation & culvert replacement	EA Report, 2008	GS-Rail		
New Interchange					
Bramwest Parkway and Hwy 407			IC		
By 2021					
Clarkway Drive	Mayfield Road	Countryside Drive	widening	2	4
Heritage Road	Financial Rd	New Road A	widening	2	4
Clarkway Drive	Castlemore Dr	Countryside Drive	widening	2	4
Countryside Drive	The Gore Rd	Hwy. #50	widening	2	4
Wanless Road	Creditview Road	Mississauga Road	widening	2	4

Biscayne Creek / Westcreek Blvd connection	Biscayne Crescent	Westcreek Blvd	new construction		4
Urbanization of Highway 10	Bovaird Drive	Northern City boundary	urbanization	4	4
John Street	Truman St	Centre Street	reconstruction	2	2
Heritage Road	New Road A	Bovaird Dr	widening	2	4
Sandalwood Pkwy.	Bramalea Road	Torbram Road	widening	4	6
Biscayne Creek / Westcreek Blvd connection	Biscayne Creek	First Gulf Blvd	widening	2	4
Biscayne Creek / Westcreek Blvd connection	Westcreek Boulevard	Tomken Rd	widening	2	4
Bramwest Parkway	Highway 407 (Meadowvale Road)	Steeles Ave	widening	6	8
Conservation Drive	Highway 10	Kennedy Road	widening	2	4
John Street Extension	Centre Street	James Street	new construction		2
Bramwest Parkway	Steeles Ave	Embleton Road	widening	6	8
Sandalwood Pkwy.	Dixie Road	Bramalea Road	widening	4	6
Williams Pkwy.	Torbram Road	Humberwest	widening	4	6
Heritage Road	Wanless Rd	Mayfield Road	reconstruction	2	2
Heritage Road	Hwy. #7/Bovaird Rd	Wanless Drive	widening	2	4
East-West Spine Rd	North-South Spine Rd	McLaughlin Rd	new construction		4
Wanless Drive	Mississauga Road	Winston Churchill Blvd.	widening	2	4
Creditview Road	Wanless Drive	Mayfield Road	widening	2	4
Sandalwood Pkwy.	Mississauga Rd	Heritage Rd	new construction		4
Grade Separations					
BramWest Pkwy & CN Halton Line			GS-Rail		
Highway 410 overpass	Biscayne Creek/Westcreek		OverPass		

Interchanges						
Highway 410 & Mayfield Road					IC	
Highway 410 & Highway 10					IC	
by 2031						
Creditview Road	Bovaird Drive		Mt. Pleasant Transit Spine		widening	4 6
Bramwest Parkway	Embleton Road		Bovaird Dr		widening	6 8
Bramwest Parkway	Sandalwood Rd		Mayfield Dr		new construction	6
McLaughlin Road	Wanless Drive		Mayfield Road		widening	2 4
Sandalwood Parkway	Heritage Rd		Winston Churchill Blvd.		new construction	4
Heritage Road	Wanless Drive		Mayfield Road		widening	2 4
Chinguacousy Road	Bovaird Drive		Wanless Drive		widening	4 6
Grade Separations						
Heritage Rd & CN Halton Line					GS-Rail	
Sandalwood Rd & CN Halton Line					GS-Rail	

9.3 Recommended Horizon Year Road Networks

The recommended 2011, 2016, 2021, and 2031 road networks for the entire City of Brampton are also illustrated below in through to .

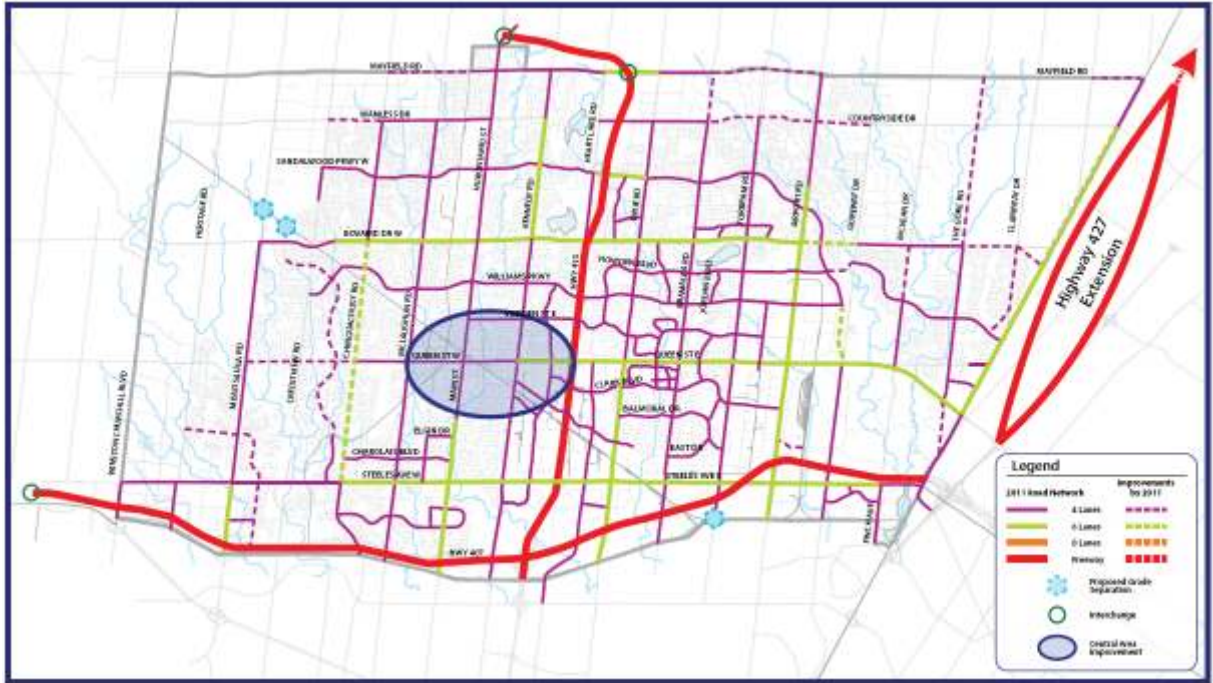


Exhibit 9-6: Recommended Road Network by 2011

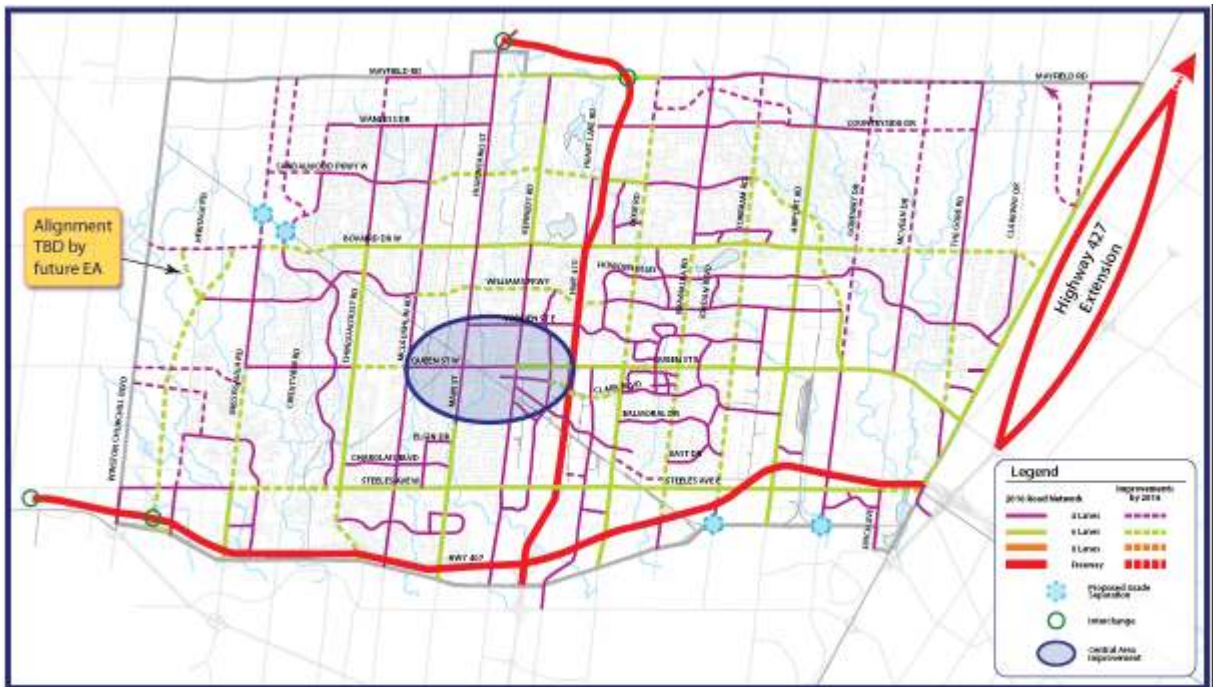


Exhibit 9-7: Recommended Road Network by 2016

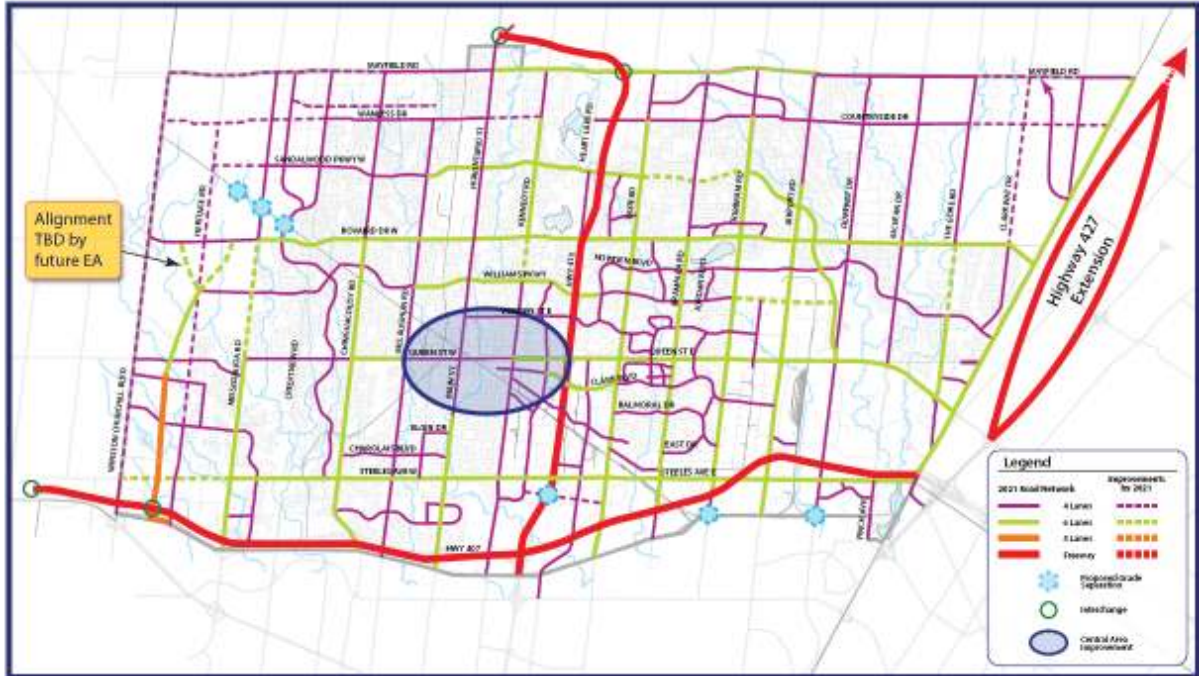


Exhibit 9-8: Recommended Road Network by 2021

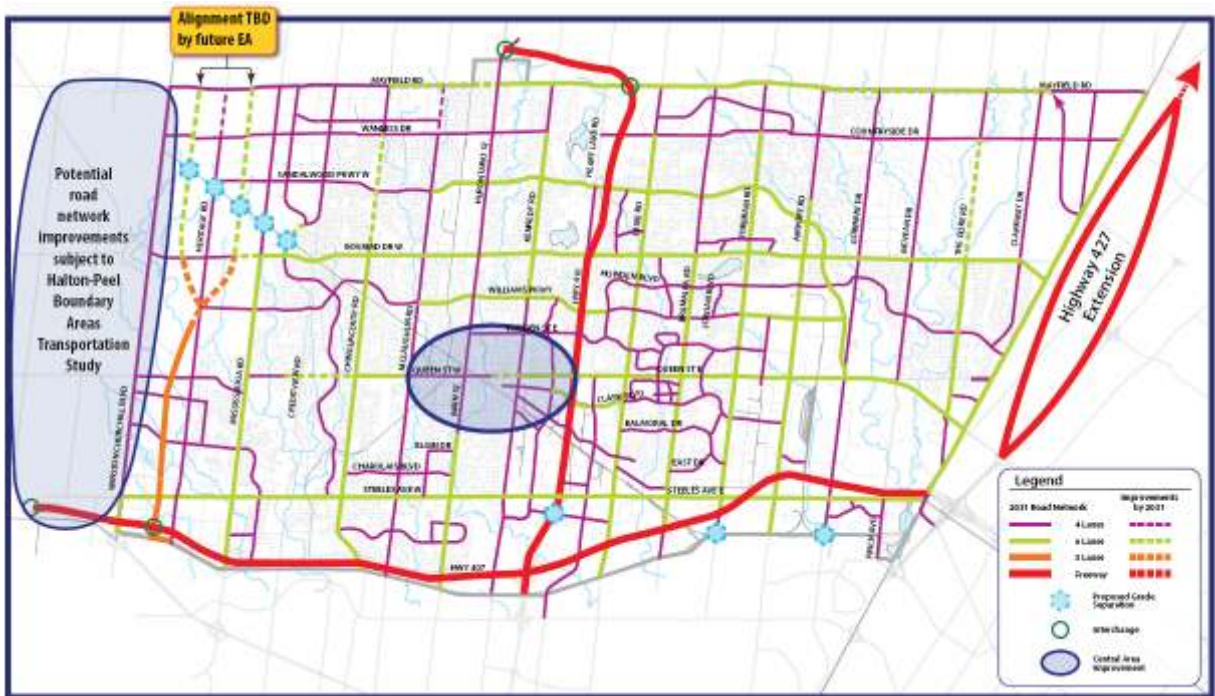


Exhibit 9-9: Recommended Road Network by 2031

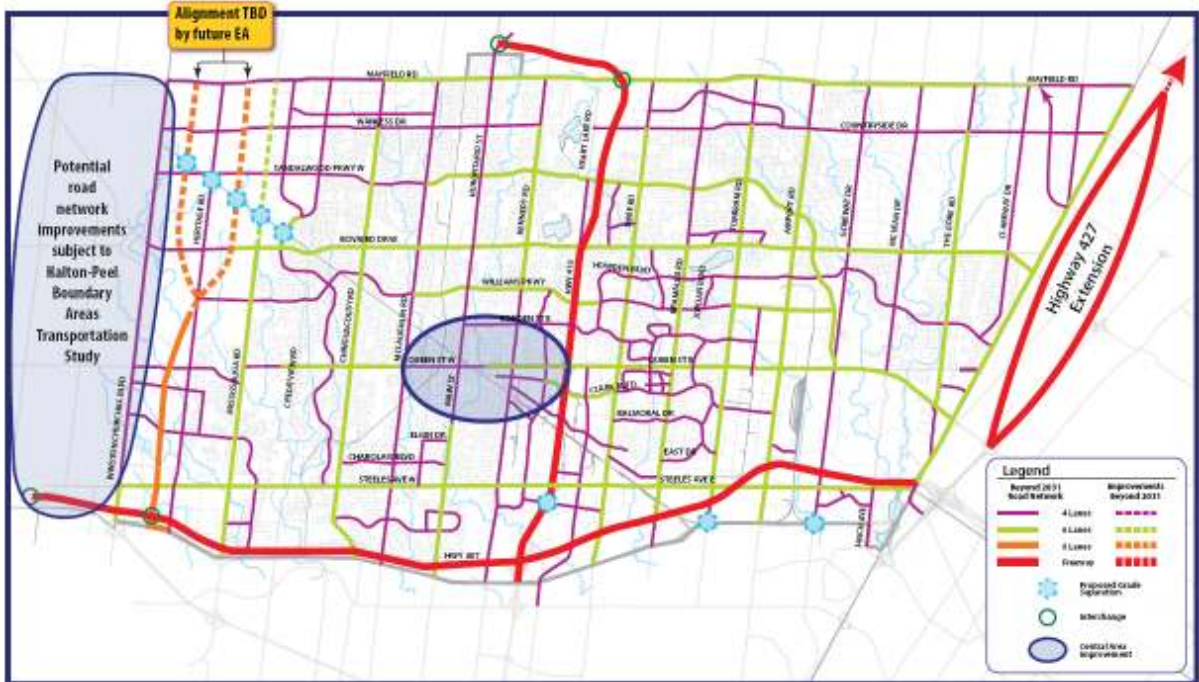


Exhibit 9-10: Recommended Road Network Beyond 2031

9.4 Summary of Recommendations

The above recommendations for the future City of Brampton transit and road networks were developed satisfy the goals of this TTMP update, including:

- To build upon the strongly supported 2004 TTMP vision
- Ensure full compatibility with the bold long term goals of Brampton’s Growth Management Plan
- To update the development charges bylaw
- Incorporate latest planning studies and legislation including provincial Places to Grow Act, Metrolinx, 2006 TTS, etc.

The recommendations provide a sustainable, balanced future transit and road network that will meet the City’s needs until 2031 and beyond.