

DEVELOPMENT CHARGES BACKGROUND STUDY

City of Brampton



CONSOLIDATION STUDY

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EXECUTIVE SUMMARY

A. PURPOSE OF 2019 DEVELOPMENT CHARGES (DC) BACKGROUND STUDY

1. Legislative Context

The City of Brampton 2019 City-wide Development Charges (DC) Background Study (herein referred to as the “DC Background Study”) is presented as part of the process to lead to the approval of the new DC by-laws in compliance with the *Development Charges Act, 1997 (DCA)*. The study is prepared in accordance with the *DCA* and associated regulations, including the amendments that came into force on January 1, 2016.

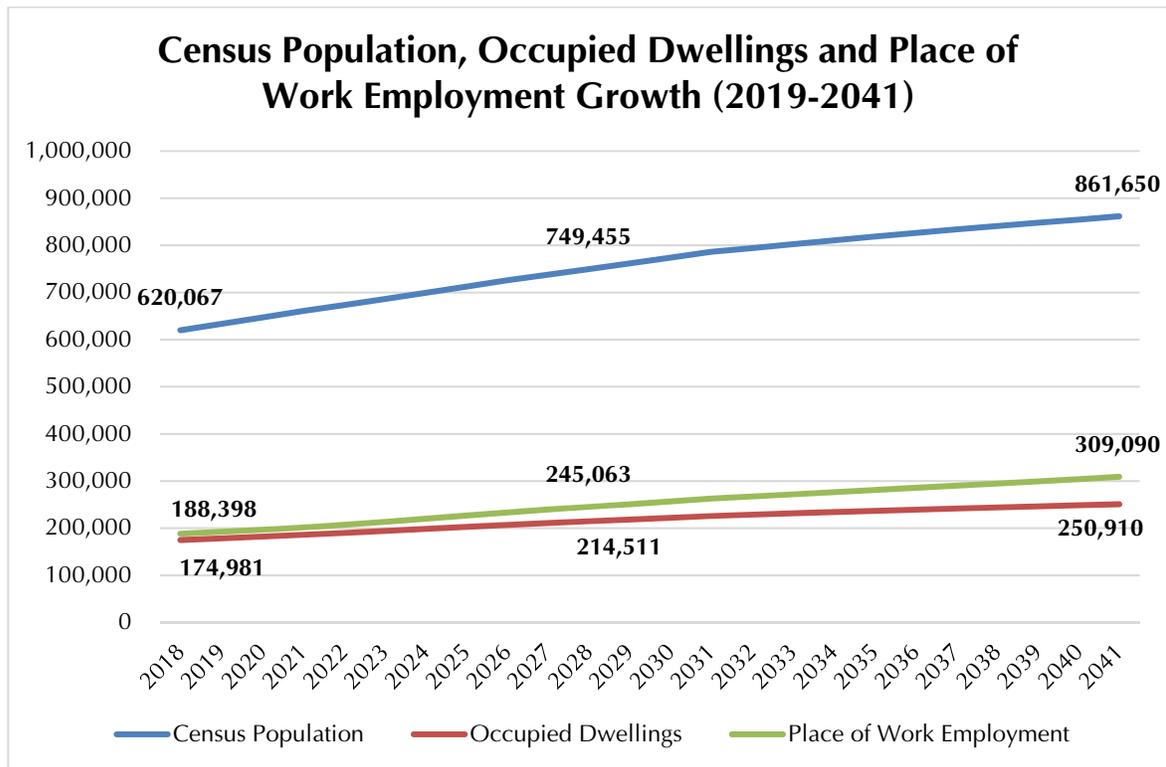
2. Calculation of the Development Charges Rates

The *DCA* in Ontario is the most prescriptive of all legislation in Canada with respect to recovering development-related costs. Several key steps are required to calculate DCs. These include:

- Preparing a development (growth) forecast;
- Establishing historical service levels;
- Determining the increased need for services arising from development;
- Determining how these costs are attributed to development types (i.e. residential and non-residential); and
- For all services, adjusting for a cashflow analysis.

B. DEVELOPMENT FORECAST

In Brampton, over the 10-year planning period of 2019-2028 the City is anticipated to grow by approximately 129,390 persons, 39,530 occupied dwelling units and 56,670 employees. Over the long-term planning period to 2041, the City will grow by 241,580 persons, 75,930 occupied dwelling units and 120,690 employees. The development forecast is further discussed in Appendix A.



C. TRANSIT RIDERSHIP ANALYSIS

For the purposes of the Transit development charges calculation, a ridership forecast for the 2011 to 2041 planning period was completed. The ridership forecast is further discussed in Appendix C.1.

Summary of Transit Ridership Forecast		
Year	PM Peak Period Ridership	% of Allocation
2011-2018	8,265	29 per cent
2019-2028	9,990	35 per cent
2029-2041	10,440	36 per cent
Total	28,694	100 per cent

D. COST OF GROWTH ANALYSIS

An overview of the long-term capital and operating costs as well as the asset management-related annual provisions for capital facilities and infrastructure to be included in the DC by-law is provided in the DC Background Study. This examination is required as one of the provisions of the *DCA*. Additional details on the cost of growth

analysis for Transit, including the asset management plan, is included in Appendix C.3. The analysis for all other services is included in Appendix F.

1. Transit Services

The City of Brampton evaluates the fiscal impacts of capital works including an examination of the full range of costs – initial capital, operating and the long-term repair, maintenance and replacement of infrastructure. A detailed analysis of asset management and financial strategies for the various transit asset groups is described in detail in Appendix C.3.

The analysis concludes that the City can afford to invest and operate transit infrastructure over the 10-year and long-term planning period. Importantly, the analysis completed as part of the City’s annual budget will ensure that the projects included in the DC Background Study are financially sustainable over their full life cycle.

2. All Other Services

The calculated annual provision for all services other than Transit are also considered to be financially sustainable as it is expected that the increased capital asset management requirements can be absorbed by the tax base over the long-term. Appendix F summarizes the relevant City documents and asset management requirements for these services.

E. DEVELOPMENT CHARGES ADMINISTRATION & POLICY CONSIDERATIONS

1. Consideration for Area Rating

As part of the new regulations adopted by the Province, Council is required to consider the use of area rating (i.e. area-specific development charges) when preparing a development charges background study. As part of the City’s 2019 DC update, the appropriateness of implementing area-specific development charges for the various City services was examined.

The *DCA* permits the City to designate, in its DC by-law, the areas where development charges shall be imposed. The charges may apply to all lands in the City or to other designated development areas as specified in the DC By-law.

The following was considered with respect to area-specific development charges:

- Is the use of area-specific charges appropriate for some or all services?
- Are there any data limitations with calculating an area-specific development charge?

Area-specific development charges are typically considered when there is clear benefit to a particular area (including the population or population and employment), and have been implemented in mostly stand alone greenfield developments.

Based on discussions with staff, and the analysis of the delivery of services, it is proposed that the City continue to calculate and collect DCs on a uniform, City-wide basis.

2. Revised Non-Residential Rate Structure

The City is proposing changes to the current non-residential DC rate structure.

Summary of Proposed Non-Residential Rate Structure	
Current Non-Residential DC Rate Structure	Proposed Changes for 2019 DC Study
Industrial/Office Development	Separated into standalone rate categories: <ul style="list-style-type: none"> • Major Office • Industrial
Non-Industrial/Non-Office Development	Unchanged from current DC By-law

3. Revised Non-Residential Floor Space per Worker (FSW) Assumptions

The City is proposing changes to the current non-residential floor space per worker assumptions.

Summary of FSW Assumptions	
Current 2014 FSW Assumptions	Proposed Changes for 2019 DC Study
Population-Related: Commercial: 40 m ² Institutional: 65 m ²	Unchanged from current DC By-law
Employment Land: 135 m ²	Unchanged from current DC By-law
Major Office: 27 m ²	Major Office FSW has been reduced to 23m ²

F. CALCULATED DEVELOPMENT CHARGES

1. Calculated City-wide Residential and Non-Residential Development Charges

The City's 2019 development charge rates have been calculated in accordance with the tests and filters of the legislation. This includes limiting the recovery of General, Protection (e.g. Fire) and Roads Services infrastructure to the 10-year average historical service level; adjusting for the statutory 10 per cent discount for General Services; deductions for ineligible shares of projects (e.g. portions of projects that relate to the replacement of existing infrastructure and/or provide a benefit to the existing

community) and deductions for shares of projects that will provide a benefit to development beyond the identified planning periods (i.e. 2019-2028 for General Services and 2019-2041 for Roads & Related Services).

Taking into consideration these factors, the following are the calculated development charge rates that reflect the increase in need for services arising from new development over the identified planning periods.

Summary of Calculated Residential Charges per Unit				
Service	Singes & Semis	Rows & Other Multiples	Large Apartments	Small Apartments
General Services	\$13,530	\$10,030	\$8,135	\$4,687
Transit	\$6,583	\$4,880	\$3,958	\$2,281
Roads & Related	\$17,666	\$13,097	\$10,620	\$6,119
TOTAL	\$37,779	\$28,007	\$22,713	\$13,087

Note 1: Includes Roads & Related associated with Bramwest Parkway/NSTC

Summary of Calculated Non-Residential Charge per Square Metre			
Service	Non-Industrial/ Non-Office	Industrial	Major Office
General Services	\$6.75	\$6.75	\$6.75
Transit	\$19.81	\$19.81	\$19.81
Roads	\$90.52	\$32.48	\$208.80
TOTAL	\$117.08	\$59.04	\$235.36

Note 1: Includes Roads & Related associated with Bramwest Parkway/NSTC

Specific assumptions used in the calculation and analysis are provided in the body of this report.

2. The 2019 DC Background Study is Based Upon the Best Available Information

The 2019 DC Background Study has been prepared based on the best available information at the time of preparing this report and is subject to change based on future operating and capital business plans presented to Council as part of the annual budgeting process. Any excess capacity that occurs over the five-year life of the DC By-law is expected to be recovered from future development as part of the capital plans approved by Council.

3. 2019 Draft DC By-law Available Under Separate Cover

The new 2019 DC by-law will be made available under separate cover at least two weeks in advance of the statutory public meeting in accordance with the requirements of the *DCA*.

I INTRODUCTION

A. INTRODUCTION AND BACKGROUND

This City of Brampton Development Charges Background Study is presented as part of a process to lead to the approval of a new development charge by-law in compliance with the *Development Charges Act, 1997 (DCA)*.

The *DCA* and *Ontario Regulation 82/98 (O. Reg. 82/98)* require that a development charges 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;
- A 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-development-related components of the capital projects; and
- An examination of the long term capital and operating costs for the capital infrastructure required for each service to which the development charges by-laws would relate.

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

The *DCA* provides for a period of public review and comment regarding the proposed development charges. Following completion of this process, in accordance with the *DCA* and Council's review of this study and the comments it receives regarding this

study or other information brought to its attention about the proposed charges, it is intended that Council will pass new development charges by-laws for the City.

The remainder of this study sets out the information and analysis upon which the proposed development charges are based.

B. LEGISLATIVE CONTEXT

The study is prepared in accordance with the *DCA* and associated regulations, including the amendments that came into force on January 1, 2016. Several of these amendments resulted in changes to the calculation methodology used for transit services including the removal of the 10 per cent statutory deduction and the use of a forward looking 10-year “planned level of service” rather than the 10-year “historical level of service”.

In particular, an asset management plan that deals with all assets whose capital costs are proposed to be funded under the DC by-law, which demonstrates that all such assets mentioned are financially sustainable over their full life cycle, must also be included as part of the background study. The DC Background Study must also include consideration for the use of area-rated or area-specific development charges.

C. RELEVANT ANALYSIS

The underlying assumptions and calculation methodologies contained in the DC Background Study have been informed by a range of inputs, including the City’s capital budget, discussions with City staff and analysis completed by other consultants.

Of particular relevance, the City retained HDR to complete a Transit Ridership Forecast and 2019 Transportation Background Study Report to inform the Transit and Roads & Related DC calculations. The reports provide details on the capital infrastructure requirements for Roads & Related Services, including the road infrastructure costing methodology, network service level analysis, as well as a ridership analysis for Transit.

D. CONSULTATION AND APPROVAL PROCESS

The following provides a summary of the consultation and approval process to complete the 2019 DC Background Study. It is intended that following the release of the DC

Background Study, consultation will continue with the public and development industry stakeholders prior to the passage of the new 2019 DC by-law in spring 2019.

Activity	Timeline
Stakeholder Consultation Meeting 1	February 7, 2019
Stakeholder Consultation Meeting 2	April 5, 2019
Public Release of DC Background Study	April 18, 2019
Technical Stakeholder Consultation Sessions Following Release of the DC Background Study	Ongoing (April and May 2019)
Anticipated Date of Statutory Public Meeting	May 22, 2019
Anticipated Passage of 2019 DC By-law	June 19, 2019

II THE METHODOLOGY USES A CITY-WIDE APPROACH TO ALIGN DEVELOPMENT-RELATED COSTS AND BENEFITS

Several key steps are required in calculating any development charge. However, specific circumstances arise in each municipality which must be reflected in the calculation. Therefore, this study has been tailored for the City of Brampton's unique circumstances. The approach to the proposed development charges is focussed on providing a reasonable alignment of development-related costs with the development that necessitates them. This study utilizes a City-wide uniform approach for all DC eligible services which the City provides.

A. A CITY-WIDE DEVELOPMENT CHARGE IS PROPOSED

The City provides a wide range of services to the community it serves and has an extensive inventory of facilities, land, infrastructure, vehicles and equipment. The *DCA* provides municipalities with flexibility to define services that will be included in the development charge by-laws, provided that the other provisions of the *Act* and its associated regulations are met. The *DCA* also requires that by-laws designate the areas within which the by-laws 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.

1. Services Based on a City-Wide Approach

For the majority of 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, transit, parks and so on. As development occurs, new facilities will need to be added so that service levels in newly developing areas are provided at levels enjoyed in existing communities. A widely accepted method for sharing the development-related capital costs for such City services is to apportion them over all new development anticipated in the City.

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

- General Government;
- Library Services;
- Fire Services;
- Recreation;
- Public Works;
- Parking;
- Transit;
- Roads & Related; and
- Bramwest Parkway/North-South Transportation Corridor.

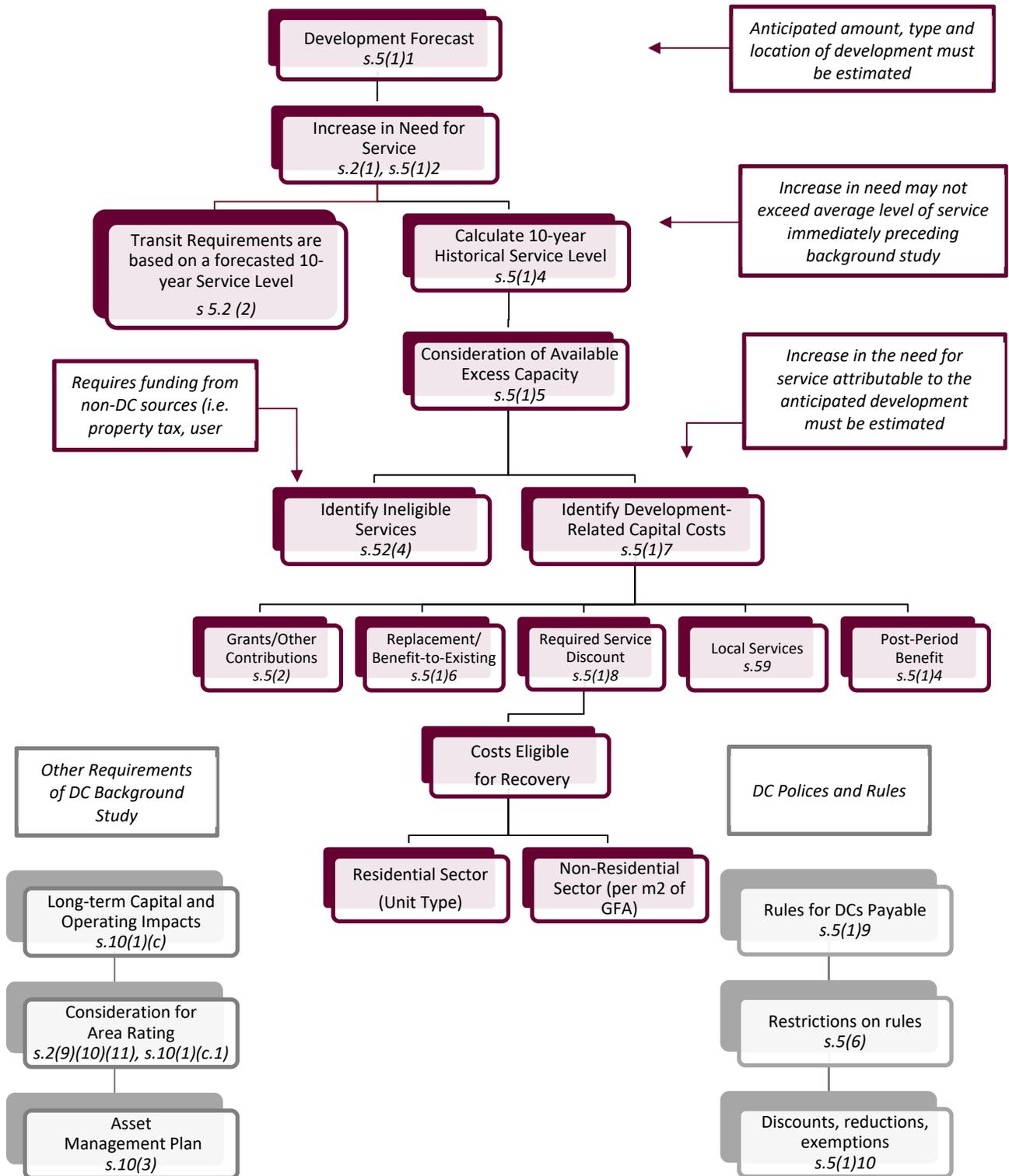
These services form a reasonable basis on which to plan and administer the development charges. It is noted that the analysis of each of these services examines the individual capital facilities and equipment that make them up. For example, Recreation Services includes various indoor facilities such as community centres, pools, arenas; associated land requirements as allowed under the *DCA*; and equipment.

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

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

Several key steps are required in calculating development charges for future development-related projects. These are summarized below and shown schematically in Figure 1.

Figure 1: Statutory Requirements of Development Charges Calculation and Study Process



1. Development Forecast

The first step in the methodology requires a development forecast to be prepared for the 10-year study period, 2019–2028, for most City-wide services and for development to 2041 for Roads & Related services. The forecast of future residential and non-residential development used in this study is based on development anticipated to occur within approved Official Plan designated urban areas. The forecast reflects *Growth Plan* targets, 2016 Census data and recent development activity. Additional details on the development forecast assumptions are included in Appendix A.

For the residential portion of the forecast, new dwelling units, net population growth and population growth in new units are estimated. Net population growth equals the population in new housing units reduced by the decline in the population in the existing base anticipated over the 10-year period and to 2041 (due to reducing household sizes as the community ages). The net population change is used in the calculation of the development charges funding envelopes. In calculating the per capita development charge, however, the population growth in new housing units is used.

The non-residential portion of the forecast estimates the gross floor area (GFA) of building space to be developed over the 10-year period, 2019–2028, and to 2041. The forecast provides estimates for three categories: population-related development, major office development, and employment land development. The forecast of GFA is based on the employment forecast for the City. Factors for floor space per worker by category are used to convert the employment forecast into gross floor areas for the purposes of the development charges study.

2. Service Categories and Historical Service Levels

The *Development Charges Act* 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.)

Historical 10-year average service levels thus form the basis for development charges. A detailed review of the City's capital service levels for buildings, land, vehicles, and related infrastructure and facilities has been undertaken. This data and resulting 10-year historical service levels are used as a reference for the calculation to determine what portion of future capital projects that may be included in the development charge. The historical service levels used in this study have been calculated based on the period 2009–2018.

3. Development-Related Capital Forecast and Analysis of Net Capital Costs to be Included in the Development Charges

A development-related capital forecast has been prepared by the City's departments as part of the present study. Only eligible capital costs, as permitted by the *DCA* are proposed to be included. In accordance with s. 5(3), eligible costs include:

- Costs to acquire land or an interest in land, including a leasehold interest
- Costs to improve land
- Costs to acquire, lease, construct or improve buildings and structures
- Costs to acquire, lease, construct or improve facilities including
 - Rolling stock with an estimated useful life of seven years or more
 - Furniture and equipment, other than computer equipment, and
 - Materials acquired for circulation, reference or information purposes by a library board as defined in the Public Libraries Act.
- Costs to undertake studies in connection with any of the matters referred to in paragraphs 1 to 4.
- Costs of the development charge background study required under section 10.
- Interest on money borrowed to pay for costs described in paragraphs 1 to 4. 1997, c. 27, s. 5(3)

The forecast identifies development-related projects and their gross and net costs, after allowing for capital grants, subsidies or other contributions as required by the *DCA* (*DCA*, s. 5. (2)). The capital forecast provides another 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 *DCA*, s. 5. (1) 4. referenced above, these sections have the effect of requiring that the development charge be calculated on the lesser of the historical 10-year average service levels or the service levels embodied in future plans of the City. The development-related capital forecast prepared for this study ensures that development charges are only imposed to help pay for projects that have been or are intended to be purchased or built in order to accommodate future anticipated development. It is not sufficient in the calculation of development charges merely to have had the service in the past. There must also be a demonstrated commitment to continue to emplace 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.

For some projects in the development-related capital forecast, a portion of the project may confer benefits to existing residents. As required by the *DCA*, S. 5. (1) 6., these portions of projects and their associated net costs are the funding responsibility of the City from non-development charges sources. The amount of City funding for non-growth shares of projects is also identified as part of the preparation of the development-related capital forecast.

There is also a requirement in the *DCA* to reduce the applicable development charge by the amount of any “uncommitted excess capacity” that is available for a service. Such capacity is available to partially meet the future servicing requirements.

Finally, in calculating development charges, the development-related net capital costs must be reduced by 10 per cent for all services except Fire, Transit, Public Works and Roads and Related (*DCA*, s. 5. (1) 8.). The 10 per cent discount is applied to other services, e.g. General Government, Library Services, Recreation and Parking and the resulting City funding responsibility from non-development charge sources is identified.

4. Attribution to Types of Development

The next step in the determination of development charges is the allocation of the development-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 those services.

Some services (e.g. Recreation and Library) are deemed to provide benefit only to the residential sector, while other services are deemed to benefit both the residential and non-residential sectors. The apportionment of costs for these latter services is based on the expected demand for, and use of, the service by each sector (e.g. apportioned based on shares of net population and employment) and consideration of other factors affecting the demand for specific municipal services.

Finally, the residential component of the development charge is calculated based on the population to be generated in new housing units during the respective planning periods and the per capita amount determined is applied to different housing types on the basis of average occupancy factors. The non-residential component is calculated based on the growth that is forecast in non-residential building space in square metres.

5. Final Adjustment

The final determination of the development charge results from adjustments made to development-related net capital costs for each service and sector resulting from the application of any unallocated development-related reserve fund balances that are available to finance the development-related capital costs in the capital forecast. A cash

flow 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*.

C. OPERATING & CAPITAL COST IMPACTS AND ASSET MANAGEMENT PLAN LEGISLATIVE REQUIREMENTS

Section 10 of the *DCA* identifies what must be included in a Development Charges Background Study, namely:

- s.10 (2) The development charge background study shall include,
 - (c) an examination, for each service to which the development charge by-law would relate, of the long term capital and operating costs for capital infrastructure required for the service;
 - (c.2) an asset management plan prepared in accordance with subsection (3);

Asset management plan

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

The requirement to include an Asset Management Plan (AMP) was part of the *DCA* amendments that came into effect on January 1, 2016. A key function of the AMP is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle. Appendix F addresses the operating and capital cost impacts and the asset management plan. Separate analysis are prepared for Transit and all other services.

D. TRANSIT SERVICES SPECIFIC REQUIREMENTS

1. Planned Level of Service

As per the new requirements of the *DCA* and associated regulation that came into effect on January 1, 2016, Transit services must be treated as a “discrete” service. Generally, it is understood that this provision is intended to preclude combining the Roads & Related and Transit services into a broader “Transportation” DC service.

The *DCA* (s.5.2 (3)) requires that in estimating the increase in need for Transit services the increased need “shall not exceed the planned level of service over the 10-year period immediately following the preparation of the background study”.

The definition of planned level of service is not defined in the *DCA*. For the purposes of the development charge calculations, the “planned level of service” is considered the 10-year development-related capital forecast (2019-2028) in the 2019 DC Background Study, as informed by various sources including the City’s current and proposed capital budgets, long range plans, prior DC studies and staff reports.

In order to meet the requirements of the *DCA*, it is recommended that Council approve the 2019 DC Background Study and the underlying capital forecast, as an expression that Council intends to ensure that the increase in need in Transit service will be met.

In addition, any background study that incorporates Transit services into the calculation must now include the following:

- An assessment of ridership forecast for all modes of transit and whether ridership is generated from existing or planned development (O.Reg. 82/98 s.8(2)4).
- An assessment of ridership capacity for all modes of transit over the 10-year forecast period (O. Reg. 82/98 s.8(2)4).

2. Asset Management Plan Requirements

In addition to the AMP requirements set out in section 10 of the *DCA*, *Ontario Regulation 82/98*, identifies additional direction on the contents of the asset management strategy for Transit services to be addressed in a DC Background Study. This includes an AMP as well as a financial strategy. However, it is noted that the Regulations are silent with respect to the AMP requirements for the Background Study for any services other than transit.

III DEVELOPMENT FORECAST

This section provides the basis for the development forecasts used in calculating the development charges and provides a summary of the forecast results. The development forecast is based on estimates of growth occurring within approved Official Plan designated urban areas. This forecast is consistent with the population and employment targets in the *Growth Plan* and with the Region of Peel’s ongoing Municipal Comprehensive Review.

This section portrays a summary of the results of the housing unit, population forecast and the non-residential employment and space forecast. Details of the forecasts are provided in Appendix A.

A. RESIDENTIAL AND NON-RESIDENTIAL FORECAST

The Development Charges Act (DCA) requires the City to estimate “the anticipated amount, type and location of development” for which development charges may be imposed. The development forecast must cover both residential and non-residential development and be specific enough with regards to quantum, type, location and timing of development to allow the City to prepare a reasonable development-related capital program. A description of the forecast methodology and more detailed tables of results are provided in Appendix A.

B. RESIDENTIAL DEVELOPMENT FORECAST

The residential development forecast is based on development that is expected in designated urban areas of Brampton’s Official Plan. Table 1 provides a summary of the residential forecast for two planning periods: 2019–2028 and 2019–2041. As noted in Section II, for development charges calculation purposes, the 10-year planning period is applicable to General Services. The 2041 development forecast has been utilized in the calculation of the Roads & Related component of development charges.

Table 1 - Residential Development Charges Forecast Summary					
Development Forecast	2018 Estimate	General Services Planning Period 2019 - 2028		Roads & Related Services Planning Period 2019 - 2041	
		Growth	Total at 2028	Growth	Total at 2041
Residential					
Total Occupied Dwellings	174,981	39,530	214,511	75,929	250,910
Total Population					
<i>Census</i>	620,067	129,388	749,455	241,583	861,650
<i>Population in New Dwellings</i>		144,563		261,282	

The City's population is expected to increase by approximately 129,390 persons over the next 10 years reaching about 749,460 by 2028. The 2041 population is forecast to reach 861,650.

The population figures referred to above reflect the "net" increase in population. This is the increase after taking into account the expected decline in occupancy factors in existing housing units. The population residing in new housing units is expected to increase by 144,560 people over the 10-year planning period and 261,280 people to ultimate development.

Approximately 39,530 housing units are forecast to be developed between 2019 and 2028 and roughly 75,930 units by 2041.

C. NON-RESIDENTIAL DEVELOPMENT FORECAST

The non-residential forecast is based on the forecast of employment in new non-residential building space.

Non-residential space is forecast according to three categories: Population-related Employment, Major Office Employment and Employment Land Employment. Population-related Employment includes traditional retail forms, such as regional centres, district centres, neighbourhood convenience, highway commercial, big box and power centres occupied by retail and local service uses. Population-related Employment

also includes institutional space consisting of all community institutional uses such as schools, places of worship and hospitals. Major Office Employment is defined as those working in free-standing office buildings. Employment Land Employment consists of buildings in Brampton’s “industrial” areas and may include some non-traditional retail space and office space associated with industrial storage uses.

Table 2 provides a summary of the employment forecast for the 2019–2028 period and to 2041. Over the next 10 years, employment is projected to grow by 56,670 employees and by 120,690 employees over the longer planning horizon to 2041.

Table 2 - Non-Residential Development Charges Forecast Summary					
Development Forecast	2018 Estimate	General Services Planning Period 2019 - 2028		Roads & Related Services Planning Period 2019 - 2041	
		Growth	Total at 2028	Growth	Total at 2041
Non-Residential					
Employment*	188,398	56,665	245,063	120,692	309,090
Non-Residential Building Spaces (m2)		4,832,564		9,315,431	
Industrial		3,693,789		6,654,737	
Major Office		278,061		774,513	
Population-Related		860,714		1,886,182	

*Excludes work at home

The table also shows that about 4.83 million square metres of gross floor area (GFA) is forecast to come on-stream over the next decade. During the longer-term planning period to 2041, it is forecast that 9.32 million square metres of GFA will be added.

IV TRANSIT RIDERSHIP

The assessment of ridership forecast for the purposes of the DC Background Study was completed by HDR, the City's engineering consultant. The model was calibrated using the regional travel behaviour survey, the 2011 Transportation Tomorrow Survey (TTS).

Hemson has utilized the outputs from the City's ridership model data to allocate trips arising from development over the 2011 and 2041 planning period. The interim years from 2011 to 2019 and 2019 to 2028 were attributed based on shares of population and employment growth identified in the development-forecast. Using this assumption, the total 10-year in-period planning trips amount to 9,990 PM peak period trips.

Of the total attributed ridership growth of 28,694 trips from 2011-2041 the additional trips over the 2019-2028 planning period account for 35 per cent of total ridership growth. These assumptions and the analysis used to support these allocations are discussed further in Appendix C.1.

Transit Ridership Forecast		
Year	PM Peak Period Ridership	% of Allocation
2011-2019	8,265	29 per cent
2019-2028	9,990	35 per cent
2028-2041	10,440	36 per cent
Total	28,694	100 per cent

V SUMMARY OF HISTORICAL 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 General Services (Fire, Library, Recreation, etc.) the legislative requirement is met by documenting historical service levels for the preceding 10 years, in this case, for the period 2009 to 2018. Service levels have been measured as a ratio of inputs per capita or per population and employment.

O. Reg. 82/98 requires that when determining historical service levels 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 feet per capita. The qualitative aspect is introduced by the consideration of the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of \$/square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-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 replacement 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 provided Board and City staff, and is based on historical records and their experience with costs to acquire or construct similar facilities, equipment and infrastructure. It should be noted that Suncorp Valuations was retained to establish replacement costs for all DC eligible facilities and those values have been incorporated into this study. Furthermore, land values have been based on appraised values prepared by Avison Young for the purpose of this study.

Table 3 summarizes service levels for all services included in the development charge calculation. Appendices B (General Services) and D (Roads & Related) provide detailed historical inventory data upon which the calculation of service levels is based.

TABLE 3

**CITY OF BRAMPTON
SUMMARY OF AVERAGE HISTORICAL SERVICE LEVELS 2009 - 2018
FOR GENERAL AND ROADS & RELATED SERVICES**

Service	2009 - 2018 Service Level Indicator
1.0 GENERAL GOVERNMENT	\$52.76 per population & employment
Buildings	\$37.96 per population & employment
Land	\$8.61 per population & employment
Materials	\$0.79 per population & employment
Maintenance Equipment	\$5.40 per population & employment
2.0 LIBRARY SERVICES	\$202.05 per capita
Buildings	\$128.03 per capita
Land	\$29.04 per capita
Materials	\$30.95 per capita
Furniture and Equipment	\$14.03 per capita
3.0 FIRE SERVICES	\$196.86 per population & employment
Buildings	\$84.55 per population & employment
Land	\$57.13 per population & employment
Vehicles	\$47.80 per population & employment
Equipment	\$7.38 per population & employment
4.0 RECREATION	\$3,035.41 per capita
Indoor Recreation	\$1,544.12 per capita
Park Facilities	\$384.68 per capita
Outdoor Buildings	\$163.28 per capita
Parkland	\$674.48 per capita
Special Facilities	\$127.41 per capita
Fleet and Equipment	\$141.44 per capita
5.0 PUBLIC WORKS	\$245.07 per population & employment
Buildings	\$58.32 per population & employment
Land	\$114.33 per population & employment
Furniture	\$1.84 per population & employment
Fleet	\$70.58 per population & employment
6.0 PARKING	\$113.56 per population & employment
Parking Lots	\$100.43 per population & employment
Land	\$11.42 per population & employment
Equipment	\$1.71 per population & employment
7.0 ROADS & RELATED	\$7,492.38 per population & employment
Roads & Related Infrastructure	\$7,492.38 per population & employment

VI THE DEVELOPMENT-RELATED CAPITAL FORECAST

A. A DEVELOPMENT-RELATED CAPITAL FORECAST IS 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 development forecasts summarized in Section II and detailed in Appendix A, staff of the City departments, in collaboration with the consultants, prepared a development-related capital forecast setting out those projects that are required to service anticipated growth. For General Services, the capital plan covers the 10-year period from 2019 to 2028. As permitted by the *DCA*, s. 5 (1) 4., the development charge for Roads & Related is based on a longer planning horizon to 2041.

One of the recommendations contained in this DC Background Study is for Council to adopt the development-related capital forecast developed for the purposes of the development charges calculation. It is assumed that future capital budgets and forecasts will continue to bring forward the development-related projects contained herein, that are consistent with the growth occurring in the City. It is acknowledged that changes to the forecast presented here, may occur through the City's normal capital budget process.

B. THE DEVELOPMENT-RELATED CAPITAL FORECAST FOR CITY-WIDE SERVICES

A summary of the development-related capital forecast for General Services is presented in Table 4, with full details of the capital forecasts included in Appendix B for General Services and Appendix C for Transit.

**CITY OF BRAMPTON
SUMMARY OF DEVELOPMENT-RELATED CAPITAL FORECAST
FOR GENERAL SERVICES 2019 - 2028
AND FOR ROADS & RELATED SERVICES 2019 - 2041
(in \$000)**

Service	Gross Cost	Grants/ Subsidies	Municipal Cost
1.0 GENERAL GOVERNMENT	\$39,105.0	\$0.0	\$39,105.0
1.1 Buildings, Land & Furnishings	\$23,000.0	\$0.0	\$23,000.0
1.2 Development-Related Studies	\$16,105.0	\$0.0	\$16,105.0
2.0 LIBRARY SERVICES	\$117,968.7	\$0.0	\$117,968.7
2.1 Recovery of Negative Reserve Fund Balance	\$10,476.7	\$0.0	\$10,476.7
2.2 Buildings, Land & Furnishings	\$87,105.3	\$0.0	\$87,105.3
2.3 Material Acquisitions	\$20,386.6	\$0.0	\$20,386.6
3.0 FIRE SERVICES	\$95,955.9	\$0.0	\$95,955.9
3.1 Recovery of Negative Reserve Fund Balance	\$12,965.9	\$0.0	\$12,965.9
3.2 Buildings, Land & Furnishings	\$78,200.0	\$0.0	\$78,200.0
3.3 Vehicles	\$4,290.0	\$0.0	\$4,290.0
3.4 Equipment	\$500.0	\$0.0	\$500.0
4.0 RECREATION	\$605,527.0	\$0.0	\$605,527.0
4.1 Buildings, Land & Furnishings	\$374,825.0	\$0.0	\$374,825.0
4.2 Parkland Development	\$96,612.6	\$0.0	\$96,612.6
4.3 Parkland Redevelopment	\$58,839.4	\$0.0	\$58,839.4
4.4 Parks Annual Programs	\$75,250.0	\$0.0	\$75,250.0
5.0 PUBLIC WORKS	\$51,709.6	\$0.0	\$51,709.6
5.1 Recovery of Negative Reserve Fund Balance	\$37,229.6	\$0.0	\$37,229.6
5.2 Buildings, Land & Equipment	\$8,600.0	\$0.0	\$8,600.0
5.3 Equipment	\$5,880.0	\$0.0	\$5,880.0
6.0 PARKING	\$23,550.2	\$0.0	\$23,550.2
6.1 Parking Facilities	\$23,550.2	\$0.0	\$23,550.2
7.0 TRANSIT	\$1,610,531.5	\$930,000.2	\$680,531.3
7.1 Recovery of Negative Reserve Fund Balance	\$60,209.5	\$0.0	\$60,209.5
7.2 Buildings, Land & Equipment	\$162,000.0	\$110,000.0	\$52,000.0
7.3 Vehicles	\$404,495.0	\$193,687.2	\$210,807.8
7.4 Bus Pads and Shelters	\$15,427.0	\$11,313.0	\$4,114.0
7.5 Higher Order Transit Infrastructure	\$968,400.0	\$615,000.0	\$353,400.0
TOTAL 10-YEAR GENERAL SERVICES	\$2,544,347.8	\$930,000.2	\$1,614,347.6

Service	Gross Cost	Developer Funding	Municipal Cost
1.0 ROADS & RELATED	\$1,926,122.6	\$91,001.4	\$1,835,121.1
1.1 Roads & Related Projects - City Wide	\$1,293,825.8	\$91,001.4	\$1,202,824.4
1.2 Roads & Related Projects - Nstc	\$132,796.1	\$0.0	\$132,796.1
1.3 Roads & Related Projects - Other Improvements	\$481,879.7	\$0.0	\$481,879.7
1.4 Outstanding Roads & Related DC Credits	\$17,621.0	\$0.0	\$17,621.0
TOTAL TO 2041 ROADS & RELATED SERVICES	\$1,926,122.6	\$91,001.4	\$1,835,121.1

The development-related capital forecast for 10-year General Services estimates a total gross cost of \$2.55 billion. It is expected that \$930 million in subsidies and/or other recoveries will be utilized by the City to fund portions of the Transit capital program. This share is removed from the total gross cost of the forecast, leaving \$1.62 billion as the net municipal cost to the City.

This capital forecast incorporates those projects identified to be related to development anticipated in the next 10 years. It is not implied that all of these costs are to be recovered from new development by way of development charges. Portions of the capital forecast may relate to providing servicing for development which has occurred prior to 2019 (for which development charge reserve fund balances exist), or for growth anticipated to occur beyond the 2019–2028 planning period. In addition, the amounts shown in Table 4 have not been reduced by 10 per cent for various General Services as mandated by s. 5 (1) 8. of the *DCA*.

Of the \$1.62 billion in the 10-year net development-related capital costs for General Services, \$680.53 million (42 per cent) is related to Transit services. The capital program includes for the recovery of a negative reserve fund balance, additional vehicles, a new facility, Bus Rapid Transit on Queen Street, Light Rail Transit on Main Street as well as a number of other Transit projects.

The Recreation capital forecast amounts to \$605.53 million and focuses on additional buildings, park development and various annual programs.

The development-related capital component for Library Services totals \$117.97 million. The capital program provides for the acquisition of additional materials, the recovery of the negative DC reserve fund balance and the construction of new library buildings.

The net development-related capital forecast for Fire Services totals \$95.96 million. The program includes the recovery of the negative DC reserve fund balance, four new fire stations, additional vehicles and new fire fighting equipment.

The Public Works capital program amounts to \$51.71 million and provides for the recovery of the negative DC reserve fund balance, a new facility and additional fleet and equipment.

General government is included at \$39.11 million and includes various development-related studies as well as the design and construction of a new animal shelter.

The Parking capital program amounts to \$23.55 million and includes the lease payments associated with the construction of a building and parking lot in the South West Quadrant of the City.

Lastly, the gross cost of the Roads & Related capital program totals \$1.93 billion. The capital program recovers for a wide range of road infrastructure and improvements. Additional related infrastructure included in the Roads DC capital program are traffic signals & intersection work, sidewalks, grade separations, property acquisition, active transportation projects, etc.

A local service or “internal” component is identified for some of the projects, reflecting the cost that a development would have to pay to provide the required local servicing for a particular subdivision. The City will continue to require these contributions through the normal subdivision process, but excluding them from the development charges calculation ensures that only the oversized portion of costs is shared by other developments. The total recoveries anticipated from local costs are estimated at \$91.00million. The remaining net municipal cost is therefore \$1.84 billion.

VII PROPOSED 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. For City-wide services, 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 interest earnings and borrowing costs into account are also discussed.

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, the charge is differentiated by use (non-industrial/non-office, industrial and major office). The calculated non-residential charges are based on gross floor area (GFA) of building space.

It is noted that the calculation of the City-wide development charges does not include any provision for exemptions required under the *DCA*, such as the exemption for enlargements of up to 50 per cent on existing industrial buildings. 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, however, by offsetting increases in other portions of the calculated charge.

A. DEVELOPMENT CHARGE CALCULATION

A summary of the “unadjusted” residential and non-residential development charges for City-wide services is presented in Tables 5 and 6. The totals in the table separate the 10-year City-wide General Services from the City-wide Roads & Related services which are analysed to ultimate development. Further details of the calculation for each individual City service category are available in Appendices B – D.

1. General Services

A summary of the “unadjusted” residential and non-residential development charges for the City-wide General Services is presented in Table 5.

The capital forecast for the General Services incorporates those projects identified to be related to growth anticipated in the next 10 years. However, not all of the capital costs are to be recovered from new development by way of development charges. Table 5 shows that \$129.59 million has been identified as available DC reserves and represents the revenues collected from previous development charges. This portion has been netted out of the chargeable capital costs. Another share of the forecast, \$256.20 million, is attributable to development beyond the 2028 period and will be considered for recovery under future development charge studies.

The *DCA*, s. 5(1)8 requires that development-related net capital costs for General Services be reduced by 10 per cent in calculating the applicable development charge. The discount does not apply to protection service (e.g. Fire), Transit and services related to a highway (e.g. Public Works). The 10 per cent share of the development-related net capital costs not included in the development charge calculations must be funded from non-development charge sources. In total, about \$68.63 million is identified as the required 10 per cent reduction.

A final share of the program has been identified as a replacement of existing infrastructure and benefit to existing share. The portion of the program that is deemed to be the replacement share amounts to \$381.19 million.

After these adjustments, the discounted net development-related capital cost for General Services is \$778.74 million. This amount is allocated between the residential and non-residential sectors to derive the unadjusted development charges. Library and Recreation are deemed to benefit residential development only, while the remaining services are allocated between both residential and non-residential sectors (see Appendix B and Appendix C.2 for details). Approximately \$658.21 million of the General Services development charges net discounted capital program is deemed to benefit residential development. When this amount is divided by the 10 year population growth in new units (144,563) an unadjusted charge of \$4,553.15 per capita is derived. The non-residential share of the General Services capital program totals \$120.52 million and when this amount is divided by the 10-year forecast of non-residential space growth (4,832,564) an unadjusted charge of \$24.93 per square metre is derived.

**CITY OF BRAMPTON
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
10-YEAR CAPITAL PROGRAM FOR GENERAL SERVICES**

10 Year Growth in Population in New Units	144,563
10 Year Growth in Square Meters	4,832,564

Service	Development-Related Capital Forecast (2019 - 2028)						Residential Share		Non-Residential Share	
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Legislated Service Discount (\$000)	Available DC Reserves (\$000)	Post-2028 Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)	%	\$000	%	\$000
1.00 GENERAL GOVERNMENT	\$39,105.0	\$22,237.5	\$1,686.8	\$4,326	\$0.0	\$10,854.5	70%	\$7,598.1	30%	\$3,256.3
Unadjusted Development Charge Per Capita (\$)								\$52.56		
Unadjusted Development Charge Per Square Metre (\$)										\$0.67
2.00 LIBRARY SERVICES	\$117,968.7	\$28,773.5	\$7,871.8	\$0	\$57,794.7	\$23,528.6	100%	\$23,528.6	0%	\$0.0
Unadjusted Development Charge Per Capita (\$)								\$162.76		
Unadjusted Development Charge Per Square Metre (\$)										\$0.00
3.00 FIRE SERVICES	\$95,955.9	\$12,873.0	\$0.0	\$0	\$46,456.4	\$36,626.5	70%	\$25,638.6	30%	\$10,988.0
Unadjusted Development Charge Per Capita (\$)								\$177.35		
Unadjusted Development Charge Per Square Metre (\$)										\$2.27
4.00 RECREATION	\$605,527.0	\$19,352.0	\$58,617.5	\$121,172	\$52,913.8	\$353,471.8	100%	\$353,471.8	0%	\$0.0
Unadjusted Development Charge Per Capita (\$)								\$2,445.11		
Unadjusted Development Charge Per Square Metre (\$)										\$0.00
5.00 PUBLIC WORKS	\$51,709.6	\$0.0	\$0.0	\$0	\$6,113.4	\$45,596.2	70%	\$31,917.3	30%	\$13,678.9
Unadjusted Development Charge Per Capita (\$)								\$220.79		
Unadjusted Development Charge Per Square Metre (\$)										\$2.83
6.00 PARKING	\$23,550.2	\$19,009.1	\$454.1	\$4,087	\$0.0	\$0.0	70%	\$0.0	30%	\$0.0
Unadjusted Development Charge Per Capita (\$)								\$0.00		
Unadjusted Development Charge Per Square Metre (\$)										\$0.00
7.00 TRANSIT	\$680,531.3	\$278,947.8	\$0.0	\$0	\$92,926	\$308,657.7	70%	\$216,060.4	30%	\$92,597.3
Unadjusted Development Charge Per Capita								\$1,494.58		
Unadjusted Development Charge Per Square Metre (\$)										\$19.16
Total - 10 Year City-Wide General Services	\$1,614,347.6	\$381,192.9	\$68,630.2	\$129,585.1	\$256,204.1	\$778,735.3		\$658,214.9		\$120,520.5
Unadjusted Development Charge Per Capita (\$)								\$4,553.15		
Unadjusted Development Charge Per Square Metre (\$)										\$24.93

2. Roads & Related Services

The net municipal cost estimated for Roads & Related services is \$1.84 billion (see Table 6). This infrastructure will be used to service the development expected to occur to 2041.

Of the \$1.84 billion net municipal cost, about \$113.49 million has been identified as a non-growth or benefit to existing share; these costs will be recovered from other municipal funding sources. Approximately \$83.85 million is available in the City's existing roads & related development charges reserve accounts (inclusive of the Bramwest/NSTC funds). Lastly, \$38.67 million has been identified as providing benefit beyond 2041. After these adjustments, approximately \$1.60 billion is included in the development charges calculations.

This amount is allocated to the residential and non-residential sector based on each sector's share of forecast population and employment growth to 2041. On this basis, the allocation to the residential and non-residential sectors is allocated 67 per cent and 33 per cent respectively. The residential sector's "unadjusted" development charge is calculated at \$4,100.57 per capita. The non-residential sector's share results in an "unadjusted" development charge of \$32.39 per square metre for industrial development; \$190.10 per square metre for major office development and \$87.45 per square metre for non-industrial/non-office development.

TABLE 6

CITY OF BRAMPTON
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
CAPITAL PROGRAM FOR ROADS & RELATED INFRASTRUCTURE: 2019 - 2041

Population in New Units (2019-2041)	261,282
Non-residential Floor Space Growth in Square Meters (2019-2041)	9,315,431
<i>Industrial</i>	6,654,737
<i>Major Office</i>	774,513
<i>Non-Office and Non-Industrial</i>	1,886,182

	Development-Related Capital Program						Residential Share		Non-Residential Share	
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Legislated Service Discount (\$000)	Available DC Reserves (\$000)	Post-2041 Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)	%	\$000	%	\$000
1.0 ROADS & RELATED - EXCLUDING BRAMWEST NSTC	\$ 1,702,325.1	\$ 113,485.0	\$ -	\$ 62,051.7	\$ 20,824.1	\$ 1,505,964	67%	\$ 1,008,996.1	33%	\$ 496,968.2
Unadjusted Development Charge Per Capita								\$3,861.71		
Industrial Unadjusted Development Charge Per Sq. M										\$30.50
Major Office Unadjusted Development Charge Per Sq. M										\$179.03
Non-Industrial/Non-Office Unadjusted Development Charge Per Sq. M										\$82.35
2.0 ROADS & RELATED - BRAMWEST PARKWAY / NSTC	\$ 132,796.1	\$ -	\$ -	\$ 21,796.4	\$ 17,850.7	\$ 93,149	67%	\$ 62,409.8	33%	\$ 30,739.2
Unadjusted Development Charge Per Capita								\$238.86		
Industrial Unadjusted Development Charge Per Sq. M										\$1.89
Major Office Unadjusted Development Charge Per Sq. M										\$11.07
Non-Industrial/Non-Office Unadjusted Development Charge Per Sq. M										\$5.09
Total - City-Wide Roads & Related Services (to 2041)	\$1,835,121.1	\$113,485.0	\$0.0	\$83,848.1	\$38,674.7	\$1,599,113		\$1,071,405.9		\$527,707.4
Unadjusted Development Charge Per Capita (\$)								\$4,100.57		
Industrial Unadjusted Development Charge Per Square Metre										\$32.39
Major Office Unadjusted Development Charge Per Square Metre										\$190.10
Non-Industrial/Office Unadjusted Development Charge Per Square Metre										\$87.45

B. PROPOSED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES

Final adjustments to the “unadjusted” development charge rates are made through a cash flow analysis. The analysis, details of which are included in the technical appendices, considers the borrowing cost and interest earnings associated with the timing of expenditures and development charge receipts for each service.

Table 7 summarizes the results of the adjustment to the residential DC rates. Residential development charges are proposed to vary by dwelling unit type to reflect their different occupancy factors and resulting demand for services. The proposed residential charges are shown in Table 7. The proposed residential charges range from \$13,087 for small apartments (≤ 750 square feet) to \$37,779 for single and semi-detached units. The proposed charge for rows and other multiples is \$28,007 and the charge for large apartments (> 750 square feet) is \$22,713.

Tables 8, 9 and 10 summarize the results of the adjusted non-industrial/non-office, industrial and major office charges. As shown in Table 8, the adjusted charge for industrial development amounts to \$59.04 per square metre. Table 9 shows that the adjusted charge for non-industrial/non-office development amounts to \$117.08 per square metre of non-residential GFA. Table 10 shows that the adjusted charge for major office development totals \$235.36 per square metre. Consistent with the City’s historical practise, the General Services rates are calculated on a uniform, City-wide basis, whereas the Roads & Related charge differs between non-industrial/non-office, industrial and major office development.

C. COMPARISON OF CURRENT AND CALCULATED DEVELOPMENT CHARGES

Table 11 presents a comparison of calculated residential development charges with the City’s current charges (as of February 1, 2019). Table 11 shows that the calculated charge per single and semi-detached unit of \$37,779 will produce an increase of \$6,838 over the present development charge of \$30,941, which amounts to a 22 per cent increase in the residential rate.

Tables 12, 13 and 14 show the calculated industrial, major office and non-industrial/non-office charges, by service, as compared to the existing charges currently in force. The calculated industrial rate amounts to \$59.04 per square metre, which represents a 13 per cent increase (or \$6.98) over the current rate of \$52.06 per square

metre. The calculated non-industrial/non-office rate of \$117.08 represents a 5 per cent increase (or \$6.01) over the current rate of \$111.07 per square metre. Under the 2019 DC Study, it is proposed that major office be segregated into its own rate category, therefore, the calculated major office rate amounts to \$235.36 per square metre, which represents a \$183.30 per square metre increase over the current rate of \$52.06 per square metre. It should be noted that this would represent the maximum calculated rate allowable under the *Development Charges Act* and Council has the authority to adopt any rate as long as it does not exceed the maximum permissible rates identified in this study.

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TABLE 7

CITY OF BRAMPTON
CITY-WIDE UNIFORM DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Unadjusted Charge Per Capita	Adjusted Charge Per Capita	Residential Charge By Unit Type				Percentage of Charge
			Singles / Semis	Rows / Other Multiples	Large Apartments > 750 Sq. Ft.	Small Apartments < = 750 Sq. Ft.	
General Government	\$52.56	\$54.01	\$234	\$173	\$141	\$81	1%
Library Services	\$162.76	\$178.16	\$771	\$572	\$464	\$267	2%
Fire Services	\$177.35	\$207.05	\$897	\$665	\$539	\$311	2%
Recreation	\$2,445.11	\$2,429.25	\$10,519	\$7,798	\$6,324	\$3,644	28%
Public Works	\$220.79	\$256.04	\$1,109	\$822	\$667	\$384	3%
Parking	\$0.00	\$0.00	\$0	\$0	\$0	\$0	0%
Transit	\$1,494.58	\$1,520.39	\$6,583	\$4,880	\$3,958	\$2,281	17%
Subtotal Charge Per Unit	\$4,553.15	\$4,644.90	\$20,113	\$14,910	\$12,093	\$6,968	53%
Roads & Related - Excluding Bramwest/NSTC	\$3,861.71	\$3,866.21	\$16,741	\$12,411	\$10,064	\$5,799	44%
Roads & Related - Bramwest/NSTC	\$238.86	\$213.56	\$925	\$686	\$556	\$320	2%
TOTAL CHARGE PER UNIT	\$8,653.72	\$8,724.67	\$37,779	\$28,007	\$22,713	\$13,087	100%
(1) Based on Persons Per Unit of:			4.33	3.21	2.60	1.50	

TABLE 8

**CITY OF BRAMPTON
CITY-WIDE UNIFORM DEVELOPMENT CHARGES
INDUSTRIAL DEVELOPMENT CHARGE PER SQUARE METRE**

Service	Non-Residential		Percentage of Charge
	Unadjusted Charge Per Square Metre	Adjusted Charge Per Square Metre	
General Government	\$0.67	\$0.70	1%
Library Services	\$0.00	\$0.00	0%
Fire Services	\$2.27	\$2.70	5%
Recreation	\$0.00	\$0.00	0%
Public Works	\$2.83	\$3.35	6%
Parking	\$0.00	\$0.00	0%
Transit	\$19.16	\$19.81	34%
Subtotal Per Square Metre	\$24.93	\$26.56	45%
Roads & Related - Excluding Bramwest/NSTC	\$30.50	\$30.79	52%
Roads & Related - Bramwest/NSTC	\$1.89	\$1.69	3%
TOTAL CHARGE PER SQUARE METRE	\$57.32	\$59.04	100%

TABLE 9

**CITY OF BRAMPTON
CITY-WIDE UNIFORM DEVELOPMENT CHARGES
NON-INDUSTRIAL/NON-OFFICE DEVELOPMENT CHARGE PER SQUARE METRE**

Service	Non-Residential		Percentage of Charge
	Unadjusted Charge Per Square Metre	Adjusted Charge Per Square Metre	
General Government	\$0.67	\$0.70	1%
Library Services	\$0.00	\$0.00	0%
Fire Services	\$2.27	\$2.70	2%
Recreation	\$0.00	\$0.00	0%
Public Works	\$2.83	\$3.35	3%
Parking	\$0.00	\$0.00	0%
Transit	\$19.16	\$19.81	17%
Subtotal Per Square Metre	\$24.93	\$26.56	23%
Roads & Related - Excluding Bramwest/NSTC	\$82.35	\$85.88	73%
Roads & Related - Bramwest/NSTC	\$5.09	\$4.64	4%
TOTAL CHARGE PER SQUARE METRE	\$112.38	\$117.08	100%

TABLE 10

**CITY OF BRAMPTON
CITY-WIDE UNIFORM DEVELOPMENT CHARGES
MAJOR OFFICE DEVELOPMENT CHARGE PER SQUARE METRE**

Service	Non-Residential		Percentage of Charge
	Unadjusted Charge Per Square Metre	Adjusted Charge Per Square Metre	
General Government	\$0.67	\$0.70	0%
Library Services	\$0.00	\$0.00	0%
Fire Services	\$2.27	\$2.70	1%
Recreation	\$0.00	\$0.00	0%
Public Works	\$2.83	\$3.35	1%
Parking	\$0.00	\$0.00	0%
Transit	\$19.16	\$19.81	8%
Subtotal Per Square Metre	\$24.93	\$26.56	11%
Roads & Related - Excluding Bramwest/NSTC	\$179.03	\$198.45	84%
Roads & Related - Bramwest/NSTC	\$11.07	\$10.35	4%
TOTAL CHARGE PER SQUARE METRE	\$215.03	\$235.36	100%

TABLE 11

**CITY OF BRAMPTON
COMPARISON OF CURRENT AND CALCULATED
RESIDENTIAL DEVELOPMENT CHARGES**

Service	Current Residential Charge / SDU	Calculated Residential Charge / SDU	Difference in Charge	
			\$	%
General Government	\$248	\$234	-\$14	-6%
Library Services	\$759	\$771	\$12	2%
Fire Services	\$725	\$897	\$172	24%
Recreation	\$10,489	\$10,519	\$30	0.3%
Public Works	\$732	\$1,109	\$377	52%
Parking	\$0	\$0	\$0	N/A
Transit	\$1,761	\$6,583	\$4,822	274%
Subtotal Charge Per Unit	\$14,714	\$20,113	\$5,399	37%
Roads & Related - Excluding Bramwest/NSTC	\$15,590	\$16,741	\$1,151	7%
Roads & Related - Bramwest/NSTC	\$636	\$925	\$289	45%
TOTAL CHARGE PER UNIT	\$30,941	\$37,779	\$6,838	22.1%

TABLE 12

**CITY OF BRAMPTON
COMPARISON OF CURRENT AND CALCULATED
INDUSTRIAL NON-RESIDENTIAL DEVELOPMENT CHARGES**

Service	Current Industrial / Office Charge	Calculated Industrial Charge	Difference in Charge	
			\$	%
General Government	\$0.78	\$0.70	-\$0.08	-10%
Library Services	\$0.00	\$0.00	\$0.00	N/A
Fire Services	\$2.26	\$2.70	\$0.44	20%
Recreation	\$0.00	\$0.00	\$0.00	N/A
Public Works	\$2.29	\$3.35	\$1.06	46%
Parking	\$0.00	\$0.00	\$0.00	N/A
Transit	\$5.50	\$19.81	\$14.31	260%
Subtotal Per Square Metre	\$10.83	\$26.56	\$15.73	145%
Roads & Related - Excluding Bramwest/NSTC	\$39.58	\$30.79	-\$8.79	-22%
Roads & Related - Bramwest/NSTC	\$1.65	\$1.69	\$0.04	3%
TOTAL CHARGE PER SQUARE METRE	\$52.06	\$59.04	\$6.98	13%

TABLE 13

**CITY OF BRAMPTON
COMPARISON OF CURRENT AND CALCULATED
NON-INDUSTRIAL/NON-OFFICE NON-RESIDENTIAL DEVELOPMENT CHARGES**

Service	Current Non-Industrial / Non-Office Charge	Calculated Non-Industrial / Non-Office Charge	Difference in Charge	
			\$	%
General Government	\$0.78	\$0.70	-\$0.08	-10%
Library Services	\$0.00	\$0.00	\$0.00	N/A
Fire Services	\$2.26	\$2.70	\$0.44	20%
Recreation	\$0.00	\$0.00	\$0.00	N/A
Public Works	\$2.29	\$3.35	\$1.06	46%
Parking	\$0.00	\$0.00	\$0.00	N/A
Transit	\$5.50	\$19.81	\$14.31	260%
Subtotal Per Square Metre	\$10.83	\$26.56	\$15.73	145%
Roads & Related - Excluding Bramwest/NSTC	\$96.28	\$85.88	-\$10.40	-11%
Roads & Related - Bramwest/NSTC	\$3.96	\$4.64	\$0.68	17%
TOTAL CHARGE PER SQUARE METRE	\$111.07	\$117.08	\$6.01	5%

TABLE 14

**CITY OF BRAMPTON
COMPARISON OF CURRENT AND CALCULATED
MAJOR OFFICE NON-RESIDENTIAL DEVELOPMENT CHARGES**

Service	Current Industrial / Office Charge	Calculated Major Office Charge	Difference in Charge	
			\$	%
General Government	\$0.78	\$0.70	-\$0.08	-10%
Library Services	\$0.00	\$0.00	\$0.00	N/A
Fire Services	\$2.26	\$2.70	\$0.44	20%
Recreation	\$0.00	\$0.00	\$0.00	N/A
Public Works	\$2.29	\$3.35	\$1.06	46%
Parking	\$0.00	\$0.00	\$0.00	N/A
Transit	\$5.50	\$19.81	\$14.31	260%
Subtotal Per Square Metre	\$10.83	\$26.56	\$15.73	145%
Roads & Related - Excluding Bramwest/NSTC	\$39.58	\$198.45	\$158.87	401%
Roads & Related - Bramwest/NSTC	\$1.65	\$10.35	\$8.70	527%
TOTAL CHARGE PER SQUARE METRE	\$52.06	\$235.36	\$183.30	352%

VIII COST OF GROWTH ANALYSIS

This section provides a brief examination of the long-term capital and operating costs as well as the asset management-related annual provisions for the capital facilities and infrastructure to be included in the DC by-law. This examination is required as one of the provisions of the *DCA*. Additional details on the cost of growth analysis, including asset management analysis for Transit services is included in Appendix C.3. The analysis for all other services is included in Appendix F.

A. ASSET MANAGEMENT PLAN

1. Transit Services

The City utilizes a range of fiscal planning tools and approaches in examining the funding and maintenance of Transit infrastructure. For example, the City has completed a Long-Term Financial Master Plan, five-year business plan for Brampton Transit and Corporate Asset Management Plan to ensure the City continues to run efficiently and spend public money wisely. In addition, a Transit Asset Management Plan is currently underway which will help manage and invest in the City's transit infrastructure.

The following are key, and interrelated, documents central to the City's fiscal evaluation:

- City of Brampton [Long-Term Financial Master Plan](#)
- City of Brampton [Transportation Master Plan Update](#)
- City of Brampton [2016 Corporate Asset Management Plan](#)
- City of Brampton [2018 State of Local Infrastructure Report](#)
- City of Brampton [Transit Business Plan \(2018 - 2022\)](#)

The key objective of the reports is to ensure financial sustainability for the delivery of Transit services. In particular, the City as part of its annual budget processes, implement and manage the year-to-year expenditure needs and revenue requirements of the program.

The AMP analysis for Transit services has been grouped into the categories identified in the DC Transit capital program (see Appendix C.2).

1. Recovery of Negative Reserve Fund Balance
2. Buildings, Land & Equipment

3. Vehicles
4. Bus Pads and Shelters
5. Higher Order Transit Infrastructure

Table 15 provides a summary of the calculated annual asset management contributions based on the identified useful lives of the various assets and projects.

Table 15 - Summary of Calculated Full Life Cycle Annual Contributions at 2029				
Transit Services	2019 - 2028 Capital Program		Calculated AMP Annual Provision by 2029	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Recovery of Negative Reserve Fund Balance	\$60,209,496	\$0	\$0	\$0
Buildings, Land & Equipment	\$50,514,286	\$111,485,714	\$699,429	\$2,500,714
Vehicles	\$106,741,800	\$297,753,200	\$5,930,100	\$16,541,844
Bus Pads and Shelters	\$3,695,000	\$11,732,000	\$184,750	\$586,600
Higher Order Transit	\$87,497,167	\$880,902,833	\$430,809	\$6,961,668
Total 2029 Provision	\$308,657,748	\$1,310,873,748	\$7,245,088	\$26,090,684

2. All Other Services

Tables 16 and 17 provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2019–2028 and 2019–2041 DC recoverable portion. The years 2029 and 2042 have been included to calculate the annual contribution for the 2019–2028 and 2019–2041 periods as the expenditures in 2028 and 2041 will not trigger asset management contributions until 2029 and 2042, respectively. As shown in Table 16, by 2029, the City will need to fund an additional \$12.69 million per annum in order to properly fund the full life cycle costs of the new assets related to General Services supported under the development-charges by-law.

Table 17 provides a separate analysis of the annual provisions required for the engineered services capital program as the program extends to 2041. As shown in Table 17, the annual provision in 2042 amounts to \$38.47 million.

Table 16 - Calculated Annual Provision by 2029 for General Services				
Service	2019 - 2028 Capital Program		Calculated AMP Annual Provision by 2029	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
General Government	\$16,868,000	\$22,238,000	\$140,000	\$260,000
Library Services	\$24,979,000	\$92,990,000	\$713,000	\$4,531,000
Fire Services	\$36,627,000	\$59,329,000	\$380,000	\$1,357,000
Recreation	\$527,382,000	\$78,145,000	\$11,299,000	\$1,159,000
Public Works	\$45,596,000	\$6,113,000	\$153,000	\$593,000
Parking	\$4,541,000	\$19,009,000	\$0	\$0
Total 2029 Provision	\$655,993,000	\$277,824,000	\$12,685,000	\$7,900,000

Table 17 - Calculated Annual Provision by 2042 for Engineered Services				
Service	2019 - 2041 Capital Program		Calculated AMP Annual Provision by 2042	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Roads & Related	\$1,682,961,000	\$243,161,000	\$38,465,000	\$6,197,000
Total 2042 Provision	\$1,682,961,000	\$243,161,000	\$38,465,000	\$6,197,000

B. LONG-TERM CAPITAL AND OPERATING COSTS

1. Transit Services

Appendix C.3 provides details on the long-term capital and operating cost analysis for Transit services. In total, it is anticipated that the City will incur approximately \$37.99 million in additional operating costs by 2028. It should be noted that the operating cost impacts of both the BRT and LRT projects will need to be reviewed as it is expected that a business case study will be completed prior to any capital investments.

Consistent with current practice, the net funding difference is anticipated to be funded from other revenue sources such as property taxes. It is noted that the City also continues to have dialogue with other organizations regarding revenue agreements of fare sharing and discount assumptions. Lastly, as indicated in Appendix C.3, Provincial Gas Tax funds have typically been used to fund operating expenses and it is expected

that these funds will continue to be used to offset the increased operating costs associated with implementing this capital program.

2. All Other Services

Appendix F summarizes the estimated increase in net operating costs that the City will experience for additions associated with the planned capital forecast. These estimates are generally based on the City's 2017 Financial Information Return and data from City staff.

By 2028, the City's net operating costs are estimated to increase by \$45.72 million for property tax supported services. Increases in net operating costs will be experienced as new facilities and community centres are opened. By 2041, the City's net operating costs for roads & related infrastructure will increase by \$23.92 million. Operating and maintenance costs will increase as additions to the City's road network are made.

Appendix F also summarizes the components of the development-related capital forecast that will require funding from non-DC sources. In total, \$563.31 million will need to be financed from non-DC sources over the 2019-2028 and 2019-2041 planning period. In addition, \$294.88 million in interim DC financing related to post-period shares of projects may be required. However, because DC By-laws must be revisited at least every five years, it is difficult to determine the quantum of interim financing that may be necessary.

The share of the development-related capital forecast requiring funding from non-DC sources consists of two components. The most significant, at \$494.68 million is related to replacement and benefit to existing shares of the program. An additional \$68.63 million is identified as the mandatory 10 per cent discount for certain City-wide General Services. Council is made aware of these factors so that they understand the operating and capital costs that will not be covered by DCs as it adopts the development-related capital forecast set out in the study.

C. THE PROGRAM IS DEEMED TO BE FINANCIALLY SUSTAINABLE

In summary, the asset management plan and long-term capital and operating analysis contained in Appendix C.3 (Transit) and Appendix F (all services excluding Transit) demonstrates that the City can afford to invest and operate the identified general and engineered services infrastructure over the 10-year and long-term planning period.

Importantly, the City's annual budget review allows staff to continue to monitor and implement mitigating measures should the program become less sustainable.

IX DEVELOPMENT CHARGES POLICY & ADMINISTRATION

A. CONSIDERATION OF AREA RATING

In accordance with the *DCA*, Council must give consideration to the use of area rating, also known as area-specific development charges. As part of the City's 2019 DC Background Study, the appropriateness of implementing area-specific development charges for the various City services was examined.

The *DCA* permits the City to designate in its DC by-law, the areas where development charges shall be imposed. The charges may apply to all lands in the City or to other designated development areas as specified in the DC by-law.

The following was considered with respect to area-specific development charges:

- Is the use of area-specific charges appropriate for some or all services?
- Are there any data limitations with calculating an area-specific development charge?

Area-specific development charges are typically considered when there is a clear benefit to a particular area (including the population or population and employment) and have been implemented mostly in stand alone green field developments.

Most municipalities in the province have adopted uniform, municipal-wide DCs, as has the City of Brampton since at least 1999.

Based on discussions with staff, and the analysis of the delivery of services, it is proposed that the City continue to calculate and collect DCs on a uniform, City-wide basis. The rationale for maintaining a uniform City-wide approach is based primarily on the fact that 10-year historical service levels can be calculated on a City-wide basis to ensure the emplacement of a service or infrastructure in one particular area of the City does not exceed the service level of that specific community. As well, City-wide DCs ensure a consistent approach to financing the cost of development-related projects, from both a DC and non-DC revenue source perspective. Finally, an attempt to impose area-specific DCs to a DC regime which has imposed City-wide DCs for a long length of time would cause equity issues during transitions. This may cause greenfield areas to face

significant increases in DC rates which could be counter-intuitive to the overall planning and development of the City.

City Services Considered	Servicing Needs
General Services	<p>Services such as Library and recreation are open and accessible to all residents in the City and are driven and planned for based on City-wide population growth.</p> <p>General Government, Fire Services, Public Works, Parking and Transit are provided to all residents and employees in the City and are driven and planned for based on City-wide population and employment growth.</p>
Roads & Related Services	Roads & Related services are provided through a City-wide network and is planned based on City-wide population and employment growth.

B. DEVELOPMENT CHARGES RECOMMENDATIONS

No significant changes are recommended to the City's current policies and practices regarding development charges administration. Considering the requirements of the *DCA*, the following recommendations are made:

- That present practices regarding collection of DCs and by-law administration continue to the extent possible, having regard to any requirements of the *DCA*;
- That under the *DCA*, the City should codify any rules regarding application of the by-laws and exemptions within the DC by-laws proposed for adoption;
- That the City continue to use front-ending agreements or developer agreements (or services-in-lieu arrangements), whichever are practical and desirable by the development industry and the City;
- That the by-law permit the payment of DCs in cash or through services-in-lieu agreements. The City is not obligated to enter into services-in-lieu agreements;
- That Council adopt the development-related capital forecasts, and the increase in the need for services attributable to the anticipated development, as included in the 2019 DC Background Study, subject to annual review through the City's normal capital budget process.
- That Council intends to undertake the adopted capital forecast to ensure that the increase in need for service will be met.

- That Council determine that the future excess capacity identified in the DC Background Study shall be paid for by the development charges contemplated in the said DC Background Study, or other similar charges.
- That Council gave consideration of the use of more than one development charge by-law to reflect different needs for services in different areas, also known as area rating or area-specific DCs, and determined that for the services, and associated infrastructure proposed to be funded by DCs under the DC by-law, that the charges be calculated on a city-wide basis.
- That Council adopt the Transit development-related capital program, as included in the DC Background Study, as the “planned level of service”, and in doing so, indicate that it intends to ensure that the increase in need for Transit will be met.
- That Council approve the Cost of Growth analysis, including the Asset Management Plan, that deals with all assets whose capital costs are intended to be funded under the development charge by-law and that such assets are considered to be financially sustainable over their full life-cycle.

C. 2019 DRAFT DC BY-LAW AVAILABLE UNDER SEPARATE COVER

The new 2019 DC by-law(s) will be made available under separate cover at least two weeks in advance of the statutory public meeting in accordance with the requirements of the *DCA*.

Of particular importance, the definitions that will be included in the DC by-law are used for the purposes of administering the City’s development charges. In the event that definitions in other municipal documents (e.g. Official Plan or Zoning By-law) differs from the DC by-law, the language in the DC by-law prevails.

APPENDIX A

DEVELOPMENT FORECAST

APPENDIX A

RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT FORECAST

This appendix provides the details of the development forecast used in the preparation of the Development Charges Background Study for the City of Brampton. The development forecast is based on estimates of growth occurring within approved Official Plan designated urban areas. This forecast is consistent with the population and employment targets in the *Growth Plan* and with the Region of Peel's ongoing Municipal Comprehensive Review. The results of the forecasts are presented in the following 11 tables:

Table 1	Historical Population, Occupied Households & Employment Summary
Table 2	Historical Occupied Households by Unit Type
Table 3	Historical Annual Growth in Occupied Households by Unit Type
Table 4	Historical Households by Period of Construction Showing Household Size
Table 5	Historical Place of Work Employment
Table 6	Population, Household & Employment Forecast Summary
Table 7	Forecast of Occupied Households by Unit Type
Table 8	Forecast of Annual Growth in Occupied Households by Unit Type
Table 9	Forecast Population in New Households by Unit Type
Table 10	Forecast of Place of Work Employment
Table 11	Forecast of Annual Non-Residential Space Growth

The appendix begins with a brief discussion of the forecast key inputs and results in the context of recent development activity. This is followed by more detailed methodological discussions of the residential and non-residential forecast.

A. FORECAST APPROACH & KEY ASSUMPTIONS

1. Forecast Key Inputs

In preparing updated forecasts for the City of Brampton's land use and infrastructure planning needs and Development Charges Background Study, the following were incorporated:

- Amendment 2 to the *Growth Plan* for the *Greater Golden Horseshoe*, May 2017;

- Region of Peel and City of Brampton Official Plans;
- 2016 Census data on population, employment and housing;
- 2016 National Household Survey on housing occupancy (persons per unit) and employment by place of work;
- City of Brampton Employment Survey to 2017; and
- The City of Brampton’s land use databases including existing and potential housing unit counts and existing and potential employment land development.

2. Total Population and Employment vs. Census Population and Employment

Population figures used in the forecasts represent the population recorded in the Census (“Census population”) and does not include the Census net undercoverage (approximately 3.18 per cent of the Census population in Brampton). Net undercoverage represents those who were missed or double-counted by the Census, and is also the definition of population used in the Regional Official Plan and the *Growth Plan*. Population figures shown in the development forecast represent mid-year estimates.

Household figures represent occupied dwellings, and are associated with the year in which they are anticipated to be occupied.

“Total Census Employment” figures represent Statistics Canada place of work data. Place of work data record where people work rather than their place of residence. Employment is categorized as Population-related, Major Office and Employment Land. These categories include employment with a regular and no fixed place of work. However, work-at-home employment is excluded from the figures as, for development charge purposes, this type of employment is considered not to require building floorspace for its activities.

The table below outlines the differences between total population and employment vs census population and employment.

Differences in Municipal Growth Forecasts			
	2016	2031	2041
Residential			
Total Population	613,600	812,000	890,000
Census Population for DC Study	594,280	786,180	861,650
Non-Residential			
Total Employment	191,390	277,430	324,910
Place of Work Employment for DC Study	180,480	263,000	309,090

B. FORECASTS PROJECT SLIGHTLY LESS GROWTH THAN RECENT ACTIVITY

During the 10-year period from 2009 to 2018, the City of Brampton experienced rapid population and employment growth. This growth was fuelled by a strong GTA economy and continued migration into the metropolitan region. Moving forward, Brampton is expected to continue to experience rapid housing growth until its greenfield housing capacity becomes largely exhausted at some point during the 2030s. However, the rate of growth is expected to slow from the levels experienced over the past 10 years.

1. Historical Growth in Population and Occupied Households in Brampton Has Been Rapid (Tables 1, 2, 3 and 5)

Brampton's population and housing growth has well exceeded the GTA average in recent years. Between the 2006 and 2016 Census, the population of the GTA grew by 861,000 people or 15 per cent. During this same period the City of Brampton's population grew by approximately 37 per cent to a 2016 Census value of 594,300.

Population Growth in Brampton, Peel Region and the GTA 2006-2016				
	2006 Population	2011 Population	2016 Population	2007-2016 Population Growth
Brampton	433,800	523,900	594,300	160,500 37%
Peel Region	1,159,500	1,296,800	1,381,700	222,200 19%
GTA	5,556,000	6,054,000	6,417,000	861,000 15%

Note: See Appendix A Table 1

Source: 2006 Census, 2011 Census, 2016 Census

The number of housing units in Brampton has grown at a lower rate than population; likely as a result of the increase in the average number of persons residing in dwelling units. In contrast to other parts of the GTA, average household sizes in Brampton have grown over the course of the last decade, from an average household size of 3.48 in 2009 to 3.54 in 2018.

The City of Brampton has experienced stable employment growth over the past decade. Over the past 10-year period, the City's employment growth rate has remained relatively stable at 2.1 per cent.

Employment Growth in Brampton, Peel Region and the GTA 2006 to 2016				
	2006 Employment	2011 Employment	2016 Employment	2007-2016 Employment Growth
Brampton	155,900	172,100	191,400	35,500 23%
Peel Region	608,000	649,400	695,400	87,400 14%
GTA	2,965,400	3,109,800	3,334,200	368,800 12%

Note: See Appendix A Table 5 (includes work at home)

Source: 2006 Census, 2011 Census, 2016 Census

2. Brampton Households Have High Occupancy Levels (Table 4)

Occupancy levels for single and semi detached, row and other multiple and apartment units in Brampton by period of construction are provided in Table 4. In 2016, the average Brampton dwelling contained approximately 3.51 persons, which is significantly higher than the GTA average. These values are from the National Household Survey (NHS). The 2006-2016 PPU values for each new dwelling type are: Single & Semi-detached 4.33; Rows 3.20; and Apartments 1.93. These values are forecasted to remain relatively similar over time (see Table 9).

C. RESIDENTIAL FORECAST HAS BEEN UPDATED TO REFLECT THE LATEST AVAILABLE INFORMATION

Much of the residential growth forecast is based on the population and employment targets in the *Growth Plan* and with the Region of Peel's ongoing Municipal Comprehensive Review and 2016 Census data. The Province updated Schedule 3 population and employment targets at the Regional level through Amendment 2 to the *Growth Plan for the Greater Golden Horseshoe* in 2017.

The residential growth forecast incorporates 2016 Census data including population and the 2016 National Household Survey (NHS) for data on occupied dwelling unit types, and average household size by dwelling unit type. Hemson has also utilized updates of the City of Brampton's land use databases to supplement the Census and NHS data.

D. FORECAST OF RESIDENTIAL UNITS BY STRUCTURE TYPE IS USED TO DISTRIBUTE POPULATION GROWTH IN NEW UNITS

The residential unit and population in new units forecast for the City is based on the forecast of three unit structure types: singles and semis; rows and other multiples; and apartments. The population in new units are estimated using person per unit factors.

The attached series of tables provide all of the assumptions and results for the forecasts. The purpose of each table and key assumptions are provided in the descriptions below:

1. Forecast of Households, Population and Employment (Tables 6, 7, 8 and 9)

Table 6 provides a summary of the total City-wide household, population and employment forecast from 2016 to ultimate development. Ultimate development for the purposes of this development charges study is 2041. Tables 7, 8 and 9 detail the forecast of occupied households and population in new households by unit type.

The City's Census population is forecast to rise from approximately 620,070 in 2018 to 749,460 in 2028 and to 861,650 at ultimate development. This represents respective increases of 21 per cent and 39 per cent when measured against the 2018 population. The City's Census population estimates are slightly lower than total population targets due to Census undercoverage estimated at 3 per cent.

Households are forecast to increase from approximately 174,980 in 2018 to 214,510 in 2028 and to 250,910 at ultimate development. These are increases of 23 per cent and 43 per cent respectively. The higher rate of household growth compared to population growth reflects a decline in occupancy levels expected in existing housing units and a shift to higher density development with lower persons per unit.

Employment is to increase from approximately 188,400 in 2018 to 245,060 in 2028 and to 309,090 at ultimate development. These are increases of 30 per cent and 64 per cent respectively.

Tables 7 and 8 detail housing unit growth for singles and semis, rows and other multiples and apartments. The forecast of residential units by unit type applies an assumption of the mix of development during each of the five year Census periods. In the initial 10-year forecast period from 2019–2028, which applies to “soft services,” approximately 59 per cent of new housing units are anticipated to be single and semi detached units, 25 per cent rows and other multiples and 16 per cent apartments. This mix is expected to change over the course of the forecast so that over the 2019–2041 period about 50 per cent of new housing units are expected to be singles/semis, 26 per cent rows and other multiples and 24 per cent apartments. The higher share of apartment units in the later part of the forecast reflects the shrinking of the City's land supply and a shift towards intensification of existing urban areas within Brampton's Urban Growth Centre. The forecast of population in new units is shown in Table 9.

The population estimated to reside in the new dwelling units is 144,560 over the 10-year period and 261,280 over the longer period to ultimate development (in 2041). These estimates are based on application of person per unit factors to each dwelling type. The per capita residential development charge rates are calculated based on these estimates.

E. NON-RESIDENTIAL SPACE FORECAST BASED ON THE FORECAST OF EMPLOYMENT (TABLES 10 AND 11)

City-wide non-residential development charges are calculated on a per square metre basis. Therefore, as required by the *DCA*, a forecast for non-residential building space is provided. Consistent with the residential forecast, the non-residential building space forecast covers a period from 2019 to ultimate development. The 10-year forecast period (2019–2028) is used for “soft” services and the forecast to ultimate development is used for engineered services (e.g. roads & related). The non-residential building space used in this study is based on the employment forecast.

The forecast of employment in the City is separated into three categories. They are:

- Population-related Employment
- Major office Employment
- Employment Land Employment

The non-residential space forecast prepared for development charges purposes is based on these employment forecasts and described below.

1. Population-Related Employment and Space Forecast

In 2018, approximately 75,260 or 40 per cent of the City’s 188,400 employees are employed in population-related activities. City-wide Population-related Employment is forecast to grow by 23 per cent between 2019 and 2028 to a total of 92,470 employees. Growth in the period following 2028 is expected to be more modest with total Population-related Employment increasing to 112,980 at ultimate development.

It is estimated that retail and commercial employment represents a majority of the City’s current Population-related Employment. Retail and other commercial jobs are expected to comprise 60 per cent of growth throughout the forecast. For converting Population-related Employment growth to building space, a factor of 50 square metres per employee is used.

Over the 10-year planning period 2019–2028, about 860,700 square metres of building space is forecast to be added in this category. Over the period to build-out 1.89 million square metres will be added.

2. Major Office Employment and Space Forecast

In 2018, 15,890 workers or 8 per cent of the City's total employment is employed in the major office category. In the 10-year forecast period, Brampton’s Major Office Employment is forecast to increase by 76 percent to 27,980 employees. At ultimate development 49,560 employees are forecast to be employed in the major office category.

While major office space has a high profile in the community, employment in this category is not a large part of the existing base in Brampton. This share of total employment is expected to increase with the development of the City's Urban Growth Centre over the long-term.

A ratio of 23 square metres per employee is used in the forecast to estimate future major office building space. Approximately 278,060 square metres of major office space is forecast to be added by 2028. By ultimate development about 774,510 square metres is forecast.

3. Employment Land Forecast

Employment within designated employment lands is the largest category of employment in Brampton, and this is expected to remain the case throughout the forecast. Typical operations that occur on employment lands include manufacturing, distribution and smaller offices.

In 2018, an estimated 97,260 people, or 52 per cent of the City's total employment, were employed in the employment lands category. This amount is expected to grow by 23 per cent over the 10-year forecast period from 2019–2028 and by 50 per cent to ultimate development.

Growth in building space on employment lands is forecast by applying a ratio of 135 square metres per employee. Approximately 3.69 million square metres are forecast to be added by 2028 and 6.65 million square metres are expected to be added by 2041.

**APPENDIX A - TABLE 1
CITY OF BRAMPTON
HISTORICAL POPULATION, OCCUPIED HOUSEHOLDS & EMPLOYMENT SUMMARY**

Mid-Year	Census Population	Annual Growth	Occupied Households	Annual Growth	Av. Household Size (PPU)	Employment For DC Study	Annual Growth	Activity Rate
2006	433,800		125,900		3.45	146,590		33.8%
2007	450,486	16,686	130,261	4,361	3.46	149,629	3,039	33.2%
2008	467,814	17,328	134,773	4,512	3.47	152,736	3,107	32.6%
2009	485,808	17,994	139,442	4,669	3.48	155,914	3,178	32.1%
2010	504,495	18,687	144,272	4,830	3.50	159,165	3,251	31.5%
2011	523,900	19,405	149,270	4,998	3.51	162,490	3,325	31.0%
2012	537,275	13,375	152,843	3,573	3.52	165,928	3,438	30.9%
2013	550,992	13,717	156,501	3,658	3.52	169,444	3,516	30.8%
2014	565,059	14,067	160,247	3,746	3.53	173,040	3,596	30.6%
2015	579,485	14,426	164,083	3,836	3.53	176,718	3,678	30.5%
2016	594,280	14,795	168,010	3,927	3.54	180,480	3,762	30.4%
2017	607,036	12,756	171,452	3,442	3.54	184,386	3,906	30.4%
2018	620,067	13,030	174,981	3,529	3.54	188,398	4,011	30.4%
Growth 2009-2018		152,253		40,208			35,661	

Source: Statistics Canada, Census of Canada

**APPENDIX A - TABLE 2
CITY OF BRAMPTON
HISTORICAL OCCUPIED HOUSEHOLDS BY UNIT TYPE**

Mid-Year	Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2006	86,400	14,100	25,400	125,900	69%	11%	20%	100%
2007	89,627	14,674	25,960	130,261	69%	11%	20%	100%
2008	92,970	15,272	26,532	134,773	69%	11%	20%	100%
2009	96,432	15,894	27,117	139,442	69%	11%	19%	100%
2010	100,017	16,541	27,714	144,272	69%	11%	19%	100%
2011	103,730	17,215	28,325	149,270	69%	12%	19%	100%
2012	105,917	17,856	29,070	152,843	69%	12%	19%	100%
2013	108,145	18,522	29,834	156,501	69%	12%	19%	100%
2014	110,417	19,212	30,619	160,247	69%	12%	19%	100%
2015	112,731	19,928	31,424	164,083	69%	12%	19%	100%
2016	115,090	20,670	32,250	168,010	69%	12%	19%	100%
2017	117,346	21,575	32,531	171,452	68%	13%	19%	100%
2018	119,646	22,520	32,815	174,981	68%	13%	19%	100%

Source: Statistics Canada, Census of Canada & Hemson estimates

APPENDIX A - TABLE 3
CITY OF BRAMPTON
HISTORICAL ANNUAL GROWTH IN OCCUPIED HOUSEHOLDS BY UNIT TYPE

Mid-Year	Annual Growth in Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2006								
2007	3,227	574	560	4,361	74%	13%	13%	100%
2008	3,342	598	572	4,512	74%	13%	13%	100%
2009	3,462	622	585	4,669	74%	13%	13%	100%
2010	3,585	647	598	4,830	74%	13%	12%	100%
2011	3,713	674	611	4,998	74%	13%	12%	100%
2012	2,187	641	745	3,573	61%	18%	21%	100%
2013	2,229	665	764	3,658	61%	18%	21%	100%
2014	2,271	690	784	3,746	61%	18%	21%	100%
2015	2,315	716	805	3,836	60%	19%	21%	100%
2016	2,359	742	826	3,927	60%	19%	21%	100%
2017	2,256	905	281	3,442	66%	26%	8%	100%
2018	2,300	945	284	3,529	65%	27%	8%	100%
Growth 2009-2018	26,676	7,248	6,283	40,208	66%	18%	16%	100%

Source: Statistics Canada, Census of Canada & Hemson estimates

**APPENDIX A - TABLE 4
CITY OF BRAMPTON
HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE**

Dwelling Unit Type	Period of Construction										Period of Construction Summaries		
	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	Pre 2006	2006-2016	Total
Singles & Semis													
Household Population	3,720	9,288	23,095	39,700	56,033	21,815	43,990	104,405	76,733	66,735	302,045	143,468	445,513
Households	1,325	3,368	7,980	12,753	16,100	5,610	11,160	24,805	17,590	15,515	83,100	33,105	116,205
Household Size	2.81	2.76	2.89	3.11	3.48	3.89	3.94	4.21	4.36	4.30	3.63	4.33	3.83
Rows													
Household Population	555	730	3,150	12,040	6,660	5,225	7,730	8,420	8,950	12,150	44,510	21,100	65,610
Households	170	210	1,110	4,055	2,170	1,585	2,410	2,445	2,660	3,935	14,155	6,595	20,750
Household Size	3.26	3.48	2.84	2.97	3.07	3.30	3.21	3.44	3.36	3.09	3.14	3.20	3.16
Apartments (excl. Duplexes): Bachelor or 1BR													
Household Population	400	710	1,525	2,525	2,210	935	630	520	1,055	870	9,455	1,925	11,380
Households	330	540	1,125	1,765	1,495	605	390	340	790	640	6,590	1,430	8,020
Household Size	1.21	1.31	1.36	1.43	1.48	1.55	1.62	1.53	1.34	1.36	1.43	1.35	1.42
Apartments (excl. Duplexes): 2BR or more													
Household Population	1,025	2,490	6,345	14,175	11,215	3,935	2,605	1,935	2,110	2,340	43,725	4,450	48,175
Households	390	970	2,300	4,760	4,180	1,400	920	665	855	1,025	15,585	1,880	17,465
Household Size	2.63	2.57	2.76	2.98	2.68	2.81	2.83	2.91	2.47	2.28	2.81	2.37	2.76
Apartments (excl. Duplexes) - Total													
Household Population	1,425	3,200	7,870	16,700	13,425	4,870	3,235	2,455	3,165	3,210	53,180	6,375	59,555
Households	720	1,510	3,425	6,525	5,675	2,005	1,310	1,005	1,645	1,665	22,175	3,310	25,485
Household Size	1.98	2.12	2.30	2.56	2.37	2.43	2.47	2.44	1.92	1.93	2.40	1.93	2.34
Duplexes													
Household Population	280	488	910	1,810	5,028	2,050	2,760	3,950	1,848	460	17,275	2,308	19,583
Households	110	208	325	588	1,390	540	740	980	520	135	4,880	655	5,535
Household Size	2.55	2.35	2.80	3.08	3.62	3.80	3.73	4.03	3.55	3.41	3.54	3.52	3.54
All Units													
Household Population	5,980	13,705	35,025	70,250	81,145	33,960	57,715	119,230	90,695	82,555	417,010	173,250	590,260
Households	2,325	5,295	12,840	23,920	25,335	9,740	15,620	29,235	22,415	21,250	124,310	43,665	167,975
Household Size	2.57	2.59	2.73	2.94	3.20	3.49	3.69	4.08	4.05	3.88	3.35	3.97	3.51

Note: Population and household values in this table are based on National Household Survey response rates and may differ from Census values

Source: Statistics Canada, 2016 National Household Survey Special Run.

50% of the Duplex Units have been reallocated to Single/Semi Detached Units

APPENDIX A - TABLE 5
CITY OF BRAMPTON
HISTORICAL PLACE OF WORK EMPLOYMENT

Mid-Year	Office	Annual Growth	Population Related	Annual Growth	Employment Land	Annual Growth	Total For DC Study	Annual Growth	Work at Home	Annual Growth	Total w/ Work At Home	Annual Growth
2006	9,830		57,030		79,730		146,590		9,300		155,890	
2007	10,177	347	58,506	1,476	80,946	1,216	149,629	3,039	9,364	64	158,993	3,103
2008	10,537	359	60,020	1,514	82,180	1,234	152,736	3,107	9,429	65	162,165	3,172
2009	10,909	372	61,573	1,553	83,433	1,253	155,914	3,178	9,494	65	165,408	3,243
2010	11,294	385	63,166	1,593	84,705	1,272	159,165	3,251	9,559	65	168,724	3,316
2011	11,693	399	64,801	1,635	85,996	1,291	162,490	3,325	9,625	66	172,115	3,391
2012	12,175	482	66,111	1,310	87,643	1,646	165,928	3,438	9,869	244	175,797	3,683
2013	12,677	502	67,447	1,336	89,321	1,678	169,444	3,516	10,120	250	179,564	3,767
2014	13,199	523	68,810	1,363	91,031	1,710	173,040	3,596	10,377	257	183,417	3,853
2015	13,743	544	70,201	1,391	92,774	1,743	176,718	3,678	10,640	263	187,358	3,941
2016	14,310	567	71,620	1,419	94,550	1,776	180,480	3,762	10,910	270	191,390	4,032
2017	15,077	767	73,416	1,796	95,893	1,343	184,386	3,906	11,144	234	195,530	4,140
2018	15,886	808	75,256	1,841	97,256	1,362	188,398	4,011	11,383	239	199,780	4,250
Growth 2009-2018		5,349		15,237		15,076		35,661		1,954		37,615

Note: Employment Values Include No Fixed Place of Work Employment

Source: Statistics Canada, Census of Canada & Hemson estimates

**APPENDIX A - TABLE 6
CITY OF BRAMPTON
POPULATION, HOUSEHOLD & EMPLOYMENT FORECAST SUMMARY**

Mid-Year	Census Population	Annual Growth	Total Population	Annual Growth	Total Occupied Households	Annual Growth	Av. Household Size (PPU)	Place of Work Employment ⁽¹⁾	Annual Growth	Activity Rate
2016	594,280		613,600		168,010		3.54	180,480		30.4%
2017	607,036	12,756	626,800	13,200	171,452	3,442	3.54	184,386	3,906	30.4%
2018	620,067	13,030	640,283	13,484	174,981	3,529	3.54	188,398	4,011	30.4%
2019	633,377	13,310	654,057	13,774	178,598	3,617	3.55	192,518	4,120	30.4%
2020	646,972	13,596	668,127	14,070	182,306	3,708	3.55	196,751	4,233	30.4%
2021	660,860	13,888	682,500	14,373	186,110	3,804	3.55	201,100	4,349	30.4%
2022	673,390	12,530	695,440	12,940	190,124	4,014	3.54	207,195	6,095	30.8%
2023	686,157	12,767	708,625	13,185	194,233	4,109	3.53	213,508	6,314	31.1%
2024	699,167	13,009	722,060	13,435	198,439	4,206	3.52	220,050	6,542	31.5%
2025	712,423	13,256	735,750	13,690	202,744	4,305	3.51	226,831	6,780	31.8%
2026	725,930	13,507	749,700	13,950	207,150	4,406	3.50	233,860	7,029	32.2%
2027	737,599	11,669	761,765	12,065	210,795	3,645	3.50	239,389	5,529	32.5%
2028	749,455	11,856	774,025	12,260	214,511	3,716	3.49	245,063	5,674	32.7%
2029	761,502	12,047	786,482	12,457	218,298	3,787	3.49	250,886	5,824	32.9%
2030	773,743	12,241	799,139	12,657	222,158	3,860	3.48	256,864	5,977	33.2%
2031	786,180	12,437	812,000	12,861	226,090	3,932	3.48	263,000	6,136	33.5%
2032	794,162	7,982	820,251	8,251	228,714	2,624	3.47	267,347	4,347	33.7%
2033	802,226	8,063	828,585	8,334	231,377	2,663	3.47	271,795	4,448	33.9%
2034	810,371	8,145	837,004	8,419	234,081	2,704	3.46	276,348	4,553	34.1%
2035	818,599	8,228	845,509	8,505	236,824	2,743	3.46	281,008	4,660	34.3%
2036	826,910	8,311	854,100	8,591	239,610	2,786	3.45	285,780	4,772	34.6%
2037	833,744	6,834	861,162	7,062	241,808	2,198	3.45	290,208	4,428	34.8%
2038	840,635	6,891	868,283	7,121	244,036	2,228	3.44	294,749	4,541	35.1%
2039	847,582	6,948	875,462	7,180	246,296	2,260	3.44	299,407	4,658	35.3%
2040	854,587	7,005	882,701	7,239	248,586	2,290	3.44	304,186	4,779	35.6%
2041	861,650	7,063	890,000	7,299	250,910	2,324	3.43	309,090	4,904	35.9%
Growth 2019-2028		129,388		133,741		39,530			56,665	
Growth 2019-2031		166,113		171,717		51,109			74,602	
Growth 2019-2041		241,583		249,717		75,929			120,692	

Note: Includes No Fixed Place of Work Employment but excludes Work at Home

Source: City of Brampton and Hemson Consulting Ltd., 2018

APPENDIX A - TABLE 7
CITY OF BRAMPTON
FORECAST OF OCCUPIED HOUSEHOLDS BY UNIT TYPE

Mid-Year	Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2016	115,090	20,670	32,250	168,010	69%	12%	19%	100%
2017	117,346	21,575	32,531	171,452	68%	13%	19%	100%
2018	119,646	22,520	32,815	174,981	68%	13%	19%	100%
2019	121,991	23,506	33,101	178,598	68%	13%	19%	100%
2020	124,382	24,535	33,389	182,306	68%	13%	18%	100%
2021	126,820	25,610	33,680	186,110	68%	14%	18%	100%
2022	129,173	26,587	34,364	190,124	68%	14%	18%	100%
2023	131,570	27,601	35,062	194,233	68%	14%	18%	100%
2024	134,011	28,654	35,774	198,439	68%	14%	18%	100%
2025	136,497	29,747	36,500	202,744	67%	15%	18%	100%
2026	139,030	30,880	37,240	207,150	67%	15%	18%	100%
2027	140,980	31,723	38,092	210,795	67%	15%	18%	100%
2028	142,958	32,589	38,964	214,511	67%	15%	18%	100%
2029	144,964	33,478	39,856	218,298	66%	15%	18%	100%
2030	146,998	34,392	40,768	222,158	66%	15%	18%	100%
2031	149,060	35,330	41,700	226,090	66%	16%	18%	100%
2032	150,136	35,987	42,591	228,714	66%	16%	19%	100%
2033	151,220	36,656	43,501	231,377	65%	16%	19%	100%
2034	152,312	37,338	44,431	234,081	65%	16%	19%	100%
2035	153,412	38,032	45,380	236,824	65%	16%	19%	100%
2036	154,520	38,740	46,350	239,610	64%	16%	19%	100%
2037	155,198	39,371	47,239	241,808	64%	16%	20%	100%
2038	155,879	40,012	48,145	244,036	64%	16%	20%	100%
2039	156,563	40,664	49,069	246,296	64%	17%	20%	100%
2040	157,250	41,326	50,010	248,586	63%	17%	20%	100%
2041	157,940	42,000	50,970	250,910	63%	17%	20%	100%

Source: City of Brampton and Hemson Consulting Ltd., 2018

APPENDIX A - TABLE 8
CITY OF BRAMPTON
FORECAST OF ANNUAL GROWTH IN OCCUPIED HOUSEHOLDS BY UNIT TYPE

Mid-Year	Annual Growth in Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apts.	Total
2016								
2017	2,256	905	281	3,442	66%	26%	8%	100%
2018	2,300	945	284	3,529	65%	27%	8%	100%
2019	2,345	986	286	3,617	65%	27%	8%	100%
2020	2,391	1,029	288	3,708	64%	28%	8%	100%
2021	2,438	1,075	291	3,804	64%	28%	8%	100%
2022	2,353	977	684	4,014	59%	24%	17%	100%
2023	2,397	1,014	698	4,109	58%	25%	17%	100%
2024	2,441	1,053	712	4,206	58%	25%	17%	100%
2025	2,486	1,093	726	4,305	58%	25%	17%	100%
2026	2,533	1,133	740	4,406	57%	26%	17%	100%
2027	1,950	843	852	3,645	53%	23%	23%	100%
2028	1,978	866	872	3,716	53%	23%	23%	100%
2029	2,006	889	892	3,787	53%	23%	24%	100%
2030	2,034	914	912	3,860	53%	24%	24%	100%
2031	2,062	938	932	3,932	52%	24%	24%	100%
2032	1,076	657	891	2,624	41%	25%	34%	100%
2033	1,084	669	910	2,663	41%	25%	34%	100%
2034	1,092	682	930	2,704	40%	25%	34%	100%
2035	1,100	694	949	2,743	40%	25%	35%	100%
2036	1,108	708	970	2,786	40%	25%	35%	100%
2037	678	631	889	2,198	31%	29%	40%	100%
2038	681	641	906	2,228	31%	29%	41%	100%
2039	684	652	924	2,260	30%	29%	41%	100%
2040	687	662	941	2,290	30%	29%	41%	100%
2041	690	674	960	2,324	30%	29%	41%	100%
Growth 2019-2028	23,312	10,069	6,149	39,530	59%	25%	16%	100%
Growth 2019-2031	29,414	12,810	8,885	51,109	58%	25%	17%	100%
Growth 2019-2041	38,294	19,480	18,155	75,929	50%	26%	24%	100%

Source: City of Brampton and Hemson Consulting Ltd., 2018

**APPENDIX A - TABLE 9
CITY OF BRAMPTON
FORECAST POPULATION IN NEW HOUSEHOLDS BY UNIT TYPE**

Mid-Year	Assumed Average Occupancies (PPU)				Forecast Population in New Households			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2016	4.33	3.20	1.93					
2017	4.33	3.20	1.93					
2018	4.34	3.20	1.93	3.84	9,972	3,028	549	13,549
2019	4.34	3.21	1.94	3.84	10,170	3,162	554	13,886
2020	4.34	3.21	1.94	3.84	10,372	3,302	559	14,233
2021	4.34	3.21	1.94	3.84	10,578	3,452	566	14,596
2022	4.33	3.20	1.94	3.65	10,184	3,131	1,329	14,643
2023	4.32	3.20	1.94	3.64	10,348	3,243	1,354	14,945
2024	4.31	3.19	1.94	3.63	10,512	3,360	1,380	15,252
2025	4.30	3.18	1.94	3.62	10,678	3,480	1,406	15,565
2026	4.28	3.18	1.93	3.61	10,853	3,600	1,431	15,884
2027	4.28	3.17	1.93	3.48	8,345	2,676	1,649	12,670
2028	4.27	3.17	1.94	3.47	8,455	2,747	1,688	12,889
2029	4.27	3.17	1.94	3.46	8,564	2,817	1,727	13,108
2030	4.26	3.17	1.94	3.45	8,673	2,894	1,766	13,333
2031	4.26	3.16	1.94	3.45	8,782	2,967	1,806	13,555
2032	4.26	3.16	1.94	3.19	4,579	2,077	1,727	8,382
2033	4.25	3.16	1.94	3.19	4,609	2,113	1,765	8,486
2034	4.25	3.16	1.94	3.18	4,638	2,153	1,804	8,595
2035	4.24	3.15	1.94	3.17	4,668	2,189	1,842	8,699
2036	4.24	3.15	1.94	3.16	4,698	2,231	1,883	8,812
2037	4.24	3.15	1.94	3.00	2,874	1,988	1,727	6,589
2038	4.24	3.15	1.94	2.99	2,886	2,019	1,762	6,667
2039	4.24	3.15	1.95	2.99	2,898	2,053	1,798	6,749
2040	4.24	3.15	1.95	2.98	2,910	2,084	1,833	6,827
2041	4.23	3.15	1.95	2.98	2,922	2,121	1,871	6,915
Growth 2019-2023	4.33	3.21	1.94	3.76	51,652	16,289	4,362	72,303
Growth 2019-2028	4.31	3.19	1.94	3.66	100,495	32,153	11,916	144,563
Growth 2019-2031	4.30	3.19	1.94	3.61	126,514	40,831	17,215	184,560
Growth 2019-2041	4.29	3.18	1.94	3.44	164,197	61,859	35,226	261,282

Source: City of Brampton and Hemson Consulting Ltd., 2018

**APPENDIX A - TABLE 10
CITY OF BRAMPTON
FORECAST OF PLACE OF WORK EMPLOYMENT**

Mid-Year	Major Office	Annual Growth	Population Related	Annual Growth	Employment Land	Annual Growth	Total For DC Study	Annual Growth	Work at Home	Annual Growth	Total w/ Work At Home	Annual Growth
2016	14,310		71,620		94,550		180,480		10,910		191,390	
2017	15,077	767	73,416	1,796	95,893	1,343	184,386	3,906	11,144	234	195,530	4,140
2018	15,886	808	75,256	1,841	97,256	1,362	188,398	4,011	11,383	239	199,780	4,250
2019	16,737	852	77,143	1,887	98,637	1,382	192,518	4,120	11,626	244	204,144	4,364
2020	17,635	897	79,077	1,934	100,039	1,401	196,751	4,233	11,876	249	208,626	4,482
2021	18,580	945	81,060	1,983	101,460	1,421	201,100	4,349	12,130	254	213,230	4,604
2022	19,813	1,233	82,630	1,570	104,751	3,291	207,195	6,095	12,361	231	219,556	6,326
2023	21,128	1,315	84,230	1,600	108,150	3,398	213,508	6,314	12,596	235	226,104	6,549
2024	22,530	1,402	85,862	1,631	111,658	3,508	220,050	6,542	12,836	240	232,886	6,782
2025	24,026	1,495	87,525	1,663	115,280	3,622	226,831	6,780	13,081	244	239,911	7,025
2026	25,620	1,594	89,220	1,695	119,020	3,740	233,860	7,029	13,330	249	247,190	7,279
2027	26,772	1,152	90,831	1,611	121,786	2,766	239,389	5,529	13,543	213	252,932	5,742
2028	27,975	1,203	92,471	1,640	124,617	2,831	245,063	5,674	13,760	216	258,822	5,890
2029	29,233	1,258	94,140	1,669	127,514	2,896	250,886	5,824	13,980	220	264,866	6,043
2030	30,547	1,314	95,840	1,700	130,477	2,964	256,864	5,977	14,203	223	271,067	6,201
2031	31,920	1,373	97,570	1,730	133,510	3,033	263,000	6,136	14,430	227	277,430	6,363
2032	33,332	1,412	99,097	1,527	134,918	1,408	267,347	4,347	14,577	147	281,924	4,494
2033	34,805	1,474	100,649	1,551	136,341	1,423	271,795	4,448	14,725	148	286,520	4,597
2034	36,345	1,539	102,224	1,576	137,779	1,438	276,348	4,553	14,875	150	291,223	4,703
2035	37,952	1,607	103,825	1,600	139,232	1,453	281,008	4,660	15,027	152	296,035	4,812
2036	39,630	1,678	105,450	1,625	140,700	1,468	285,780	4,772	15,180	153	300,960	4,925
2037	41,442	1,812	106,915	1,465	141,851	1,151	290,208	4,428	15,306	126	305,514	4,554
2038	43,338	1,895	108,400	1,485	143,011	1,160	294,749	4,541	15,433	127	310,182	4,668
2039	45,320	1,982	109,906	1,506	144,181	1,170	299,407	4,658	15,561	128	314,968	4,786
2040	47,393	2,073	111,432	1,527	145,361	1,179	304,186	4,779	15,690	129	319,875	4,908
2041	49,560	2,167	112,980	1,548	146,550	1,189	309,090	4,904	15,820	130	324,910	5,035
Growth 2019-2028		12,090		17,214		27,361		56,665		2,377		59,042
Growth 2019-2031		16,034		22,314		36,254		74,602		3,047		77,650
Growth 2019-2041		33,674		37,724		49,294		120,692		4,437		125,130

Note: Includes No Fixed Place of Work Employment

Source: City of Brampton and Hemson Consulting Ltd., 2018

APPENDIX A - TABLE 11
CITY OF BRAMPTON
FORECAST OF ANNUAL NON-RESIDENTIAL SPACE GROWTH

Employment Density	
Population-Related Weighted	50 m ² per employee
Commercial	40 m ² per employee
Institutional	65 m ² per employee
Employment Land	135 m ² per employee
Major Office	23 m ² per employee

Mid-Year	Major Office	Population Related	Employment Land	Total For DC Study
2019	19,589	94,342	186,533	300,464
2020	20,639	96,708	189,183	306,529
2021	21,745	99,132	191,871	312,748
2022	28,361	78,500	444,340	551,201
2023	30,244	80,020	458,755	569,019
2024	32,251	81,570	473,637	587,458
2025	34,391	83,150	489,002	606,543
2026	36,673	84,760	504,866	626,299
2027	26,489	80,539	373,461	480,489
2028	27,680	81,993	382,141	491,814
2029	28,924	83,473	391,024	503,421
2030	30,224	84,980	400,112	515,317
2031	31,583	86,515	409,412	527,509
2032	32,465	76,371	190,078	298,914
2033	33,901	77,567	192,083	303,550
2034	35,400	78,781	194,109	308,289
2035	36,965	80,014	196,156	313,135
2036	38,600	81,267	198,224	318,091
2037	41,687	73,237	155,387	270,310
2038	43,593	74,254	156,658	274,505
2039	45,587	75,286	157,940	278,812
2040	47,672	76,331	159,232	283,235
2041	49,852	77,392	160,534	287,778
Growth 2019-2028	278,061	860,714	3,693,789	4,832,564
Growth 2019-2031	368,793	1,115,682	4,894,337	6,378,811
Growth 2019-2041	774,513	1,886,182	6,654,737	9,315,431

Note: Includes No Fixed Place of Work Employment

APPENDIX B

GENERAL SERVICES TECHNICAL APPENDIX

GENERAL SERVICES TECHNICAL APPENDICES INTRODUCTION AND OVERVIEW

The following six appendices provide the detailed analysis undertaken to establish the development charge rates for each of the general services in the City of Brampton:

Appendix B.1	General Government
Appendix B.2	Library Services
Appendix B.3	Fire Services
Appendix B.4	Recreation Services
Appendix B.5	Public Works
Appendix B.6	Parking

Every appendix contains a set of three tables. The tables provide the background data and analysis undertaken to arrive at the calculated development charge rates for that particular service. An overview of the content and purpose of each of the tables is given below.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 presents the data used to determine the 10-year historical service level. The *DCA* and *Ontario Regulation 82/98* require that 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 the purpose of this study, the historical inventory period is defined as 2009-2018.

O. Reg. 82/98 requires that when defining and determining historical service levels, both the 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 feet. The qualitative aspect is introduced by considering the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of cost per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be funded by new growth reflect,

not only the quantity (number and size), but also the quality (replacement value or cost) of service provided by the municipality in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by City staff in consultation with Hemson. This information is generally based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure. It should be noted that Suncorp Valuations was retained to establish replacement costs for all DC eligible facilities and those values have been incorporated into this study. Furthermore, land values have been based on appraised values prepared by Avison Young for the purpose of this study.

Table 1 also shows the calculation of the “maximum allowable” funding envelope, net of uncommitted excess capacity and the legislated 10 per cent reduction (for all applicable services). The maximum allowable is defined as the 10-year historical service level (expressed as either \$/capita or \$/population & employment) multiplied by the forecast increase in net population growth or net population and employment growth, over the future planning period. The resulting figure is the value of capital infrastructure that would have to be constructed for that particular service so that the 10-year historical service level is maintained.

There is also a requirement in the *DCA* to consider “excess capacity” within the City’s existing infrastructure that may be available to partially meet the future servicing requirements. If Council has expressed its intent, before or at the time the capacity was created, to recoup the cost of providing the capacity from new development, it is considered “committed excess capacity” under the *DCA*, and the associated capital cost is eligible for recovery.

TABLE 2 2019 – 2028 PROVISIONAL DEVELOPMENT-RELATED CAPITAL PROGRAM AND CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

In order to impose a development charge, it is not sufficient to merely base the charge on historical service levels. The *DCA* requires that Council express its intent to provide future capital facilities to support future growth. Based on the growth forecasts presented in Appendix A, City staff, with reliance on various Master Plans, have developed a development-related capital forecast which sets out the projects required to service anticipated growth for the 10-year period from 2019-2028.

To determine the share of the program that is eligible for recovery through development charges, the project costs are reduced by any anticipated grants,

subsidies or other recoveries, “replacement” shares and benefit to existing shares, and the legislated “10 per cent reduction” for any eligible service.

A replacement share occurs when a new facility will, at least in part, replace a facility that is demolished, redeployed or will otherwise not be available to serve its former function. The replacement share of the capital program is not deemed to be development-related and is therefore removed from the development charge calculation. The capital cost for replacement will require funding from non-development charge sources, typically property taxes.

When calculating development charges, the development-related net capital cost must be reduced by 10 per cent for all services except fire services, transit and engineered services (*DCA* s.5.(1)8.). The 10 per cent discount is therefore applied to all general services considered in this appendix with the exception of Fire Services and Public Works. As with replacement shares, the 10 per cent mandatory reduction must be funded from non-development charge sources.

The capital program less any replacement shares or benefit to existing shares, and the 10 per cent discount, yields the development-related costs. Although deemed development-related, not all of the net development-related capital program may be recoverable from development charges in the period from 2019-2028. For some services, reserve fund balances may be available to fund a share of the program. In addition, for some services, a portion of the capital program may service growth occurring after 2028. This portion of the capital program is deemed “pre-built” service capacity and is considered as committed excess capacity to be recovered under future development charges. The capital costs associated with pre-built service capacity are also removed from the development charge calculation.

The remaining portion of the net capital program represents the development-related cost that may be included in the development charge. In all cases, as required, this amount is equal to or less than the maximum allowable capital amount as calculated at the end of Table 1. The result is the discounted development-related net capital costs eligible for recovery against growth over the forecast period from 2019-2028.

Calculation of the Unadjusted Development Charges Rates

The section below the capital program displays the calculation of the “unadjusted” development charge rates. The term “unadjusted” development charge is used to distinguish the charge that is calculated prior to cash flow financing considerations. The cash flow analysis is shown in Table 3.

The first step in determining the unadjusted development charge rate is to allocate the development-related net capital cost between the residential and non-residential sectors. For General Government, Fire Services, Public Works and Parking and the development-related costs have been apportioned as 70 per cent residential and 30 per cent non-residential. This apportionment is based on the anticipated shares of population and employment growth over the 10-year forecast period.

The development-related costs associated with Library Services and Recreation have been allocated 100 per cent to the residential sector, as the need for these services is generally driven by residential development.

The residential share of the 2019-2028 DC eligible costs are then divided by the forecast population growth in new units. This gives the unadjusted residential development charge per capita. The non-residential development-related net capital costs are divided by the forecast increase in non-residential gross floor area (GFA). This yields a charge per square metre of new non-residential development.

TABLE 3 CASH FLOW ANALYSIS

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

In order to determine appropriate development charge rates reflecting borrowing and earnings necessary to support the net development-related funding requirement, assumptions are used for the inflation rate and interest rate. An inflation rate of 2 per cent is used for the funding requirements, an interest rate of 5.5 per cent is used for borrowing on the funds, and an interest rate of 3.5 per cent is applied to positive balances.

Table 3 displays the results of the cash flow analysis and provides the adjusted or final per capita residential and per square metre (of GFA) non-residential development charges.

APPENDIX B.1

GENERAL GOVERNMENT

APPENDIX B.1**GENERAL GOVERNMENT**

The *DCA* allows the cost of development-related studies and other general government functions to be included in the calculation of the development charges, as long as they are permitted under the legislation. Consistent with s. 5 (1) 7 of the *DCA*, the eligible development-related net capital cost for the provision of studies and permitted general government expenditures is reduced by 10 per cent in calculating the development charges.

TABLE 1 HISTORICAL SERVICE LEVELS

General Government consists of services related to buildings (e.g. animal control, courthouse) including land, equipment and fleet.

General Government services for buildings in Brampton are currently provided out of two City owned facilities valued at \$27.51 million. The land associated with this space totals 4.16 acres and is valued at \$6.24 million. Materials and equipment are valued at \$569,200. Fleet and maintenance equipment are split amongst General Government, Recreation and Public Works. General Government has a total of 49 vehicles and equipment that add another \$3.98 million to the value of the inventory.

The replacement value of the 2018 inventory of capital assets for General Government is \$38.30 million and the average historical service level over 10 years is \$52.76 per population and employment. The historical service level, multiplied by the 10-year forecast of net population and employment growth, results in a maximum allowable funding envelope of \$9.82 million (186,054 net population and employment growth x historical service level of \$52.76/population and employment).

The General Government funding envelope must be reduced by 10 per cent as required under the *DCA*. The resulting net maximum allowable funding envelope brought forward to the development charges calculation is reduced to \$8.83 million.

The historical service level cap does not apply to development-related studies.

TABLE 2 2019 – 2028 PROVISIONAL DEVELOPMENT-RELATED CAPITAL PROGRAM AND CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

As shown in Table 2, the 2019-2028 development-related gross cost for general government is \$39.11 million. The most significant project in the capital program relates to the construction of a new Animal Shelter planned for 2022-2023 for a total cost of \$23.00 million. The capital program also provides for various planning studies, including the completion of two DC studies, a Fire Master Plan, secondary plan reviews, growth management program support and enhancement studies, as well as other various development-related studies.

Recognizing that not all projects under this service are entirely a result of new growth in the City, “benefit to existing” shares have been netted off the total cost. These shares amount to \$22.24 million, which will not be recovered through development charges. The legislated 10 per cent discount totals \$1.69 million. The funds that are available in the DC reserves amount to \$4.33 million, and are used to help offset the cost of the program. No post-period benefit shares have been identified for this service.

The remaining \$10.85 million is eligible for development charges funding in the 10-year forecast planning period. This amount is included in the development charge calculation and is allocated 70 per cent, or \$7.60 million to the residential sector and 30 per cent, or \$3.26 million to the non-residential sector based on shares of 10-year growth in population and employment. The resulting unadjusted per capita residential charge is \$52.56 before cash flow adjustments. The non-residential unadjusted charge is \$0.67 per square metre.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential charge increases to \$54.01 per capita and the non-residential charge increases to \$0.70 per square metre.

10-year Hist. Service Level per pop & emp	GENERAL GOVERNMENT SUMMARY				Adjusted	
	2019 - 2028		Unadjusted		Development Charge	
	Development-Related Capital Program Total	Net DC Recoverable	Development Charge \$/capita	Development Charge \$/sq.m	\$/capita	\$/sq.m
\$52.76	\$39,105,000	\$10,854,480	\$52.56	\$0.67	\$54.01	\$0.70

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APPENDIX B.1
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
GENERAL GOVERNMENT

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq.ft)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Court House	58,488	58,488	58,488	58,488	58,488	58,488	58,488	58,488	58,488	58,488	58,488	\$416
Animal Shelter	8,916	8,916	8,916	8,916	8,916	8,916	8,916	8,916	8,916	8,916	8,916	\$356
Total (#)	67,404											
Total (\$000)	\$27,507.0											

LAND Facility Name	# of Acres										UNIT COST (\$/acre)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Court House	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	\$1,500,000
Animal Shelter	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	\$1,500,000
Total (acres)	4.16											
Total (\$000)	\$6,240.0											

MATERIALS AND EQUIPMENT Description	Total Value of Materials and Equipment (\$000)										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Court House	\$535.1	\$535.1	\$535.1	\$535.1	\$535.1	\$535.1	\$535.1	\$535.1	\$535.1	\$535.1	\$535.1
Animal Shelter	\$34.0	\$34.0	\$34.0	\$34.0	\$34.0	\$34.0	\$34.0	\$34.0	\$34.0	\$34.0	\$34.0
Total (\$000)	\$569.2	\$569.2	\$569.2	\$569.2	\$569.2	\$569.2	\$569.2	\$569.2	\$569.2	\$569.2	\$569.2

APPENDIX B.1
TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
GENERAL GOVERNMENT

MAINTENANCE VEHICLES & EQUIPMENT (#'s)	# of Equipment										UNIT COST (\$/unit)	Allocation to General Gov
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
(A) Cars, Station Wagons	30	31	31	28	23	15	13	13	2	2	\$38,400	40%
(B) Compact Pickups	6	5	5	4	3	3	3	3	3	3	\$26,000	0%
(C) Compact SUVs (2X4 & 4X4)	91	91	84	125	123	108	104	103	113	118	\$64,700	30%
(D) 3/4 & 1 Ton Pickups	38	36	36	36	36	33	13	11	8	6	\$61,300	5%
(E) 3/4 & 1 Ton 4X4 Pickups	50	60	58	79	76	105	128	126	131	133	\$71,600	5%
(F) Compact Vans	7	7	9	8	8	17	17	17	17	7	\$35,700	25%
(G) 3/4 & 1 Ton Vans	9	10	12	12	10	10	10	10	10	11	\$65,100	10%
(H) 1 - 7.5 Ton S Axle, Dual Axle Dump, Flat Bed	46	48	47	49	50	54	54	54	55	59	\$164,900	0%
(I) 7.5 - 20 Ton S Axle, D Wheeldump, Flat Bed, Tanker	40	34	37	39	37	37	37	36	36	36	\$294,900	0%
(J) 20 - 34 Ton Tandem Axle Dumps, Flusher, Flat Bed	15	15	14	14	14	14	14	14	14	14	\$409,200	0%
(L) 7.5 - 20 Ton Spec Vehicle, Buck, Crane, Bodyinterch	2	2	2	2	2	2	2	3	3	3	\$361,700	0%
(N) Trailer	47	54	68	69	69	68	68	68	68	67	\$308,500	5%
(O) Ice Resurfacers	20	19	20	20	20	21	21	21	21	22	\$106,200	\$0
(P) Loader Backhoe Combinations and Excavators	5	5	5	6	6	6	8	7	6	6	\$182,000	0%
(Q) Front End Loaders Rubber Tire and Crawler	8	8	8	8	8	10	10	10	10	10	\$326,900	0%
(R) Graders	1	-	-	-	-	-	-	-	-	-	\$275,400	0%
(S) Street Sweepers Mechanical And Vacuum	7	6	6	5	5	4	4	4	4	-	\$269,800	0%
(T) Tractors Farm Type All Sizes	25	25	25	23	26	27	28	28	28	28	\$156,300	0%
(U) Sidewalk Plows and Skid Steer Loaders	7	6	7	7	7	7	7	7	8	9	\$118,100	0%
Turf Equipment Mowers, Trimmers, Gators	68	65	65	68	68	116	116	116	124	124	\$114,400	0%
(X) Asphrollers, Grinders, Hotbx, Con/Asphsaw, Tamper	8	9	11	12	12	13	13	13	13	13	\$57,300	0%
(Y) Rd Maint Eqp, Signbrds, Stmrs, Leafloadrs, Compres	13	8	8	10	11	12	12	12	12	11	\$19,400	0%
(Z) Specialty Equipment Not Classified	56	56	69	68	72	89	96	89	89	85	\$590,700	0%
Total (#)	599	600	627	692	686	771	778	765	775	767		
Sub-total General Government Share Only (#)	49	50	49	61	58	54	52	52	50	49		
Total (\$000)	108,799.6	109,038.0	121,291.1	125,946.8	127,680.6	145,224.1	149,964.5	145,383.9	146,798.8	143,965.0		
Sub-total General Government Share Only (\$000)	\$3,368.6	\$3,528.1	\$3,631.9	\$4,463.3	\$4,324.0	\$4,069.5	\$3,982.1	\$3,949.4	\$3,983.3	\$3,983.2		

APPENDIX B.1
TABLE 1CITY OF BRAMPTON
CALCULATION OF SERVICE LEVELS
GENERAL GOVERNMENT

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historic Population	485,808	504,495	523,900	537,275	550,992	565,059	579,485	594,280	607,036	620,067
Historic Employment	<u>155,914</u>	<u>159,165</u>	<u>162,490</u>	<u>165,928</u>	<u>169,444</u>	<u>173,040</u>	<u>176,718</u>	<u>180,480</u>	<u>184,386</u>	<u>188,398</u>
Total Historic Population & Employment	641,723	663,660	686,390	703,203	720,437	738,100	756,204	774,760	791,423	808,464

INVENTORY SUMMARY (\$000)

Buildings	\$27,507.0	\$27,507.0	\$27,507.0	\$27,507.0	\$27,507.0	\$27,507.0	\$27,507.0	\$27,507.0	\$27,507.0	\$27,507.0
Land	\$6,240.0	\$6,240.0	\$6,240.0	\$6,240.0	\$6,240.0	\$6,240.0	\$6,240.0	\$6,240.0	\$6,240.0	\$6,240.0
Materials	\$569.2	\$569.2	\$569.2	\$569.2	\$569.2	\$569.2	\$569.2	\$569.2	\$569.2	\$569.2
Maintenance Equipment	\$3,368.6	\$3,528.1	\$3,631.9	\$4,463.3	\$4,324.0	\$4,069.5	\$3,982.1	\$3,949.4	\$3,983.3	\$3,983.2
Total (\$000)	\$37,684.8	\$37,844.3	\$37,948.1	\$38,779.5	\$38,640.1	\$38,385.6	\$38,298.3	\$38,265.6	\$38,299.4	\$38,299.4

SERVICE LEVELS (\$/population & employment)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average Service Level
Buildings	\$42.86	\$41.45	\$40.07	\$39.12	\$38.18	\$37.27	\$36.38	\$35.50	\$34.76	\$34.02	\$37.96
Land	\$9.72	\$9.40	\$9.09	\$8.87	\$8.66	\$8.45	\$8.25	\$8.05	\$7.88	\$7.72	\$8.61
Materials	\$0.89	\$0.86	\$0.83	\$0.81	\$0.79	\$0.77	\$0.75	\$0.73	\$0.72	\$0.70	\$0.79
Maintenance Equipment	\$5.25	\$5.32	\$5.29	\$6.35	\$6.00	\$5.51	\$5.27	\$5.10	\$5.03	\$4.93	\$5.40
Total (\$/pop & employ)	\$58.72	\$57.02	\$55.29	\$55.15	\$53.63	\$52.01	\$50.65	\$49.39	\$48.39	\$47.37	\$52.76

CITY OF BRAMPTON
CALCULATION OF MAXIMUM ALLOWABLE
GENERAL GOVERNMENT

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$52.76
Net Population & Employment Growth 2019 - 2028	186,054
Maximum Allowable Funding Envelope	\$9,816,394
Less: 10% Legislated Reduction	\$981,639
Discounted Maximum Allowable Funding Envelope	\$8,834,755

CITY OF BRAMPTON
2019 DEVELOPMENT CHARGES BACKGROUND STUDY
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Cost		Total DC Eligible Costs	DC Eligible Costs		
						Replacement and BTE Share	10% Reduction		Available DC Reserves	2019-2028	Post 2028
1.0 GENERAL GOVERNMENT											
1.1 Buildings, Land & Furnishings											
1.1.1	Animal Shelter Design	2022 - 2022	\$ 3,000,000	\$ -	\$ 3,000,000	\$ 1,950,000	\$ 105,000	\$ 945,000	\$ -	\$ 945,000	\$ -
1.1.2	Animal Shelter Construction	2023 - 2023	\$ 20,000,000	\$ -	\$ 20,000,000	\$ 13,000,000	\$ 700,000	\$ 6,300,000	\$ -	\$ 6,300,000	\$ -
	Subtotal Buildings, Land & Furnishings		\$ 23,000,000	\$ -	\$ 23,000,000	\$ 14,950,000	\$ 805,000	\$ 7,245,000	\$ -	\$ 7,245,000	\$ -
1.2 Development-Related Studies											
1.2.1	Official Plan Review	2019 - 2019	\$ 200,000	\$ -	\$ 200,000	\$ 100,000	\$ 10,000	\$ 90,000	\$ 90,000	\$ -	\$ -
1.2.2	Library Facilities Master Plan	2019 - 2019	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 3,000	\$ 27,000	\$ 27,000	\$ -	\$ -
1.2.3	Transportation and Transit Master Plan (TTMP)	2019 - 2019	\$ 200,000	\$ -	\$ 200,000	\$ 100,000	\$ 10,000	\$ 90,000	\$ 90,000	\$ -	\$ -
1.2.4	Bramalea City Centre Master Plan Studies	2019 - 2019	\$ 250,000	\$ -	\$ 250,000	\$ 125,000	\$ 12,500	\$ 112,500	\$ 112,500	\$ -	\$ -
1.2.5	Planning Vision Implementation	2019 - 2028	\$ 5,000,000	\$ -	\$ 5,000,000	\$ 2,500,000	\$ 250,000	\$ 2,250,000	\$ 2,250,000	\$ -	\$ -
1.2.6	Development Charges Study	2019 - 2019	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 10,000	\$ 90,000	\$ 90,000	\$ -	\$ -
1.2.7	Station Location Study	2019 - 2019	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 10,000	\$ 90,000	\$ 90,000	\$ -	\$ -
1.2.8	Fire Master Plan	2019 - 2019	\$ 150,000	\$ -	\$ 150,000	\$ -	\$ 15,000	\$ 135,000	\$ 135,000	\$ -	\$ -
1.2.9	Recreation Affiliation Study	2019 - 2019	\$ 25,000	\$ -	\$ 25,000	\$ 12,500	\$ 1,250	\$ 11,250	\$ 11,250	\$ -	\$ -
1.2.10	Secondary Plan Reviews	2019 - 2028	\$ 500,000	\$ -	\$ 500,000	\$ 250,000	\$ 25,000	\$ 225,000	\$ 225,000	\$ -	\$ -
1.2.11	Growth Management Program Support & Enhancement	2019 - 2028	\$ 500,000	\$ -	\$ 500,000	\$ 250,000	\$ 25,000	\$ 225,000	\$ 225,000	\$ -	\$ -
1.2.12	CIP Studies	2019 - 2028	\$ 500,000	\$ -	\$ 500,000	\$ 250,000	\$ 25,000	\$ 225,000	\$ 225,000	\$ -	\$ -
1.2.13	Misc. Planning Studies	2019 - 2028	\$ 2,000,000	\$ -	\$ 2,000,000	\$ 1,000,000	\$ 100,000	\$ 900,000	\$ 755,520	\$ 144,480	\$ -
1.2.14	Intensification Corridor Studies	2019 - 2028	\$ 1,000,000	\$ -	\$ 1,000,000	\$ 500,000	\$ 50,000	\$ 450,000	\$ -	\$ 450,000	\$ -
1.2.15	Development Guidelines	2020 - 2020	\$ 250,000	\$ -	\$ 250,000	\$ -	\$ 25,000	\$ 225,000	\$ -	\$ 225,000	\$ -
1.2.16	Official Plan Review	2020 - 2020	\$ 200,000	\$ -	\$ 200,000	\$ 100,000	\$ 10,000	\$ 90,000	\$ -	\$ 90,000	\$ -
1.2.17	Heritage Heights Employment Lands Master Plan	2020 - 2020	\$ 100,000	\$ -	\$ 100,000	\$ 50,000	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
1.2.18	Mobility Hub Master Planning	2020 - 2020	\$ 100,000	\$ -	\$ 100,000	\$ 50,000	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
1.2.19	Transportation and Transit Master Plan (TTMP)	2020 - 2020	\$ 150,000	\$ -	\$ 150,000	\$ 75,000	\$ 7,500	\$ 67,500	\$ -	\$ 67,500	\$ -
1.2.20	Official Plan Review	2021 - 2021	\$ 100,000	\$ -	\$ 100,000	\$ 50,000	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
1.2.21	Designated MTSA's Master Plans	2021 - 2021	\$ 150,000	\$ -	\$ 150,000	\$ 75,000	\$ 7,500	\$ 67,500	\$ -	\$ 67,500	\$ -
1.2.22	Transportation and Transit Master Plan (TTMP)	2021 - 2021	\$ 100,000	\$ -	\$ 100,000	\$ 50,000	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
1.2.23	Eldorado Park Master Plan	2021 - 2021	\$ 100,000	\$ -	\$ 100,000	\$ 50,000	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -

CITY OF BRAMPTON
2019 DEVELOPMENT CHARGES BACKGROUND STUDY
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Cost		Total DC Eligible Costs	DC Eligible Costs		
						Replacement and BTE Share	10% Reduction		Available DC Reserves	2019-2028	Post 2028
1.0 GENERAL GOVERNMENT											
1.2 Development-Related Studies											
1.2.24	Parks and Rec Master Plan Update	2022 - 2022	\$ 200,000	\$ -	\$ 200,000	\$ 100,000	\$ 10,000	\$ 90,000	\$ -	\$ 90,000	\$ -
1.2.25	Official Plan Review	2022 - 2022	\$ 100,000	\$ -	\$ 100,000	\$ 50,000	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
1.2.26	Queen Street Corridor MTSA's Master Plan	2022 - 2022	\$ 250,000	\$ -	\$ 250,000	\$ 125,000	\$ 12,500	\$ 112,500	\$ -	\$ 112,500	\$ -
1.2.27	Transportation and Transit Master Plan (TTMP)	2022 - 2022	\$ 50,000	\$ -	\$ 50,000	\$ 25,000	\$ 2,500	\$ 22,500	\$ -	\$ 22,500	\$ -
1.2.28	Official Plan Review	2023 - 2023	\$ 100,000	\$ -	\$ 100,000	\$ 50,000	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
1.2.29	Mobility Hub Master Planning	2023 - 2023	\$ 100,000	\$ -	\$ 100,000	\$ 50,000	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
1.2.30	Transportation and Transit Master Plan (TTMP)	2023 - 2023	\$ 250,000	\$ -	\$ 250,000	\$ 125,000	\$ 12,500	\$ 112,500	\$ -	\$ 112,500	\$ -
1.2.31	Arena Strategy	2023 - 2023	\$ 50,000	\$ -	\$ 50,000	\$ 25,000	\$ 2,500	\$ 22,500	\$ -	\$ 22,500	\$ -
1.2.32	Development Charges Study	2024 - 2024	\$ 250,000	\$ -	\$ 250,000	\$ -	\$ 25,000	\$ 225,000	\$ -	\$ 225,000	\$ -
1.2.33	Community Risk Assessment	2024 - 2024	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 10,000	\$ 90,000	\$ -	\$ 90,000	\$ -
1.2.34	Zoning By-law Review	2024 - 2024	\$ 500,000	\$ -	\$ 500,000	\$ 250,000	\$ 25,000	\$ 225,000	\$ -	\$ 225,000	\$ -
1.2.35	Physical Activity Strategy	2024 - 2024	\$ 50,000	\$ -	\$ 50,000	\$ 25,000	\$ 2,500	\$ 22,500	\$ -	\$ 22,500	\$ -
1.2.36	Development Guidelines	2025 - 2025	\$ 250,000	\$ -	\$ 250,000	\$ -	\$ 25,000	\$ 225,000	\$ -	\$ 225,000	\$ -
1.2.37	Fire Master Plan	2025 - 2025	\$ 150,000	\$ -	\$ 150,000	\$ -	\$ 15,000	\$ 135,000	\$ -	\$ 135,000	\$ -
1.2.38	Station Location Study	2025 - 2025	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 10,000	\$ 90,000	\$ -	\$ 90,000	\$ -
1.2.39	Indoor Turf Study	2025 - 2025	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
1.2.40	Youth Study	2025 - 2025	\$ 150,000	\$ -	\$ 150,000	\$ 75,000	\$ 7,500	\$ 67,500	\$ -	\$ 67,500	\$ -
1.2.41	Older Adult Strategy	2026 - 2026	\$ 150,000	\$ -	\$ 150,000	\$ 75,000	\$ 7,500	\$ 67,500	\$ -	\$ 67,500	\$ -
1.2.42	Official Plan Review	2026 - 2026	\$ 1,000,000	\$ -	\$ 1,000,000	\$ 500,000	\$ 50,000	\$ 450,000	\$ -	\$ 450,000	\$ -
1.2.43	Parks and Rec Master Plan	2027 - 2027	\$ 350,000	\$ -	\$ 350,000	\$ 175,000	\$ 17,500	\$ 157,500	\$ -	\$ 157,500	\$ -
1.2.44	Employment Land Study	2027 - 2027	\$ 100,000	\$ -	\$ 100,000	\$ 50,000	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
Subtotal Development-Related Studies			\$ 16,105,000	\$ -	\$ 16,105,000	\$ 7,287,500	\$ 881,750	\$ 7,935,750	\$ 4,326,270	\$ 3,609,480	\$ -
TOTAL GENERAL GOVERNMENT			\$ 39,105,000	\$ -	\$ 39,105,000	\$ 22,237,500	\$ 1,686,750	\$ 15,180,750	\$ 4,326,270	\$ 10,854,480	\$ -

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	70.0%	\$7,598,136
10 Year Growth in Population in New Units		144,563
Unadjusted Development Charge Per Capita (\$)		\$52.56
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	30.0%	\$ 3,256,344
10 Year Growth in Square Meters		4,832,564
Unadjusted Development Charge Per Sq.M (\$)		\$0.67

2019 - 2028 Net Funding Envelope for Facilities	\$ 8,834,755
Reserve Fund Balance	\$ 4,326,270

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APPENDIX B.1
TABLE 3

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
RESIDENTIAL DEVELOPMENT CHARGE

GENERAL GOVERNMENT	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE (\$000)	\$0.0	\$720.7	\$1,157.3	\$1,838.2	\$1,792.1	(\$2,373.7)	(\$2,067.9)	(\$1,717.3)	(\$1,281.1)	(\$754.4)	
2019-2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$41.6	\$372.4	\$183.4	\$892.1	\$4,609.1	\$435.4	\$435.4	\$403.9	\$183.4	\$41.6	\$7,598.1
- General Government: Inflated	\$41.6	\$379.8	\$190.8	\$946.7	\$4,989.1	\$480.7	\$490.3	\$463.9	\$214.8	\$49.7	\$8,247.4
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	13,886	14,233	14,596	14,643	14,945	15,252	15,565	15,884	12,670	12,889	144,563
REVENUE											
- DC Receipts: Inflated	\$749.9	\$784.1	\$820.2	\$839.3	\$873.7	\$909.5	\$946.7	\$985.4	\$801.7	\$831.9	\$8,542.4
INTEREST											
- Interest on Opening Balance	\$0.0	\$25.2	\$40.5	\$64.3	\$62.7	(\$130.6)	(\$113.7)	(\$94.5)	(\$70.5)	(\$41.5)	(\$257.9)
- Interest on In-year Transactions	\$12.4	\$7.1	\$11.0	(\$3.0)	(\$113.2)	\$7.5	\$8.0	\$9.1	\$10.3	\$13.7	(\$37.1)
TOTAL REVENUE	\$762.3	\$816.4	\$871.7	\$900.7	\$823.2	\$786.4	\$840.9	\$900.1	\$741.5	\$804.1	\$8,247.4
CLOSING CASH BALANCE	\$720.7	\$1,157.3	\$1,838.2	\$1,792.1	(\$2,373.7)	(\$2,067.9)	(\$1,717.3)	(\$1,281.1)	(\$754.4)	\$0.0	

2019 Adjusted Charge Per Capita	\$54.01
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Allocation of Capital Program	
Residential Sector	70.0%
Non-Residential Sector	30.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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APPENDIX B.1
TABLE 3

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
NON-RESIDENTIAL DEVELOPMENT CHARGE

GENERAL GOVERNMENT	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE (\$000)	\$0.0	\$196.0	\$260.1	\$418.0	\$436.7	(\$1,301.6)	(\$1,120.5)	(\$909.0)	(\$648.5)	(\$376.6)	
2019-2028 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$17.8	\$159.6	\$78.6	\$382.3	\$1,975.3	\$186.6	\$186.6	\$173.1	\$78.6	\$17.8	\$3,256.3
- General Government: Inflated	\$17.8	\$162.8	\$81.8	\$405.7	\$2,138.2	\$206.0	\$210.1	\$198.8	\$92.1	\$21.3	\$3,534.6
NEW NON-RESIDENTIAL DEVELOPMENT											
- Square Meters in New Buildings	300,464	306,529	312,748	551,201	569,019	587,458	606,543	626,299	480,489	491,814	4,832,564
REVENUE											
- DC Receipts: Inflated	\$210.5	\$219.0	\$227.9	\$409.8	\$431.5	\$454.4	\$478.5	\$504.0	\$394.4	\$411.8	\$3,741.8
INTEREST											
- Interest on Opening Balance	\$0.0	\$6.9	\$9.1	\$14.6	\$15.3	(\$71.6)	(\$61.6)	(\$50.0)	(\$35.7)	(\$20.7)	(\$193.7)
- Interest on In-year Transactions	\$3.4	\$1.0	\$2.6	\$0.1	(\$46.9)	\$4.3	\$4.7	\$5.3	\$5.3	\$6.8	(\$13.4)
TOTAL REVENUE	\$213.9	\$226.9	\$239.6	\$424.5	\$399.8	\$387.1	\$421.6	\$459.3	\$364.0	\$397.9	\$3,534.6
CLOSING CASH BALANCE	\$196.0	\$260.1	\$418.0	\$436.7	(\$1,301.6)	(\$1,120.5)	(\$909.0)	(\$648.5)	(\$376.6)	\$0.0	

2019 Adjusted Charge Per Square Metre	\$0.70
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Allocation of Capital Program	
Residential Sector	70.0%
Non-Residential Sector	30.0%
Rates for 2019	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.2

LIBRARY SERVICES

APPENDIX B.2
LIBRARY SERVICES

Brampton Library is responsible for the provision of library services in the City of Brampton. Brampton Library offers a variety of programming and servicing, including special programs for adults, seniors, teens and children. In 2018, the Library operated out of seven branches throughout the City and expects to expand its service over the next 10 years.

TABLE 1 HISTORICAL SERVICE LEVELS

The total space used to provide Library Services in Brampton totals about 204,500 square feet in 2018 with a replacement value of \$92.84 million. The land associated with this space totals 14.15 acres and is valued at \$24.09 million. Materials total \$16.88 million and furniture and equipment add another \$10.27 million to the value of the inventory. Personal computer related equipment is excluded in this total as required by the *DCA*.

The replacement value of the 2018 inventory of capital assets for Library Services is \$144.07 million, and the average historical service level over 10 years is \$202.05 per capita. The historical service level multiplied by the 10-year forecast of net population growth results in a maximum allowable funding envelope of \$26.14 million (129,388 net population growth x historical service level of \$202.05/capita).

Finally, the Library Services funding envelope must be reduced by 10 per cent as required under the *DCA*. The resulting net maximum allowable funding envelope brought forward to the development charges calculation is reduced to \$23.53 million.

TABLE 2 2019–2028 PROVISIONAL DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The first project in Library Services’ capital program is for the recovery of the negative reserve fund balance of \$10.48 million and this full amount is brought forward for recovery through development charges.

The development-related capital program is largely related to the construction of new space to meet the needs of future population growth. The program includes for the construction of new space at several different locations throughout the City –

some of the new space will be by way of constructing new libraries while other projects include for expansions at existing facilities. The program also includes for any land acquisition required to facilitate the construction and furnishings of the new buildings. Cumulatively, the building, land and furnishings components of the library programs totals \$87.11 million. Brampton Library also plans to expand its collections over the 10-year planning horizon, therefore, about \$20.39 million has been included to reflect the acquisition of new collection materials.

The total gross cost of the Library capital program is \$117.97 million. No grants, subsidies or other recoveries are anticipated to fund any shares of the above mentioned projects, and as such the net cost to the municipality remains at \$117.97 million. Benefit-to-existing and replacement shares in the amount of \$28.77 million related to the additional collection materials have been removed from the DC calculations.

The legislated 10 per cent discount totals \$7.87 million and is netted off of the net municipal costs, leaving \$81.32 million as the total development-related costs. An amount of \$57.79 million, by which the remaining DC eligible costs exceed the maximum allowable funding envelope, is deemed a post-period benefit, and will be considered for recovery in subsequent development charge by-laws.

The 2019-2028 DC costs eligible for recovery amount to \$23.53 million, which is allocated entirely against future residential development in the City of Brampton. This results in an unadjusted development charge of \$162.76 per capita.

TABLE 3 CASH FLOW ANALYSIS

The cash flow analysis is displayed in Table 3. It considers the timing of the projects against the timing of the development charge revenues to determine adjusted calculated rates. After cash flow analysis, the residential charge increases to \$178.16 per capita.

10-year Hist. Service Level per capita	LIBRARY SERVICES SUMMARY		Unadjusted		Adjusted	
	2019 - 2028		Development Charge		Development Charge	
	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$202.05	\$117,968,660	\$23,528,629	\$162.76	\$0.00	\$178.16	\$0.00

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APPENDIX B.2
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
LIBRARY SERVICES

BUILDINGS Branch Name	# of Square Feet										UNIT COST (\$/sq.ft)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Chinguacousy	52,724	52,724	52,724	52,724	52,724	52,724	52,724	52,724	52,724	48,338	48,338	\$420
Cyril Clark	25,354	25,354	25,354	25,354	25,354	25,354	25,354	25,354	25,354	25,354	25,354	\$403
Four Corners	38,939	38,939	38,939	38,939	38,939	38,939	38,939	38,939	38,939	38,939	38,939	\$368
Gore Meadows	-	-	-	-	32,000	32,000	32,000	32,000	32,000	32,000	32,000	\$492
Mount Pleasant Village	-	-	22,112	22,112	22,112	22,112	22,112	22,112	22,112	22,112	22,112	\$478
South Fletcher's	12,754	12,754	12,754	12,754	12,754	12,754	12,754	12,754	12,754	12,754	12,754	\$410
Springdale	-	-	-	-	-	-	-	-	-	-	25,000	\$660
Temporary Locations:												
North West Interim Branch (Creditview)	3,188	3,188	-	-	-	-	-	-	-	-	-	\$250
North East Interim Branch (Mountainash)	2,632	2,632	2,632	2,632	2,632	2,632	2,632	2,632	2,632	-	-	\$250
Total (sq.ft.)	135,591	135,591	154,515	154,515	186,515	186,515	186,515	186,515	186,515	179,497	204,497	
Total (\$000)	\$53,341.7	\$53,341.7	\$63,109.7	\$63,109.7	\$78,840.7	\$78,840.7	\$78,840.7	\$78,840.7	\$78,840.7	\$76,342.0	\$92,842.0	

LAND Branch Name	# of Acres										UNIT COST (\$/acre)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Chinguacousy	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	\$1,500,000
Cyril Clark	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	\$1,100,000
Four Corners	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	\$1,500,000
Gore Meadows	-	-	-	-	4.80	4.80	4.80	4.80	4.80	4.80	4.80	\$2,200,000
Mount Pleasant Village	-	-	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	\$1,100,000
South Fletcher's	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	\$2,200,000
Springdale	-	-	-	-	-	-	-	-	-	-	2.95	\$1,500,000
Temporary Locations:												
North West Interim Branch (Creditview)	1.26	1.26	-	-	-	-	-	-	-	-	-	\$2,200,000
North East Interim Branch (Mountainash)	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	-	-	\$1,500,000
Total (acres)	7.27	7.27	6.46	6.46	11.26	11.26	11.26	11.26	11.26	11.20	14.15	
Total (\$000)	\$11,469.0	\$11,469.0	\$9,192.0	\$9,192.0	\$19,752.0	\$19,752.00	\$19,752.00	\$19,752.00	\$19,752.00	\$19,662.00	\$24,087.00	

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APPENDIX B.2
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
LIBRARY SERVICES

MATERIALS Collection	# of Collection Materials										UNIT COST (\$/item)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Material Inventory	543,955	599,061	636,630	679,818	720,897	716,674	705,851	545,183	580,598	625,000	\$27
Total All Materials (#)	543,955	599,061	636,630	679,818	720,897	716,674	705,851	545,183	580,598	625,000	
Total (\$000)	\$14,686.8	\$16,174.6	\$17,189.0	\$18,355.1	\$19,464.2	\$19,350.2	\$19,058.0	\$14,719.9	\$15,676.1	\$16,875.0	

FURNITURE AND EQUIPMENT Branch Name	Total Value of Furniture and Equipment (\$000)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Chinguacousy	\$2,212.9	\$2,315.7	\$2,337.2	\$2,431.4	\$2,464.2	\$2,655.4	\$2,754.1	\$3,312.5	\$3,989.3	\$4,055.6
Cyril Clark	\$609.5	\$1,445.3	\$1,447.7	\$1,452.2	\$1,466.8	\$1,480.5	\$1,505.3	\$1,516.3	\$1,531.2	\$1,565.1
Four Corners	\$1,395.7	\$1,467.1	\$1,483.0	\$1,487.6	\$1,501.0	\$1,828.2	\$1,847.4	\$1,862.7	\$1,902.6	\$1,958.8
Gore Meadows	\$0.0	\$0.0	\$0.0	\$129.5	\$806.1	\$815.0	\$829.8	\$829.8	\$851.2	\$949.4
Mount Pleasant Village	\$0.0	\$0.0	\$375.5	\$381.7	\$523.3	\$528.2	\$553.3	\$602.7	\$614.8	\$662.2
South Fletcher's	\$538.9	\$898.2	\$899.8	\$917.7	\$922.8	\$934.1	\$973.5	\$982.9	\$1,000.6	\$1,036.4
Springdale	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$39.1
Temporary Locations:										
North West Interim Branch (Creditview)	\$130.9	\$135.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
North East Interim Branch (Mountainash)	\$99.5	\$103.7	\$104.7	\$104.7	\$104.7	\$107.3	\$107.3	\$0.0	\$0.0	\$0.0
Total (\$000)	\$4,987.4	\$6,365.1	\$6,647.8	\$6,904.6	\$7,788.9	\$8,348.7	\$8,570.7	\$9,106.9	\$9,889.7	\$10,266.6

APPENDIX B.2
TABLE 1

CITY OF BRAMPTON
CALCULATION OF SERVICE LEVELS
LIBRARY SERVICES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historic Population	485,808	504,495	523,900	537,275	550,992	565,059	579,485	594,280	607,036	620,067

INVENTORY SUMMARY (\$000)

Buildings	\$53,341.7	\$53,341.7	\$63,109.7	\$63,109.7	\$78,840.7	\$78,840.7	\$78,840.7	\$78,840.7	\$76,342.0	\$92,842.0
Land	\$11,469.0	\$11,469.0	\$9,192.0	\$9,192.0	\$19,752.0	\$19,752.0	\$19,752.0	\$19,752.0	\$19,662.0	\$24,087.0
Materials	\$14,686.8	\$16,174.6	\$17,189.0	\$18,355.1	\$19,464.2	\$19,350.2	\$19,058.0	\$14,719.9	\$15,676.1	\$16,875.0
Furniture and Equipment	\$4,987.4	\$6,365.1	\$6,647.8	\$6,904.6	\$7,788.9	\$8,348.7	\$8,570.7	\$9,106.9	\$9,889.7	\$10,266.6
Total (\$000)	\$84,484.9	\$87,350.4	\$96,138.5	\$97,561.4	\$125,845.8	\$126,291.6	\$126,221.4	\$122,419.5	\$121,569.9	\$144,070.6

Average
Service
Level

SERVICE LEVEL (\$/capita)

Buildings	\$109.80	\$105.73	\$120.46	\$117.46	\$143.09	\$139.53	\$136.05	\$132.67	\$125.76	\$149.73	\$128.03
Land	\$23.61	\$22.73	\$17.55	\$17.11	\$35.85	\$34.96	\$34.09	\$33.24	\$32.39	\$38.85	\$29.04
Materials	\$30.23	\$32.06	\$32.81	\$34.16	\$35.33	\$34.24	\$32.89	\$24.77	\$25.82	\$27.21	\$30.95
Furniture and Equipment	\$10.27	\$12.62	\$12.69	\$12.85	\$14.14	\$14.77	\$14.79	\$15.32	\$16.29	\$16.56	\$14.03
Total (\$/capita)	\$173.91	\$173.14	\$183.51	\$181.59	\$228.40	\$223.50	\$217.82	\$206.00	\$200.27	\$232.35	\$202.05

CITY OF BRAMPTON
CALCULATION OF MAXIMUM ALLOWABLE
LIBRARY SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$202.05
Net Population Growth 2019 - 2028	129,388
Maximum Allowable Funding Envelope	\$26,142,921
Less: 10% Legislated Reduction	\$2,614,292
Discounted Maximum Allowable Funding Envelope	\$23,528,629

CITY OF BRAMPTON
2019 DEVELOPMENT CHARGES BACKGROUND STUDY
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Cost		Total DC Eligible Costs	DC Eligible Costs		
						Replacement and BTE Share	10% Reduction		Available DC Reserves	2019-2028	Post 2028
2.0 LIBRARY SERVICES											
	2.1 Recovery of Negative Reserve Fund Balance	2019 - 2019	\$ 10,476,736	\$ -	\$ 10,476,736	\$ -	\$ -	\$ 10,476,736	\$ -	\$ 10,476,736	\$ -
	2.2 Buildings, Land & Furnishings										
	2.2.1 Automation Software Upgrades	2019 - 2028	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ 50,000	\$ 450,000	\$ -	\$ 135,000	\$ 315,000
	2.2.2 BramWest - FFE Additions	2019 - 2019	\$ 355,337	\$ -	\$ 355,337	\$ -	\$ 35,534	\$ 319,803	\$ -	\$ 319,803	\$ -
	2.2.3 Various Locations - FFE Additions	2021 - 2028	\$ 400,000	\$ -	\$ 400,000	\$ -	\$ 40,000	\$ 360,000	\$ -	\$ 135,000	\$ 225,000
	2.2.4 Ward 1 - City Library Building	2023 - 2023	\$ 50,000,000	\$ -	\$ 50,000,000	\$ 19,469,500	\$ 3,053,050	\$ 27,477,450	\$ -	\$ 9,794,720	\$ 17,682,730
	2.2.5 Ward 1 - City Library FFE	2023 - 2023	\$ 5,000,000	\$ -	\$ 5,000,000	\$ -	\$ 500,000	\$ 4,500,000	\$ -	\$ -	\$ 4,500,000
	2.2.6 William Osler Hospital - Building & FFE	2023 - 2023	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ 50,000	\$ 450,000	\$ -	\$ -	\$ 450,000
	2.2.7 Cyril Clark Expansion - Building	2024 - 2024	\$ 2,500,000	\$ -	\$ 2,500,000	\$ -	\$ 250,000	\$ 2,250,000	\$ -	\$ -	\$ 2,250,000
	2.2.8 Cyril Clark Expansion - FFE	2025 - 2025	\$ 250,000	\$ -	\$ 250,000	\$ -	\$ 25,000	\$ 225,000	\$ -	\$ -	\$ 225,000
	2.2.9 Ward 6 SouthWest - Building	2025 - 2025	\$ 12,500,000	\$ -	\$ 12,500,000	\$ -	\$ 1,250,000	\$ 11,250,000	\$ -	\$ -	\$ 11,250,000
	2.2.10 Ward 6 SouthWest - FFE	2025 - 2025	\$ 1,250,000	\$ -	\$ 1,250,000	\$ -	\$ 125,000	\$ 1,125,000	\$ -	\$ -	\$ 1,125,000
	2.2.11 Ward 3/7 Uptown Brampton - Land	2026 - 2026	\$ 4,200,000	\$ -	\$ 4,200,000	\$ -	\$ 420,000	\$ 3,780,000	\$ -	\$ -	\$ 3,780,000
	2.2.12 Ward 3/7 Uptown Brampton - Building	2027 - 2027	\$ 7,500,000	\$ -	\$ 7,500,000	\$ -	\$ 750,000	\$ 6,750,000	\$ -	\$ -	\$ 6,750,000
	2.2.13 Ward 3/7 Uptown Brampton - FFE	2027 - 2027	\$ 750,000	\$ -	\$ 750,000	\$ -	\$ 75,000	\$ 675,000	\$ -	\$ -	\$ 675,000
	2.2.14 Ward 6 Osmington Lands - Land	2027 - 2027	\$ 1,400,000	\$ -	\$ 1,400,000	\$ -	\$ 140,000	\$ 1,260,000	\$ -	\$ -	\$ 1,260,000
	Subtotal Buildings, Land & Furnishings		\$ 87,105,337	\$ -	\$ 87,105,337	\$ 19,469,500	\$ 6,763,584	\$ 60,872,253	\$ -	\$ 10,384,524	\$ 50,487,730
	2.3 Material Acquisitions										
	2.3.1 Expansion to Collection Materials	2019 - 2019	\$ 1,424,000	\$ -	\$ 1,424,000	\$ 854,400	\$ 56,960	\$ 512,640	\$ -	\$ 512,640	\$ -
	2.3.2 Expansion to Collection Materials	2020 - 2020	\$ 1,445,000	\$ -	\$ 1,445,000	\$ 867,000	\$ 57,800	\$ 520,200	\$ -	\$ 520,200	\$ -
	2.3.3 Expansion to Collection Materials	2021 - 2021	\$ 1,474,000	\$ -	\$ 1,474,000	\$ 884,400	\$ 58,960	\$ 530,640	\$ -	\$ 530,640	\$ -
	2.3.4 Expansion to Collection Materials	2022 - 2022	\$ 1,518,000	\$ -	\$ 1,518,000	\$ 910,800	\$ 60,720	\$ 546,480	\$ -	\$ 546,480	\$ -
	2.3.5 Expansion to Collection Materials	2023 - 2023	\$ 1,548,360	\$ -	\$ 1,548,360	\$ 929,016	\$ 61,934	\$ 557,410	\$ -	\$ 557,410	\$ -
	2.3.6 Ward 1 - City Library Collection Materials	2023 - 2023	\$ 3,000,000	\$ -	\$ 3,000,000	\$ -	\$ 300,000	\$ 2,700,000	\$ -	\$ -	\$ 2,700,000
	2.3.7 Expansion to Collection Materials	2024 - 2024	\$ 1,571,585	\$ -	\$ 1,571,585	\$ 942,951	\$ 62,863	\$ 565,771	\$ -	\$ -	\$ 565,771
	2.3.8 Expansion to Collection Materials	2025 - 2025	\$ 1,595,159	\$ -	\$ 1,595,159	\$ 957,096	\$ 63,806	\$ 574,257	\$ -	\$ -	\$ 574,257
	2.3.9 Ward 6 SouthWest Collection Materials	2025 - 2025	\$ 980,000	\$ -	\$ 980,000	\$ -	\$ 98,000	\$ 882,000	\$ -	\$ -	\$ 882,000
	2.3.10 Expansion to Collection Materials	2026 - 2026	\$ 1,619,087	\$ -	\$ 1,619,087	\$ 971,452	\$ 64,763	\$ 582,871	\$ -	\$ -	\$ 582,871
	2.3.11 Expansion to Collection Materials	2027 - 2027	\$ 1,643,373	\$ -	\$ 1,643,373	\$ 986,024	\$ 65,735	\$ 591,614	\$ -	\$ -	\$ 591,614
	2.3.12 Ward 3/7 Uptown Brampton Collection Materials	2027 - 2027	\$ 900,000	\$ -	\$ 900,000	\$ -	\$ 90,000	\$ 810,000	\$ -	\$ -	\$ 810,000
	2.3.13 Expansion to Collection Materials	2028 - 2028	\$ 1,668,023	\$ -	\$ 1,668,023	\$ 1,000,814	\$ 66,721	\$ 600,488	\$ -	\$ -	\$ 600,488
	Subtotal Material Acquisitions		\$ 20,386,587	\$ -	\$ 20,386,587	\$ 9,303,952	\$ 1,108,263	\$ 9,974,371	\$ -	\$ 2,667,370	\$ 7,307,002
	TOTAL LIBRARY SERVICES		\$ 117,968,660	\$ -	\$ 117,968,660	\$ 28,773,452	\$ 7,871,847	\$ 81,323,361	\$ -	\$ 23,528,629	\$ 57,794,732

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	100%	\$23,528,629
10 Year Growth in Population in New Units		144,563
Unadjusted Development Charge Per Capita (\$)		\$162.76
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	0%	\$ -
10 Year Growth in Square Meters		4,832,564
Unadjusted Development Charge Per Sq.M (\$)		\$0.00

2019 - 2028 Net Funding Envelope for Library	\$ 23,528,629
Reserve Fund Balance	\$ (10,476,736)

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TABLE 3

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
LIBRARY SERVICES
RESIDENTIAL DEVELOPMENT CHARGE

LIBRARY SERVICES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE (\$000)	\$0.0	(\$9,124.5)	(\$7,581.3)	(\$5,902.4)	(\$4,048.7)	(\$12,873.7)	(\$10,529.2)	(\$7,930.9)	(\$5,059.5)	(\$2,646.8)	
2019-2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Library Services : Non Inflated	\$11,354.2	\$565.2	\$620.6	\$591.5	\$10,397.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$23,528.6
- Library Services: Inflated	\$11,354.2	\$576.5	\$645.7	\$627.7	\$11,254.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$24,458.3
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	13,886	14,233	14,596	14,643	14,945	15,252	15,565	15,884	12,670	12,889	144,563
REVENUE											
- DC Receipts: Inflated	\$2,473.8	\$2,586.4	\$2,705.5	\$2,768.5	\$2,882.1	\$3,000.1	\$3,122.8	\$3,250.7	\$2,644.7	\$2,744.3	\$28,179.0
INTEREST											
- Interest on Opening Balance	\$0.0	(\$501.9)	(\$417.0)	(\$324.6)	(\$222.7)	(\$708.1)	(\$579.1)	(\$436.2)	(\$278.3)	(\$145.6)	(\$3,613.3)
- Interest on In-year Transactions	(\$244.2)	\$35.2	\$36.0	\$37.5	(\$230.2)	\$52.5	\$54.6	\$56.9	\$46.3	\$48.0	(\$107.4)
TOTAL REVENUE	\$2,229.6	\$2,119.8	\$2,324.6	\$2,481.4	\$2,429.2	\$2,344.5	\$2,598.3	\$2,871.4	\$2,412.7	\$2,646.8	\$24,458.3
CLOSING CASH BALANCE	(\$9,124.5)	(\$7,581.3)	(\$5,902.4)	(\$4,048.7)	(\$12,873.7)	(\$10,529.2)	(\$7,930.9)	(\$5,059.5)	(\$2,646.8)	\$0.0	

2019 Adjusted Charge Per Capita	\$178.16
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Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.3

FIRE SERVICES

APPENDIX B.3

FIRE SERVICES

Brampton's Fire Services is responsible for the provision of fire protection and prevention services across the City. The *Fire Protection and Prevention Act* defines fire 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 City's Fire and Emergency Services has a full time equivalent staff complement of approximately 420 responding to fires, medical emergencies, transportation accidents, industrial accidents, rescues, and a wide range of other life-threatening emergencies.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 displays the 10-year historical inventory for buildings, land, vehicles and equipment. Fire Services currently operates out of 13 stations plus a fire life safety centre and an apparatus and maintenance building. The total for all fire related buildings is 177,780 square feet with a replacement value of \$80.29 million.

The land associated with the fire stations totals 26.05 acres, worth \$42.11 million. The 2018 fleet totals 90 vehicles with a replacement value of \$37.88 million. Equipment in all stations is valued at approximately \$7.68 million.

The 2018 total replacement value of the inventory of capital assets for Fire Services is \$167.95 million, resulting in a 10-year historical average service level of \$196.86 per population and employee. The historical service level, multiplied by the 10 year forecast in population and employment growth (186,054), results in a maximum allowable funding envelope of \$36.63 million. Protection services do not require a 10 per cent discount; therefore, the full funding envelope is brought forward to the development charges calculation.

TABLE 2 2019–2028 PROVISIONAL DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE "UNADJUSTED" DEVELOPMENT CHARGES

The first project in the Fire Services capital program is for the recovery of the negative reserve fund balance. The negative DC reserve fund balance for Fire

Services amounts to \$12.97 million and this full amount is brought forward for recovery through development charges.

Over the 10-year forecast period Fire Services is expected to add five new buildings, which include four new stations and a training campus. These new buildings combined amount to \$78.20 million. Of this amount, about \$12.87 million is deducted from the gross project cost to account for the replacement shares associated with decommissioning of space at with the construction of the new training campus in 2019 – this amount will not be recovered through development charges.

The capital program also includes provisions for new fire vehicles, including a new pumper, three squad cars, a district chief vehicle and three fire prevention officer cars. These vehicles add another \$4.29 million to the City's 10-year capital program.

The remaining \$500,000 of the development-related capital program consists of new fire fighting equipment.

Altogether, the 10-year capital forecast for Fire Services amounts to \$95.96 million. A deduction of \$12.87 million is made to this amount to account for the replacement shares, which are associated with the BFES Campus construction. A significant portion of the capital program, \$46.46 million, is deemed to benefit development post 2028, and will be considered for recovery in subsequent development charge by-laws.

The remaining \$36.63 million is related to development in the 2019-2028 planning period and is eligible for DC recovery. The *DCA* does not require a 10 per cent statutory discount for fire and protection services.

The development-related net capital cost of \$36.63 million is allocated 70 per cent to residential development (\$25.64 million) and 30 per cent to non-residential development (\$10.99 million). This apportionment is based on the anticipated shares of population and employment growth over the 10-year forecast period. The residential share of the net development-related capital cost is divided by the 10-year forecast growth in population in new units to derive an unadjusted charge of \$177.35 per capita. The non-residential share of the net growth related capital cost is divided by the 10-year forecast growth in floor space, resulting in an unadjusted charge of \$2.27 per square metre.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential calculated charge increases to \$207.05 per capita and the non-residential charge increases to \$2.70 per square metre.

10-year Hist. Service Level per pop & emp	2019 - 2028		Unadjusted		Adjusted	
	Development-Related Total	Capital Program Net DC Recoverable	Development Charge \$/capita	\$/sq.m	Development Charge \$/capita	\$/sq.m
\$196.86	\$95,955,931	\$36,626,525	\$177.35	\$2.27	\$207.05	\$2.70

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APPENDIX B.3
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

BUILDINGS Station Name	# of Square Feet										UNIT COST (\$/sq.ft)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Station #201 Headquarters	13,544	13,544	13,544	13,544	13,544	13,544	13,544	13,544	13,544	13,544	13,544	\$428
Station #202	6,745	6,745	6,745	6,745	6,745	6,745	6,745	6,745	6,745	6,745	6,745	\$527
Station #203	17,981	17,981	21,694	21,694	21,694	21,694	21,694	21,694	21,694	21,694	21,694	\$403
Station #204	5,900	5,900	5,900	5,900	5,900	5,900	5,900	5,900	5,900	5,900	11,733	\$434
Station #205	5,900	8,239	8,239	8,239	8,239	8,239	8,239	8,239	8,239	8,239	8,239	\$439
Station #206	6,711	6,711	6,711	6,711	6,711	6,711	6,711	6,711	6,711	6,711	6,711	\$522
Station #207	7,194	7,194	7,194	7,194	7,194	7,194	7,194	7,194	7,194	7,194	7,194	\$466
Station #208	6,747	6,747	6,747	6,747	6,747	6,747	6,747	6,747	6,747	6,747	6,747	\$428
Station #209	9,608	9,608	9,608	9,608	9,608	9,608	9,608	9,608	9,608	9,608	9,608	\$466
Station #210	9,668	9,668	9,668	9,668	9,668	9,668	9,668	9,668	9,668	9,668	9,668	\$461
Station #211	-	-	-	-	-	14,122	14,122	14,122	14,122	14,122	14,122	\$470
Station #212	-	-	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	\$487
Station #213	8,919	8,919	8,919	8,919	8,919	8,919	8,919	8,919	8,919	8,919	8,919	\$469
Churchville Station #217	962	962	962	-	-	-	-	-	-	-	-	\$230
Huttonville Station #218	1,269	1,269	1,269	1,269	1,269	-	-	-	-	-	-	\$230
Castlemore Station #219	1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626	-	-	\$250
Apparatus & Maintenance	-	-	-	-	-	-	-	-	-	30,944	30,944	\$478
Fire Life Safety Centre	10,847	10,847	10,847	10,847	10,847	10,847	10,847	10,847	10,847	10,847	10,847	\$352
Total (sq.ft.)	113,621	115,960	130,741	129,779	129,779	142,632	142,632	142,632	171,950	177,783		
Total (\$000)	\$49,338.6	\$50,364.9	\$57,250.5	\$57,029.2	\$57,029.2	\$63,379.3	\$63,379.3	\$63,379.3	\$77,758.0	\$80,287.0		

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APPENDIX B.3
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

LAND Station Name	# of Acres										UNIT COST (\$/acre)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Station #201 Headquarters	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	\$1,500,000
Station #202	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	\$2,200,000
Station #203	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	\$1,500,000
Station #204	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	\$1,500,000
Station #205	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	\$1,100,000
Station #206	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	\$1,500,000
Station #207	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	\$1,100,000
Station #208	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	\$2,200,000
Station #209	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	\$2,200,000
Station #210	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	\$2,200,000
Station #211	-	-	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	\$1,500,000
Station #212	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	\$1,500,000
Station #213	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	\$1,500,000
Churchville Station #217	0.14	0.14	0.14	-	-	-	-	-	-	-	-	\$2,200,000
Huttonville Station #218	0.49	0.49	0.49	0.49	0.49	-	-	-	-	-	-	\$2,200,000
Castlemore Station #219	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	-	-	-	\$1,100,000
A&M Facility - 52 Rutherford Rd	-	-	-	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	\$1,500,000
Fire Life Safety Centre	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	\$2,200,000
Total (acres)	22.85	22.85	24.69	27.05	27.05	26.56	26.56	26.56	26.05	26.05		
Total (\$000)	\$37,542.0	\$37,542.0	\$40,302.0	\$43,744.0	\$43,744.0	\$42,666.0	\$42,666.0	\$42,666.0	\$42,105.0	\$42,105.0		

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APPENDIX B.3
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

VEHICLES Vehicle Type	# of Vehicles										UNIT COST (\$/vehicle)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Aerials/Towers	8	8	8	7	7	7	7	7	7	8	\$1,500,000
Air/Light Vehicle	1	1	1	1	1	1	1	1	1	1	\$500,000
Chief/Training Vehicle	18	18	20	20	21	22	22	22	22	22	\$40,000
Command Post	1	1	1	1	1	1	1	1	1	1	\$700,000
Fire Prevention cars	19	20	20	20	25	26	28	28	28	28	\$30,000
Flashover	1	1	1	1	1	1	1	1	1	1	\$87,000
Hazardous Materials Unit	1	1	1	1	1	1	1	1	1	1	\$700,000
Platoon Chiefs Vehicle	4	4	4	4	4	4	4	4	4	4	\$80,000
Pumper/Rescue	6	6	6	6	7	7	7	7	8	8	\$1,050,000
Pumpers/Tankers	11	12	12	13	13	14	14	14	14	14	\$900,000
Rehabilitation unit	1	1	1	1	1	1	1	1	1	1	\$250,000
Technical rescue	1	1	1	1	1	1	1	1	1	1	\$600,000
Total (#)	72	74	76	76	83	86	88	88	89	90	
Total (\$000)	\$32,647.0	\$33,577.0	\$33,657.0	\$33,057.0	\$34,297.0	\$35,267.0	\$35,327.0	\$35,327.0	\$36,377.0	\$37,877.0	

FURNITURE & EQUIPMENT Description	Total Value of Furniture & Equipment (\$)										UNIT COST \$/Unit
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Computer Aided Dispatch Equipment & Com Center Equip	-	-	-	-	-	-	1	1	1	1	\$2,300,000
Furniture & Equipment - All Stations (\$000)	\$1,817,936	\$1,855,360	\$2,091,856	\$2,076,464	\$2,076,464	\$2,282,112	\$2,282,112	\$2,282,112	\$2,751,200	\$2,844,528	\$16
# of Firefighters	370	370	361	361	382	382	382	382	402	422	\$6,000
Total (\$000)	\$4,037.9	\$4,075.4	\$4,257.9	\$4,242.5	\$4,368.5	\$4,574.1	\$6,874.1	\$6,874.1	\$7,463.2	\$7,676.5	

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TABLE 1

CITY OF BRAMPTON
CALCULATION OF SERVICE LEVELS
FIRE SERVICES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historic Population	485,808	504,495	523,900	537,275	550,992	565,059	579,485	594,280	607,036	620,067
Historic Employment	<u>155,914</u>	<u>159,165</u>	<u>162,490</u>	<u>165,928</u>	<u>169,444</u>	<u>173,040</u>	<u>176,718</u>	<u>180,480</u>	<u>184,386</u>	<u>188,398</u>
Total	641,723	663,660	686,390	703,203	720,437	738,100	756,204	774,760	791,423	808,464

INVENTORY SUMMARY (\$000)

Buildings	\$49,338.6	\$50,364.9	\$57,250.5	\$57,029.2	\$57,029.2	\$63,379.3	\$63,379.3	\$63,379.3	\$77,758.0	\$80,287.0
Land	\$37,542.0	\$37,542.0	\$40,302.0	\$43,744.0	\$43,744.0	\$42,666.0	\$42,666.0	\$42,666.0	\$42,105.0	\$42,105.0
Vehicles	\$32,647.0	\$33,577.0	\$33,657.0	\$33,057.0	\$34,297.0	\$35,267.0	\$35,327.0	\$35,327.0	\$36,377.0	\$37,877.0
Equipment	\$4,037.9	\$4,075.4	\$4,257.9	\$4,242.5	\$4,368.5	\$4,574.1	\$6,874.1	\$6,874.1	\$7,463.2	\$7,676.5
Total (\$000)	\$123,565.5	\$125,559.2	\$135,467.3	\$138,072.7	\$139,438.7	\$145,886.4	\$148,246.4	\$148,246.4	\$163,703.2	\$167,945.5

SERVICE LEVEL (\$/population and employment)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average Service Level
Buildings	\$76.88	\$75.89	\$83.41	\$81.10	\$79.16	\$85.87	\$83.81	\$81.81	\$98.25	\$99.31	\$84.55
Land	\$58.50	\$56.57	\$58.72	\$62.21	\$60.72	\$57.81	\$56.42	\$55.07	\$53.20	\$52.08	\$57.13
Vehicles	\$50.87	\$50.59	\$49.03	\$47.01	\$47.61	\$47.78	\$46.72	\$45.60	\$45.96	\$46.85	\$47.80
Equipment	\$6.29	\$6.14	\$6.20	\$6.03	\$6.06	\$6.20	\$9.09	\$8.87	\$9.43	\$9.50	\$7.38
Total (\$/capita and employee)	\$192.55	\$189.19	\$197.36	\$196.35	\$193.55	\$197.65	\$196.04	\$191.34	\$206.85	\$207.73	\$196.86

CITY OF BRAMPTON
CALCULATION OF MAXIMUM ALLOWABLE
FIRE SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$196.86
Net Population and Employment Growth 2019 - 2028	186,054
Maximum Allowable Funding Envelope	\$36,626,525
Discounted Maximum Allowable Funding Envelope	\$36,626,525

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APPENDIX B.3
TABLE 2

CITY OF BRAMPTON
2019 DEVELOPMENT CHARGES BACKGROUND STUDY
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Cost		Total DC Eligible Costs	DC Eligible Costs		
						Replacement and BTE Share	0% Reduction		Available DC Reserves	2019-2028	Post 2028
3.0 FIRE SERVICES											
	3.1 Recovery of Negative Reserve Fund Balance	2019 - 2019	\$ 12,965,931	\$ -	\$ 12,965,931	\$ -	\$ -	\$ 12,965,931	\$ -	\$ 12,965,931	\$ -
	3.2 Buildings, Land & Furnishings										
	3.2.1 Station 214 - Land, Design & Construction	2019 - 2019	\$ 5,400,000	\$ -	\$ 5,400,000	\$ -	\$ -	\$ 5,400,000	\$ -	\$ 5,400,000	\$ -
	3.2.2 BFES Campus Construction	2019 - 2019	\$ 42,000,000	\$ -	\$ 42,000,000	\$ 12,873,000	\$ -	\$ 29,127,000	\$ -	\$ 18,060,595	\$ 11,066,405
	3.2.3 Station 215 - Land	2019 - 2019	\$ 4,200,000	\$ -	\$ 4,200,000	\$ -	\$ -	\$ 4,200,000	\$ -	\$ -	\$ 4,200,000
	3.2.4 Station 216 - Land	2020 - 2020	\$ 4,200,000	\$ -	\$ 4,200,000	\$ -	\$ -	\$ 4,200,000	\$ -	\$ -	\$ 4,200,000
	3.2.5 Station 215 - Design	2021 - 2021	\$ 800,000	\$ -	\$ 800,000	\$ -	\$ -	\$ 800,000	\$ -	\$ -	\$ 800,000
	3.2.6 Station 217 - Land	2021 - 2021	\$ 4,200,000	\$ -	\$ 4,200,000	\$ -	\$ -	\$ 4,200,000	\$ -	\$ -	\$ 4,200,000
	3.2.7 Station 215 - Construction	2022 - 2022	\$ 6,400,000	\$ -	\$ 6,400,000	\$ -	\$ -	\$ 6,400,000	\$ -	\$ -	\$ 6,400,000
	3.2.8 Station 216 - Design	2022 - 2022	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ 500,000
	3.2.9 Station 216 - Construction	2023 - 2023	\$ 5,000,000	\$ -	\$ 5,000,000	\$ -	\$ -	\$ 5,000,000	\$ -	\$ -	\$ 5,000,000
	3.2.10 Station 217 - Design	2026 - 2026	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ 500,000
	3.2.11 Station 217 - Construction	2027 - 2027	\$ 5,000,000	\$ -	\$ 5,000,000	\$ -	\$ -	\$ 5,000,000	\$ -	\$ -	\$ 5,000,000
			\$ 78,200,000	\$ -	\$ 78,200,000	\$ 12,873,000	\$ -	\$ 65,327,000	\$ -	\$ 23,460,595	\$ 41,866,405
	3.3 Vehicles										
	3.3.1 1 District Chief Vehicle	2019 - 2019	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000	\$ -
	3.3.2 2 Fire Prevention Officer Cars	2020 - 2020	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ -	\$ 60,000	\$ -	\$ -	\$ 60,000
	3.3.3 Pumper 208	2021 - 2021	\$ 900,000	\$ -	\$ 900,000	\$ -	\$ -	\$ 900,000	\$ -	\$ -	\$ 900,000
	3.3.4 Deputy Chief Vehicle	2022 - 2022	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000
	3.3.4 Squad 216	2022 - 2022	\$ 1,050,000	\$ -	\$ 1,050,000	\$ -	\$ -	\$ 1,050,000	\$ -	\$ -	\$ 1,050,000
	3.3.5 1 Fire Prevention Officer Car	2023 - 2023	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ -	\$ 30,000	\$ -	\$ -	\$ 30,000
	3.3.6 Squad 215	2023 - 2023	\$ 1,050,000	\$ -	\$ 1,050,000	\$ -	\$ -	\$ 1,050,000	\$ -	\$ -	\$ 1,050,000
	3.3.7 Squad 217	2027 - 2027	\$ 1,050,000	\$ -	\$ 1,050,000	\$ -	\$ -	\$ 1,050,000	\$ -	\$ -	\$ 1,050,000
			\$ 4,290,000	\$ -	\$ 4,290,000	\$ -	\$ -	\$ 4,290,000	\$ -	\$ 100,000	\$ 4,190,000
	3.4 Equipment										
	3.4.1 Fire Fighting Equipment	2019 - 2019	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000	\$ -
	3.4.2 Fire Fighting Equipment	2021 - 2021	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000
	3.4.3 Fire Fighting Equipment	2022 - 2022	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000
	3.4.4 Fire Fighting Equipment	2023 - 2023	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000
	3.4.5 Fire Fighting Equipment	2027 - 2027	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000
			\$ 500,000	\$ -	\$ 500,000	\$ -	\$ -	\$ 500,000	\$ -	\$ 100,000	\$ 400,000
	TOTAL FIRE SERVICES		\$ 95,955,931	\$ -	\$ 95,955,931	\$ 12,873,000	\$ -	\$ 83,082,931	\$ -	\$ 36,626,525	\$ 46,456,405

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	70%	\$25,638,568
10 Year Growth in Population in New Units		144,563
Unadjusted Development Charge Per Capita (\$)		\$177.35
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	30%	\$ 10,987,958
10 Year Growth in Square Meters		4,832,564
Unadjusted Development Charge Per Sq.M (\$)		\$2.27

2019 - 2028 Net Funding Envelope for Fire	\$ 36,626,525
Reserve Fund Balance	\$ (12,965,931)

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APPENDIX B.3
TABLE 3

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE SERVICES
RESIDENTIAL DEVELOPMENT CHARGE

FIRE SERVICES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE (\$000)	\$0.0	(\$23,389.6)	(\$21,617.5)	(\$19,607.2)	(\$17,411.8)	(\$14,961.4)	(\$12,236.7)	(\$9,217.0)	(\$5,879.9)	(\$3,076.0)	
2019-2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Fire Services : Non Inflated	\$25,638.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$25,638.6
- Fire Services: Inflated	\$25,638.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$25,638.6
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	13,886	14,233	14,596	14,643	14,945	15,252	15,565	15,884	12,670	12,889	144,563
REVENUE											
- DC Receipts: Inflated	\$2,875.0	\$3,005.9	\$3,144.3	\$3,217.5	\$3,349.5	\$3,486.6	\$3,629.2	\$3,777.9	\$3,073.6	\$3,189.4	\$32,748.6
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1,286.4)	(\$1,189.0)	(\$1,078.4)	(\$957.6)	(\$822.9)	(\$673.0)	(\$506.9)	(\$323.4)	(\$169.2)	(\$7,006.8)
- Interest on In-year Transactions	(\$626.0)	\$52.6	\$55.0	\$56.3	\$58.6	\$61.0	\$63.5	\$66.1	\$53.8	\$55.8	(\$103.2)
TOTAL REVENUE	\$2,249.0	\$1,772.0	\$2,010.3	\$2,195.4	\$2,450.4	\$2,724.7	\$3,019.7	\$3,337.0	\$2,804.0	\$3,076.0	\$25,638.6
CLOSING CASH BALANCE	(\$23,389.6)	(\$21,617.5)	(\$19,607.2)	(\$17,411.8)	(\$14,961.4)	(\$12,236.7)	(\$9,217.0)	(\$5,879.9)	(\$3,076.0)	\$0.0	

2019 Adjusted Charge Per Capita	\$207.05
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Allocation of Capital Program	
Residential Sector	70.0%
Non-Residential Sector	30.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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APPENDIX B.3
TABLE 3

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE SERVICES
NON-RESIDENTIAL DEVELOPMENT CHARGE

FIRE SERVICES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE (\$000)	\$0.0	(\$10,455.3)	(\$10,170.1)	(\$9,834.3)	(\$8,765.8)	(\$7,553.3)	(\$6,184.2)	(\$4,645.0)	(\$2,921.1)	(\$1,532.8)	
2019-2028 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Fire Services: Non Inflated	\$10,988.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10,988.0
- Fire Services: Inflated	\$10,988.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10,988.0
NEW NON-RESIDENTIAL DEVELOPMENT											
- Square Meters in New Buildings	300,464	306,529	312,748	551,201	569,019	587,458	606,543	626,299	480,489	491,814	4,832,564
REVENUE											
- DC Receipts: Inflated	\$812.5	\$845.4	\$879.8	\$1,581.7	\$1,665.5	\$1,753.8	\$1,847.0	\$1,945.3	\$1,522.3	\$1,589.3	\$14,442.7
INTEREST											
- Interest on Opening Balance	\$0.0	(\$575.0)	(\$559.4)	(\$540.9)	(\$482.1)	(\$415.4)	(\$340.1)	(\$255.5)	(\$160.7)	(\$84.3)	(\$3,413.4)
- Interest on In-year Transactions	(\$279.8)	\$14.8	\$15.4	\$27.7	\$29.1	\$30.7	\$32.3	\$34.0	\$26.6	\$27.8	(\$41.3)
TOTAL REVENUE	\$532.6	\$285.2	\$335.9	\$1,068.5	\$1,212.5	\$1,369.1	\$1,539.2	\$1,723.9	\$1,388.3	\$1,532.8	\$10,988.0
CLOSING CASH BALANCE	(\$10,455.3)	(\$10,170.1)	(\$9,834.3)	(\$8,765.8)	(\$7,553.3)	(\$6,184.2)	(\$4,645.0)	(\$2,921.1)	(\$1,532.8)	\$0.0	

2019 Adjusted Charge Per Square Metre	\$2.70
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Allocation of Capital Program	
Residential Sector	70.0%
Non-Residential Sector	30.0%
Rates for 2019	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.4

RECREATION

APPENDIX B.4

RECREATION

The Community Services Department is responsible for the provision of Recreation services in the City of Brampton. Recreation services are delivered through a variety of indoor facilities including community centres, gymnasiums and arenas, as well as parkland and outdoor facilities. Cultural facilities are not eligible to be recovered through development charges and are excluded from this study.

TABLE 1 HISTORICAL SERVICE LEVELS

The City operates 45 indoor recreation facilities of various types. The inventory includes 12 major community centres and 7 minor community centres. These centres total 1.11 million and 184,930 square feet, respectively, with a combined value of \$497.08 million. The 30,450 square feet of gymnasiums are valued at \$9.64 million and seniors centres, which occupy 39,880 square feet totalling \$12.91 million. There is currently one stand-alone arena in the City of Brampton valued at \$12.10 million. The remaining 152,160 square feet of indoor recreation space add \$53.16 million to the total value of the inventory.

The City owns a substantial amount of equipment used to provide recreation services. This includes fitness equipment, ice resurfacers, operations equipment, audio/video equipment, furniture and miscellaneous equipment. The total replacement value of all indoor recreation equipment in 2018 was \$43.58 million.

The land associated with these indoor facilities totals 138.70 acres, valued at \$237.48 million.

The City of Brampton also provides outdoor recreation facilities to the local population. In total, there are almost 900 park facilities offered, including soccer fields, baseball diamonds, football fields, tennis courts, bocce courts, batting cages, cricket pitches, rugby fields, running tracks, splash pads, skateboard parks, lacrosse fields, and playgrounds. The total value of these facilities in 2018 was \$241.25 million.

Also included in the outdoor recreation inventory of capital assets are outdoor buildings, park equipment and special park facilities. In total, there are 232,090 square feet of outdoor building space occupying 25.30 acres of land in Brampton. The total value of the buildings and land for these structures is valued at approximately

\$95.02 million. Equipment associated with outdoor park buildings totals \$4.00 million. Outdoor maintenance vehicles and equipment, which include pickup trucks, vans, trailers, tractors, and ice resurfacers totals \$87.90 million. The remaining special park facilities include various club houses and infrastructure, such as lawn bowling clubs, outdoor swimming pools and rinks, and golf courses. These facilities, as well as their associated equipment, are valued at \$78.87 million.

The City of Brampton's recreation inventory also includes city and community parks, neighbourhood parks and natural heritage lands. Together, these items amount to approximately 6,030 acres of developed parkland, valued at \$396.07 million.

The combined value of capital assets for Recreation is valued at \$1.77 billion. The 10-year historical average service level is \$3,035.41 per capita, and this, multiplied by the 10-year forecast of net population growth, results in a maximum allowable funding envelope of \$392.75 million.

Recreation is a service for which development-related capital costs must be reduced by 10 per cent under the *DCA*. The resulting net maximum allowable funding envelope brought forward to the development charges calculation is reduced to \$353.47 million.

TABLE 2 2019–2028 PROVISIONAL DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The largest project of the Buildings, Land & Furnishings component of the Recreation capital program relates to the construction of the new Mississauga/Embleton Community Recreation Centre. This is proposed to occur between 2020 and 2021 for a total gross project cost of \$70.00 million (including design). No other recreation centres will be decommissioned as a result of the construction of this new centre, therefore, no replacement shares have been removed from the total project cost. The remaining major facilities projects include the year-round sport facility for outdoor sports for a total cost of \$40.00 million, and the East Brampton Community Centre for a total cost of \$31.00 million. The buildings, land and furnishings component of the program totals \$374.83 million.

The City also intends to continue the development of parkland. This program totals \$96.61 million and includes various developments such as Gore Meadows, Torbram/Sandalwood, Mississauga/Embleton, Heritage Bovaird and a provision for a future Campus Park. No grants or subsidies are anticipated for these projects and no

benefit-to-existing shares are identified as they are all deemed to be entirely growth-related.

In addition to developing new parkland, the City has various projects in the capital budget for the redevelopment of current parkland. This includes such projects as the Credit Valley Trail, Dixie/407 Community Park, Inder Heights Park Expansion and Eldorado Park Site Improvements. The gross costs for all park redevelopment projects totals \$58.84 million. No grants or subsidies are planned for these projects but a benefit-to-existing share of \$650,000 has been identified and netted off the total program.

Lastly, there are several projects in the capital program that will continue to be constructed annually over the 10-year forecast period. They include neighbourhood park development, valley trails and pedestrian bridges, the shade structure program, leash free dog parks and splash pads are valued at \$75.25 million.

The 10-year capital forecast for Recreation totals \$605.53 million, of no grants or subsidies are provided. \$19.35 million is identified as a replacement or benefit to existing share, and the legislated 10 per cent discount totals \$58.62 million. These shares are netted off of the net municipal costs, leaving \$527.56 million as the total development related costs. \$121.17 million is available in the Recreation DC reserve to fund development-related projects. An amount of \$52.91 million represents the portion of the development-related cost which exceeds the maximum allowable funding envelope and is deemed to benefit growth beyond the 2019-2028 period. This share can be recovered through subsequent development charges studies.

The 2019-2028 DC costs eligible for recovery amount to \$353.47 million which is allocated entirely against future residential development in the City. This results in an unadjusted development charge of \$2,445.11 per capita.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential calculated charge increases to \$2,429.25 per capita. The following table summarizes the calculation of the Recreation development charge.

RECREATION SUMMARY						
10-year Hist.	2019 - 2028		Unadjusted		Adjusted	
Service Level	Development-Related	Capital Program	Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$3,035.41	\$605,526,964	\$353,471,786	\$2,445.11	\$0.00	\$2,429.25	\$0.00

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APPENDIX B.4
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
INDOOR RECREATION

MAJOR COMMUNITY CENTRES Facility Name	# of Square Feet										UNIT COST (\$/sq.ft)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Brampton Soccer Centre	134,309	134,309	134,309	134,309	134,309	134,309	134,309	134,309	134,309	134,309	134,309	\$358
CAA Centre (formerly Powerade Centre)	152,040	152,040	152,040	152,040	152,040	152,040	152,040	152,040	152,040	152,040	152,040	\$425
Cassie Campbell Community Centre	166,355	166,355	166,355	166,355	166,355	166,355	166,355	166,355	166,355	166,355	166,355	\$517
Century Gardens Recreation Centre	114,904	114,904	114,904	114,904	114,904	114,904	114,904	114,904	114,904	114,904	114,904	\$393
Chinguacousy Wellness Centre	43,188	43,188	43,188	43,188	43,188	43,188	43,188	43,188	43,188	43,188	43,188	\$362
Chris Gibson Recreation Centre	51,272	51,272	51,272	51,272	51,272	51,272	51,272	51,272	51,272	51,272	51,272	\$366
Earnscliffe Recreation Centre	90,493	90,493	90,493	90,493	90,493	90,493	90,493	90,493	90,493	90,493	90,493	\$307
Gore Meadows Community Centre	-	-	-	-	43,394	43,394	43,394	43,394	43,394	43,394	43,394	\$460
Greenbriar Recreation Centre	44,575	44,575	44,575	44,575	44,575	44,575	44,575	44,575	44,575	44,575	44,575	\$293
Jim Archdekin Recreation Centre	47,052	47,052	47,052	47,052	47,052	47,052	47,052	47,052	47,052	47,052	47,052	\$366
South Fletcher's Sportsplex	159,642	159,642	159,642	159,642	159,642	159,642	159,642	159,642	159,642	159,642	159,642	\$382
Terry Miller Recreation Centre	60,344	60,344	60,344	60,344	60,344	60,344	60,344	60,344	60,344	60,344	60,344	\$283
Total (sq.ft.)	1,064,174	1,064,174	1,064,174	1,064,174	1,107,568							
Total (\$000)	\$414,308.0	\$414,308.0	\$414,308.0	\$414,308.0	\$434,257.0							

MINOR COMMUNITY CENTRES Facility Name	# of Square Feet										UNIT COST (\$/sq.ft)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Balmoral Recreation Centre	17,439	17,439	17,439	17,439	17,439	17,439	17,439	17,439	17,439	17,439	17,439	\$344
Brampton Curling Club	28,258	28,258	28,258	28,258	28,258	28,258	28,258	28,258	28,258	28,258	28,258	\$285
Chinguacousy Curling Club	26,857	26,857	32,539	32,539	32,539	32,539	32,539	32,539	32,539	32,539	32,539	\$361
Ellen Mitchell Recreation Centre	14,178	14,178	14,178	14,178	14,178	14,178	14,178	14,178	14,178	14,178	14,178	\$389
Howden Recreation Centre	23,080	23,080	23,080	23,080	23,080	23,080	23,080	23,080	23,080	23,080	23,080	\$306
Kiwanis Youth Centre for Sports Excellence	38,527	38,527	38,527	38,527	38,527	38,527	38,527	38,527	38,527	38,527	38,527	\$354
Loafer's Lake Recreation Centre	30,913	30,913	30,913	30,913	30,913	30,913	30,913	30,913	30,913	30,913	30,913	\$350
Total (sq.ft.)	179,252	179,252	184,934									
Total (\$000)	\$60,767.2	\$60,767.2	\$62,820.0									

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APPENDIX B.4
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
INDOOR RECREATION

SHARED GYMASIUM FACILITIES Facility Name	# of Square Feet										UNIT COST (\$/sq.ft)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Century Gardens Rec Ctr / Gordon Graydon Senior Elem.	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639	\$316
Huttonville Community Centre / Huttonville Elem. School	10,637	10,637	10,637	10,637	10,637	10,637	10,637	10,637	10,637	10,637	10,637	\$316
Jim Archdekin Rec Ctr / Heart Lake Secondary School	5,753	5,753	5,753	5,753	5,753	5,753	5,753	5,753	5,753	5,753	5,753	\$317
Ken Giles Community Ctr / Sir Wilfred Laurier Elem. School	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	\$317
Mount Pleasant Comm Ctr / MP Village Elementary School	-	-	2,543	2,543	2,543	2,543	2,543	2,543	2,543	2,543	2,543	\$317
Terry Miller Rec Ctr / Judith Nyman Secondary School	4,216	4,216	4,216	4,216	4,216	4,216	4,216	4,216	4,216	4,216	4,216	\$316
Total (sq.ft.)	27,911	27,911	30,454									
Total (\$000)	\$8,832.0	\$8,832.0	\$9,639.0									

SENIOR CENTRES Facility Name	# of Square Feet										UNIT COST (\$/sq.ft)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
FCCC Seniors Centre	15,224	15,224	15,224	15,224	15,224	15,224	15,224	15,224	15,224	15,224	15,224	\$328
FCCC Seniors Centre Gymnasium	-	10,939	10,939	10,939	10,939	10,939	10,939	10,939	10,939	10,939	10,939	\$320
Knightsbridge Community & Seniors Centre	6,567	6,567	6,567	6,567	6,567	6,567	6,567	6,567	6,567	6,567	6,567	\$299
Snelgrove Community Centre	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	\$343
Total (sq.ft.)	28,944	39,883										
Total (\$000)	\$9,407.0	\$12,906.0										

ARENAS Facility Name	# of Square Feet										UNIT COST (\$/sq.ft)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
James F. McCurry Victoria Park Arena	35,379	35,379	35,379	35,379	35,379	35,379	35,379	35,379	-	-	-	\$310
Memorial Arena	33,128	33,128	33,128	33,128	33,128	33,128	33,128	33,128	33,128	33,128	33,128	\$365
Total (sq.ft.)	68,507	68,507	68,507	68,507	68,507	68,507	68,507	68,507	33,128	33,128	33,128	
Total (\$000)	\$23,064.5	\$23,064.5	\$23,064	\$23,064	\$23,064.5	\$23,064.5	\$23,064.5	\$23,064.5	\$23,064.5	\$12,097.0	\$12,097.0	

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APPENDIX B.4
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
INDOOR RECREATION

OTHER INDOOR FACILITIES Facility Name	# of Square Feet										UNIT COST (\$/sq.ft)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Alderlea	-	-	-	-	10,153	10,153	19,056	19,056	19,056	19,056	\$645
Avondale	6,928	6,928	6,928	6,928	6,928	6,928	6,928	6,928	6,928	6,928	\$338
Brampton Tennis Club	1,118	1,118	1,118	1,118	1,118	1,118	1,118	1,118	1,118	1,118	\$674
Castlemore Community Centre (formerly Fire Station 217)	-	-	-	962	962	962	962	962	962	962	\$229
Central Public School Recreation Centre	25,930	25,930	25,930	25,930	25,930	25,930	25,930	25,930	25,930	25,930	\$347
Chinguacousy Park Optimist Club and Ski Chalet	-	-	-	18,428	18,428	18,428	18,428	18,428	18,428	18,428	\$473
Ebenezer Community Hall	1,500	1,500	2,798	2,798	2,798	2,798	2,798	2,798	2,798	2,798	\$421
FCCC - Dorm Building "D"	8,045	8,045	8,045	8,045	8,045	8,045	8,045	8,045	8,045	8,045	\$236
FCCC - Dorm Building "E"	7,415	7,415	7,415	7,415	7,415	7,415	7,415	7,415	7,415	7,415	\$239
FCCC - Dorm Building "F"	8,045	8,045	8,045	8,045	8,045	8,045	8,045	8,045	8,045	8,045	\$236
Gore Bocce Club	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	\$209
Ken Giles Recreation Centre	28,907	28,907	28,907	28,907	28,907	28,907	28,907	28,907	28,907	28,907	\$183
Mount Pleasant Community Centre	-	-	2,523	2,523	2,523	2,523	2,523	2,523	2,523	2,523	\$375
Norton Place Community Centre	1,341	1,341	1,341	1,341	1,341	3,300	3,300	3,300	3,300	3,300	\$465
Old Optimist Community Centre (Chinguacousy)	6,985	6,985	-	-	-	-	-	-	-	-	\$320
Professor's Lake Recreation Centre	13,061	13,061	13,061	13,061	13,061	13,061	13,061	13,061	13,061	13,061	\$316
Total (sq.ft.)	114,922	114,922	111,758	131,148	141,301	143,260	152,163	152,163	152,163	152,163	
Total (\$000)	\$31,762.2	\$31,762.2	\$31,019.0	\$39,958.0	\$46,509.2	\$47,419.3	\$53,164.0	\$53,164.0	\$53,164.0	\$53,164.0	

APPENDIX B.4

TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
INDOOR RECREATION

MAJOR COMMUNITY CENTRES (\$)	Value of Equipment (\$000)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Facility Name										
Brampton Soccer Centre	\$3,492.0	\$3,492.0	\$3,492.0	\$3,492.0	\$3,492.0	\$3,492.0	\$3,492.0	\$3,492.0	\$3,492.0	\$3,492.0
CAA Centre (formerly Powerade Centre)	\$4,257.1	\$4,257.1	\$4,257.1	\$4,257.1	\$4,257.1	\$4,257.1	\$4,257.1	\$4,257.1	\$4,257.1	\$4,257.1
Cassie Campbell Community Centre	\$4,824.3	\$4,824.3	\$4,824.3	\$4,824.3	\$4,824.3	\$4,824.3	\$4,824.3	\$4,824.3	\$4,824.3	\$4,824.3
Century Gardens Recreation Centre	\$3,332.2	\$3,332.2	\$3,332.2	\$3,332.2	\$3,332.2	\$3,332.2	\$3,332.2	\$3,332.2	\$3,332.2	\$3,332.2
Chinguacousy Wellness Centre	\$1,252.5	\$1,252.5	\$1,252.5	\$1,252.5	\$1,252.5	\$1,252.5	\$1,252.5	\$1,252.5	\$1,252.5	\$1,252.5
Chris Gibson Recreation Centre	\$1,435.6	\$1,435.6	\$1,435.6	\$1,435.6	\$1,435.6	\$1,435.6	\$1,435.6	\$1,435.6	\$1,435.6	\$1,435.6
Earncliffe Recreation Centre	\$2,624.3	\$2,624.3	\$2,624.3	\$2,624.3	\$2,624.3	\$2,624.3	\$2,624.3	\$2,624.3	\$2,624.3	\$2,624.3
Gore Meadows Community Centre	\$0.0	\$0.0	\$0.0	\$0.0	\$998.1	\$998.1	\$998.1	\$998.1	\$998.1	\$998.1
Greenbriar Recreation Centre	\$1,248.1	\$1,248.1	\$1,248.1	\$1,248.1	\$1,248.1	\$1,248.1	\$1,248.1	\$1,248.1	\$1,248.1	\$1,248.1
Jim Archdekin Recreation Centre	\$1,270.4	\$1,270.4	\$1,270.4	\$1,270.4	\$1,270.4	\$1,270.4	\$1,270.4	\$1,270.4	\$1,270.4	\$1,270.4
South Fletcher's Sportsplex	\$4,789.3	\$4,789.3	\$4,789.3	\$4,789.3	\$4,789.3	\$4,789.3	\$4,789.3	\$4,789.3	\$4,789.3	\$4,789.3
Terry Miller Recreation Centre	\$1,750.0	\$1,750.0	\$1,750.0	\$1,750.0	\$1,750.0	\$1,750.0	\$1,750.0	\$1,750.0	\$1,750.0	\$1,750.0
Total (\$000)	\$30,275.8	\$30,275.8	\$30,275.8	\$30,275.8	\$31,273.8	\$31,273.8	\$31,273.8	\$31,273.8	\$31,273.8	\$31,273.8

MINOR COMMUNITY CENTRES (\$)	Value of Equipment (\$000)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Facility Name										
Balmoral Recreation Centre	\$662.7	\$662.7	\$662.7	\$662.7	\$662.7	\$662.7	\$662.7	\$662.7	\$662.7	\$662.7
Brampton Curling Club	\$649.93	\$649.9	\$649.9	\$649.9	\$649.9	\$649.9	\$649.9	\$649.9	\$649.9	\$649.9
Chinguacousy Curling Club	\$1,020.57	\$1,020.6	\$1,236.5	\$1,236.5	\$1,236.5	\$1,236.5	\$1,236.5	\$1,236.5	\$1,236.5	\$1,236.5
Ellen Mitchell Recreation Centre	\$326.09	\$326.1	\$326.1	\$326.1	\$326.1	\$326.1	\$326.1	\$326.1	\$326.1	\$326.1
Howden Recreation Centre	\$807.80	\$807.8	\$807.8	\$807.8	\$807.8	\$807.8	\$807.8	\$807.8	\$807.8	\$807.8
Kiwanis Youth Centre for Sports Excellence	\$1,348.45	\$1,348.4	\$1,348.4	\$1,348.4	\$1,348.4	\$1,348.4	\$1,348.4	\$1,348.4	\$1,348.4	\$1,348.4
Loafer's Lake Recreation Centre	\$989.22	\$989.2	\$989.2	\$989.2	\$989.2	\$989.2	\$989.2	\$989.2	\$989.2	\$989.2
Total (\$000)	\$5,804.7	\$5,804.7	\$6,020.7							

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
INDOOR RECREATION

SENIOR CENTRES (\$)	Value of Equipment (\$)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Facility Name										
FCCC Seniors Centre	\$418.7	\$418.7	\$418.7	\$418.7	\$418.7	\$418.7	\$418.7	\$418.7	\$418.7	\$418.7
FCCC Seniors Centre Gymnasium	\$0.0	\$300.9	\$300.9	\$300.9	\$300.9	\$300.9	\$300.9	\$300.9	\$300.9	\$300.9
Knightsbridge Community & Seniors Centre	\$180.5	\$180.5	\$180.5	\$180.5	\$180.5	\$180.5	\$180.5	\$180.5	\$180.5	\$180.5
Snelgrove Community Centre	\$213.6	\$213.6	\$213.6	\$213.6	\$213.6	\$213.6	\$213.6	\$213.6	\$213.6	\$213.6
Total (\$000)	\$812.9	\$1,113.7								

ARENAS (\$)	Value of Equipment (\$)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Facility Name										
James F. McCurry Victoria Park Arena	\$930,776.7	\$930,776.7	\$930,776.7	\$930,776.7	\$930,776.7	\$930,776.7	\$930,776.7	\$930,776.7	\$930,776.7	\$0.0
Memorial Arena	\$871,555.7	\$871,555.7	\$871,555.7	\$871,555.7	\$871,555.7	\$871,555.7	\$871,555.7	\$871,555.7	\$871,555.7	\$871,555.7
Total (\$000)	\$1,802.3	\$1,802.3	\$1,802.3	\$1,802.3	\$1,802.3	\$1,802.3	\$1,802.3	\$1,802.3	\$871.6	\$871.6

APPENDIX B.4

TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
INDOOR RECREATION

OTHER INDOOR FACILITIES (\$) Facility Name	Value of Equipment (\$)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Alderlea	\$0.0	\$0.0	\$0.0	\$0.0	\$327,641.2	\$327,641.2	\$614,944.3	\$614,944.3	\$614,944.3	\$614,944.3
Avondale	\$156,478.0	\$156,478.0	\$156,478.0	\$156,478.0	\$156,478.0	\$156,478.0	\$156,478.0	\$156,478.0	\$156,478.0	\$156,478.0
Brampton Tennis Club	\$31,810.2	\$31,810.2	\$31,810.2	\$31,810.2	\$31,810.2	\$31,810.2	\$31,810.2	\$31,810.2	\$31,810.2	\$31,810.2
Castlemore Community Centre (formerly Fire Station 217)	\$0.0	\$0.0	\$0.0	\$20,303.2	\$20,303.2	\$20,303.2	\$20,303.2	\$20,303.2	\$20,303.2	\$20,303.2
Central Public School Recreation Centre	\$685,274.0	\$685,274.0	\$685,274.0	\$685,274.0	\$685,274.0	\$685,274.0	\$685,274.0	\$685,274.0	\$685,274.0	\$685,274.0
Chinguacousy Park Optimist Club and Ski Chalet (New)	\$0.0	\$0.0	\$0.0	\$524,327.1	\$524,327.1	\$524,327.1	\$524,327.1	\$524,327.1	\$524,327.1	\$524,327.1
Ebenezer Community Hall	\$51,183.7	\$51,183.7	\$95,474.7	\$95,474.7	\$95,474.7	\$95,474.7	\$95,474.7	\$95,474.7	\$95,474.7	\$95,474.7
FCCC - Dorm Building "D"	\$228,154.7	\$228,154.7	\$228,154.7	\$228,154.7	\$228,154.7	\$228,154.7	\$228,154.7	\$228,154.7	\$228,154.7	\$228,154.7
FCCC - Dorm Building "E"	\$203,342.3	\$203,342.3	\$203,342.3	\$203,342.3	\$203,342.3	\$203,342.3	\$203,342.3	\$203,342.3	\$203,342.3	\$203,342.3
FCCC - Dorm Building "F"	\$231,322.6	\$231,322.6	\$231,322.6	\$231,322.6	\$231,322.6	\$231,322.6	\$231,322.6	\$231,322.6	\$231,322.6	\$231,322.6
Gore Bocce Club	\$119,181.3	\$119,181.3	\$119,181.3	\$119,181.3	\$119,181.3	\$119,181.3	\$119,181.3	\$119,181.3	\$119,181.3	\$119,181.3
Ken Giles Recreation Centre	\$831,179.9	\$831,179.9	\$831,179.9	\$831,179.9	\$831,179.9	\$831,179.9	\$831,179.9	\$831,179.9	\$831,179.9	\$831,179.9
Mount Pleasant Community Centre	\$0.0	\$0.0	\$86,091.0	\$86,091.0	\$86,091.0	\$86,091.0	\$86,091.0	\$86,091.0	\$86,091.0	\$86,091.0
Norton Place Community Centre	\$38,030.5	\$38,030.5	\$38,030.5	\$38,030.5	\$38,030.5	\$93,587.4	\$93,587.4	\$93,587.4	\$93,587.4	\$93,587.4
Old Optimist Community Centre (Chinguacousy)	\$200,843.8	\$200,843.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Professor's Lake Recreation Centre	\$375,550.6	\$375,550.6	\$375,550.6	\$375,550.6	\$375,550.6	\$375,550.6	\$375,550.6	\$375,550.6	\$375,550.6	\$375,550.6
Total (\$000)	\$3,152.4	\$3,152.4	\$3,081.9	\$3,626.5	\$3,954.2	\$4,009.7	\$4,297.0	\$4,297.0	\$4,297.0	\$4,297.0

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APPENDIX B.4
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
INDOOR RECREATION LAND

MAJOR COMMUNITY CENTRES Facility Name	# of Acres										UNIT COST (\$/acre)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Brampton Soccer Centre	9.97	9.97	9.97	9.97	9.97	9.97	9.97	9.97	9.97	9.97	9.97	\$2,200,000
CAA Centre	25.96	25.96	25.96	25.96	25.96	25.96	25.96	25.96	25.96	25.96	25.96	\$1,500,000
Cassie Campbell Community Centre	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	\$2,200,000
Century Gardens Recreation Centre	7.93	7.93	7.93	7.93	7.93	7.93	7.93	7.93	7.93	7.93	7.93	\$2,200,000
Chinguacousy Wellness Centre	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	\$1,100,000
Chris Gibson Recreation Centre	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	\$2,200,000
Earncliffe Recreation Centre	5.87	5.87	5.87	5.87	5.87	5.87	5.87	5.87	5.87	5.87	5.87	\$1,100,000
Gore Meadows Community Centre	-	-	-	-	5.20	5.20	5.20	5.20	5.20	5.20	5.20	\$2,200,000
Greenbriar Recreation Centre	3.31	3.31	3.31	3.31	3.31	3.31	3.31	3.31	3.31	3.31	3.31	\$1,100,000
Jim Archdekin Recreation Centre	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	\$1,100,000
South Fletcher's Sportsplex	10.82	10.82	10.82	10.82	10.82	10.82	10.82	10.82	10.82	10.82	10.82	\$2,200,000
Terry Miller Recreation Centre	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	\$1,100,000
Total (acres)	91.62	91.62	91.62	91.62	96.82							
Total (\$000)	\$158,499.0	\$158,499.0	\$158,499.0	\$158,499.0	\$169,939.0							

MINOR COMMUNITY CENTRES (acres) Facility Name	# of Acres										UNIT COST (\$/acre)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Balmoral Recreation Centre	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	\$2,200,000
Brampton Curling Club	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	\$1,100,000
Kiwanis Youth Centre for Sports Excellence	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	\$2,200,000
Chinguacousy Curling Club	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	\$1,500,000
Ellen Mitchell Recreation Centre	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	\$1,500,000
Howden Recreation Centre	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	\$1,100,000
Loafer's Lake Recreation Centre	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	\$1,100,000
Total (acres)	15.30											
Total (\$000)	\$23,014.0											

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TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
INDOOR RECREATION LAND

OTHER INDOOR FACILITIES Facility Name	# of Acres										UNIT COST (\$/acre)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Alderlea	-	-	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	\$1,500,000
Avondale	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	\$1,500,000
Brampton Tennis Club	2.01	2.91	2.91	2.91	2.91	2.91	2.91	2.91	2.91	2.91	2.91	\$1,500,000
Gore Bocce Club	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	\$2,200,000
Castlemore Community Centre (formerly Fire Station 217)	-	-	-	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	\$2,200,000
Central Public School Recreation Centre	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	\$2,200,000
Chinguacousy Park Optimist Club and Ski Chalet (New)	-	-	-	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	\$1,500,000
Ebenezer Community Hall	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	\$2,200,000
FCCC - Dorm Building "D"	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	\$1,500,000
FCCC - Dorm Building "E"	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	\$1,500,000
FCCC - Dorm Building "F"	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	\$1,500,000
Ken Giles Recreation Centre	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	\$1,500,000
Mount Pleasant Community Centre	-	-	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	\$1,100,000
Norton Place Community Centre	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	\$2,200,000
Old Optimist Community Centre (Chinguacousy)	0.89	0.89	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	\$1,500,000
Professor's Lake Recreation Centre	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	\$2,200,000
Total (acres)	12.35	13.25	15.22	15.78								
Total (\$000)	\$22,214.0	\$23,564.0	\$26,375.0	\$27,313.0								

SHARED GYMNASIUM FACILITIES Facility Name	# of Acres										UNIT COST (\$/acre)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Century Gardens Rec Ctr / Gordon Graydon Senior Elem.	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$2,200,000
Huttonville Community Centre / Huttonville Elem. School	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	\$2,200,000
Jim Archdekin Rec Ctr / Heart Lake Secondary School	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	\$1,100,000
Ken Giles Community Ctr / Sir Wilfred Laurier Elem. School	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	\$2,200,000
Mount Pleasant Comm Ctr / MP Village Elementary School	-	-	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	\$1,100,000
Terry Miller Rec Ctr / Judith Nyman Secondary School	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	\$1,100,000
Total (acres)	2.40	2.40	2.62									
Total (\$000)	\$4,345.0	\$4,345.0	\$4,587.0									

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TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
INDOOR RECREATION LAND

SENIOR CENTRES Facility Name	# of Acres										UNIT COST (\$/acre)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
FCCC Seniors Centre	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	\$1,500,000
FCCC Seniors Centre Gymnasium	-	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	\$1,500,000
Knightsbridge Community & Seniors Centre	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	\$1,500,000
Snelgrove Community Centre	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	\$2,200,000
Total (acres)	3.31	5.56										
Total (\$000)	\$6,365.0	\$9,740.0										

ARENAS Facility Name	# of Acres										UNIT COST (\$/acre)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Memorial Arena	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	\$1,100,000
James F. McCurry Victoria Park Arena	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	-	-	\$2,200,000
Total (acres)	5.96	2.62	2.62									
Total (\$000)	\$10,230.0	\$2,882.0	\$2,882.0									

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TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Soccer Stadiums Park Name	# of Stadiums										UNIT COST (\$/Stadium)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Avondale	1	1	1	1	1	1	1	1	1	1	\$900,000
Century Gardens Park (old)	1	1	1	1	1	1	1	1	-	-	\$900,000
Century Gardens Park (new)	-	-	-	-	-	-	-	-	1	1	\$900,000
Chris Gibson Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Morris Kerbel District Park	1	1	1	1	1	1	1	1	1	1	\$900,000
Victoria Park (old)	1	1	1	1	1	1	1	1	-	-	\$900,000
Victoria Park (new)	-	-	-	-	-	-	-	-	1	1	\$1,300,000
Subtotal (#)	5										
Subtotal (\$)	\$4,200.0	\$4,600.0	\$4,600.0								

Major Soccer - Lighted Park Name	# of Pitches										UNIT COST (\$/Pitch)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Andrew McCandless Park	-	-	-	-	-	-	-	-	2	2	\$500,000
Creditview Sandalwood Park	2	2	2	2	2	2	2	2	2	2	\$500,000
Donald M. Gordon Chinguacousy Park	2	-	-	-	-	-	-	-	-	-	\$500,000
Norton Place	1	1	1	1	1	1	1	1	1	1	\$500,000
Subtotal (#)	5	3	5	5							
Subtotal (\$)	\$2,500.0	\$1,500.0	\$2,500.0	\$2,500.0							

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TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Major Soccer - Unlighted Park Name	# of Pitches										UNIT COST (\$/Pitch)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Blue Oak Park	1	1	1	1	1	1	1	1	1	1	\$400,000
Bramalea Ltd. Community Park	2	2	2	2	2	2	2	2	2	2	\$400,000
Chinguacousy Sandalwood Park (Cassie Campbell)	2	2	2	2	2	2	2	2	2	2	\$400,000
Chris Gibson Park	1	1	1	1	1	1	1	1	1	1	\$400,000
Creditview Sandalwood	6	6	6	6	4	4	4	4	4	4	\$400,000
Dixie HWY 407 Park	7	7	7	7	7	7	7	7	7	7	\$400,000
Dixie Sandalwood Park	4	4	4	4	4	4	4	4	4	4	\$400,000
Donald M. Gordon Chinguacousy Park	2	-	-	-	-	-	-	-	-	-	\$400,000
Eldorado Park	1	-	-	-	-	-	-	-	-	-	\$400,000
Flower City Community Campus	1	1	1	1	1	1	1	1	1	1	\$400,000
Gore Meadows Community Park	-	-	-	-	-	-	-	-	1	1	\$400,000
Greenbriar Park South	1	1	1	1	1	1	1	1	1	1	\$400,000
Homestead Park	1	1	1	1	1	1	1	1	1	1	\$400,000
Leander Park	1	1	1	1	1	1	1	1	1	1	\$400,000
Loafer's Lake Park	1	1	1	1	1	1	1	1	1	1	\$400,000
Major Oaks Park	1	1	1	1	1	1	1	1	1	1	\$400,000
Northampton Park	2	2	2	2	2	2	2	2	2	2	\$400,000
Richvale Park	2	2	2	2	2	2	2	2	2	2	\$400,000
Subtotal (#)	36	33	33	33	31	31	31	31	32	32	
Subtotal (\$)	\$14,400.0	\$13,200.0	\$13,200.0	\$13,200.0	\$12,400.0	\$12,400.0	\$12,400.0	\$12,400.0	\$12,800.0	\$12,800.0	

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TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Minor Soccer - Unlighted Park Name	# of Pitches										UNIT COST (\$/Pitch)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Balmoral Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Batsman Park	-	-	-	-	4	4	4	4	4	4	\$300,000
Carabram Park	2	2	2	2	2	2	2	2	2	2	\$300,000
Centennial Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Earncliffe Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Flower City Community Campus	2	2	2	2	2	2	2	2	2	2	\$300,000
Fred Kline Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Greenbriar Park S	1	1	1	1	1	1	1	1	1	1	\$300,000
Grenoble	1	1	1	1	1	1	1	1	1	1	\$300,000
Hilldale Park N	1	1	1	1	1	1	1	1	1	1	\$300,000
Jefferson park	2	2	2	2	2	2	2	2	2	2	\$300,000
Kingswood Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Lafrance Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Loafer's Lake Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Michael Murphy Park	-	-	-	-	-	-	-	-	1	1	\$300,000
Mosswood Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Sandalwood Park	1	1	1	1	1	1	1	1	1	1	\$300,000
South Fletcher's	-	-	-	1	1	1	1	1	1	1	\$300,000
St. John Bosco	1	1	1	1	1	1	1	1	1	1	\$300,000
Torbram Sandalwood Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Valleybrook Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Valleydown Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Victoria Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Subtotal (#)	23	23	23	24	28	28	28	29	29	29	
Subtotal (\$)	\$6,900.0	\$6,900.0	\$6,900.0	\$7,200.0	\$8,400.0	\$8,400.0	\$8,400.0	\$8,400.0	\$8,700.0	\$8,700.0	\$8,700.0

APPENDIX B.4
TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Mini Soccer - Unlighted Park Name	# of Pitches										UNIT COST (\$/Pitch)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Armbro Park	1	1	1	1	1	1	1	1	1	1	1	\$200,000
Ashurst Park	2	2	2	2	2	2	2	2	2	2	2	\$200,000
Centennial Park	1	1	1	1	1	1	1	1	1	1	1	\$200,000
Central Public	4	4	4	4	4	4	4	4	4	4	4	\$200,000
Century Gardens Park	2	2	2	2	2	2	2	2	2	2	2	\$200,000
Chinguacousy Sandalwood Park (Cassie Campbell)	2	2	2	2	-	-	-	-	-	-	-	\$200,000
Chris Gibson Park	2	2	2	2	2	2	2	2	2	2	2	\$200,000
Creditview Sandalwood	8	8	8	8	4	4	4	4	4	4	4	\$200,000
Dearborne Park	6	6	6	6	6	6	6	6	6	6	6	\$200,000
Dixie HWY 407 Park	6	6	6	6	6	6	6	6	6	6	6	\$200,000
Donald M Gordon Chinguacousy Park	2	2	-	-	-	-	-	-	-	-	-	\$200,000
Earnscliffe	3	3	3	3	3	3	3	3	3	3	3	\$200,000
Flower City Community Campus	5	5	5	5	5	5	5	5	5	5	5	\$200,000
Fletcher's Green Community Park	2	2	2	-	-	-	-	-	-	-	-	\$200,000
Fred Kee Park	2	2	2	2	2	2	2	2	2	2	2	\$200,000
Hilldale Park N	1	1	1	1	1	1	1	1	1	1	1	\$200,000
Meadowlands Park	2	2	2	2	2	2	2	2	2	2	2	\$200,000
Seaborn Park	2	2	2	2	2	2	2	2	2	2	2	\$200,000
Sheridan Woodlands	1	1	1	1	1	1	1	1	1	1	1	\$200,000
Torbram Sandalwood	12	12	12	12	12	12	12	12	12	12	12	\$200,000
Weybridge Park	2	2	2	2	2	2	2	2	2	2	2	\$200,000
Subtotal (#)	68	68	66	64	58							
Subtotal (\$)	\$13,600.0	\$13,600.0	\$13,200.0	\$12,800.0	\$11,600.0							

APPENDIX B.4
TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Artificial Turf Fields Park Name	# of Fields										UNIT COST (\$/Field)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Chinguacousy Sandalwood Park (Cassie Campbell)	1	1	1	1	1	1	1	1	1	1	\$1,300,000
Creditview Sandalwood Park	-	-	-	-	2	2	2	2	2	2	\$1,300,000
Donald M. Gordon Chinguacousy Park (Terry Fox Stadium)	-	-	1	1	1	1	1	1	1	1	\$2,000,000
David Suzuki Secondary School	-	-	-	-	1	1	1	1	1	1	\$500,000
Subtotal (#)	1	1	2	2	5	5	5	5	5	5	
Subtotal (\$)	\$1,300.0	\$1,300.0	\$3,300.0	\$3,300.0	\$6,400.0	\$6,400.0	\$6,400.0	\$6,400.0	\$6,400.0	\$6,400.0	

Hard Ball Diamond - Lighted Park Name	# of Diamonds										UNIT COST (\$/Diamond)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Chris Gibson Park	1	1	1	1	1	1	1	1	1	1	\$1,300,000
Old Fairgrounds Park (Dave Dash)	1	1	1	1	1	1	1	1	1	1	\$1,300,000
Flower City Community Campus	1	1	1	1	1	1	1	1	1	1	\$1,300,000
Morris Kerbel Park	1	1	1	1	1	1	1	1	1	1	\$1,300,000
Teramoto Park	-	-	-	-	2	2	2	2	2	2	\$1,300,000
Subtotal (#)	4	4	4	4	6	6	6	6	6	6	
Subtotal (\$)	\$5,200.0	\$5,200.0	\$5,200.0	\$5,200.0	\$7,800.0	\$7,800.0	\$7,800.0	\$7,800.0	\$7,800.0	\$7,800.0	

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TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Major Diamond - Lighted Park Name	# of Diamonds										UNIT COST (\$/Diamond)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Blue Oak Park	1	1	1	1	1	1	1	1	1	1	\$900,000
Bramalea Limited Community Park	2	2	2	2	2	2	2	2	2	2	\$900,000
Brampton Sports Park	5	5	5	5	5	5	5	5	5	5	\$900,000
Carabram Park	1	1	1	1	1	1	1	1	1	1	\$900,000
Chinguacousy Park	2	-	-	-	-	-	-	-	-	-	\$900,000
Chris Gibson	2	2	2	2	2	2	2	2	2	2	\$900,000
Drinkwater Community Park	2	2	2	2	2	2	2	2	2	2	\$900,000
Duggan Park	2	2	2	2	2	2	2	2	2	2	\$900,000
Earncliffe Park	1	1	1	1	1	1	1	1	1	1	\$900,000
Fairgrounds Park	2	2	2	2	2	2	2	2	2	2	\$900,000
Fletchers Green Park	2	2	2	2	2	2	2	2	2	2	\$900,000
Moorehead Park	1	1	1	1	1	1	1	1	1	1	\$900,000
Morris Kerbel District Park	1	1	1	1	1	1	1	1	1	1	\$900,000
Norton Place Park	1	1	1	1	-	-	-	-	-	-	\$900,000
Rosalea Park	1	1	1	1	1	1	1	1	-	-	\$900,000
Sesquicentennial Park	7	7	7	7	7	7	7	7	7	7	\$900,000
Subtotal (#)	33	31	31	31	30	30	30	30	29	29	
Subtotal (\$)	\$29,700.0	\$27,900.0	\$27,900.0	\$27,900.0	\$27,000.0	\$27,000.0	\$27,000.0	\$27,000.0	\$26,100.0	\$26,100.0	

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TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Major Diamond - Unlighted Park Name	# of Diamonds										UNIT COST (\$/Diamond)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Century Gardens Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Conservation Drive Park	2	2	2	2	2	2	2	2	2	2	\$600,000
County Court Park	3	3	3	3	3	3	3	3	3	3	\$600,000
Duggan Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Earnscliffe Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Fallen Oak Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Fred Kline Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Greenbriar Park South	1	1	1	1	1	1	1	1	1	1	\$600,000
Madoc Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Major William Sharpe	1	1	1	1	1	1	1	1	1	1	\$600,000
Moorehead Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Nasmith Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Ray Lawson Valley	1	1	1	1	1	1	1	1	1	1	\$600,000
Richvale Park	2	2	2	2	2	2	2	2	2	2	\$600,000
Sesquicentennial Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Subtotal (#)	19										
Subtotal (\$)	\$11,400.0										

Minor Diamond - Unlighted Park Name	# of Diamonds										UNIT COST (\$/Diamond)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Allan Kerbell Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Armbo Park	1	-	-	-	-	-	-	-	-	-	\$250,000
Ashurst Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Bach Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Beatty Fleming Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Burton Park	2	2	2	2	2	2	2	2	2	2	\$250,000
Castlehill Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Central Public School Park	2	2	2	2	2	2	2	2	2	2	\$250,000
Cherrytree Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Chris Gibson Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Donnelly East Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Earnscliffe Park	2	2	2	2	2	2	2	2	2	2	\$250,000

APPENDIX B.4
TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Minor Diamond - Unlighted CONT'D Park Name	# of Diamonds										UNIT COST (\$/Diamond)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Fred Kee Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Fred Kline Park	3	3	3	3	3	3	3	3	3	3	3	\$250,000
Gatesgill Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Havelock Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Hickory Wood Park	2	2	2	2	2	2	2	2	2	2	2	\$250,000
Jefferson Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Kaneff Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Kingswood Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Knightsbridge Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Loafer's Lake Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Meadowlands Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Nasmith Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Notre Dame Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Ray Lawson Valley	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Richvale Park	2	2	2	2	2	2	2	2	2	2	2	\$250,000
Sandalwood Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
White Spruce Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Subtotal (#)	36	35										
Subtotal (\$)	\$9,000.0	\$8,750.0										

Batting Cages Park Name	# of Cages										UNIT COST (\$/Cage)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Donald M. Gordon Chinguacousy Park	1	1	-	-	-	-	-	-	-	-	-	\$250,000
Flower City Community Campus	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Old Fairgrounds Park	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Subtotal (#)	3	3	2									
Subtotal (\$)	\$750.0	\$750.0	\$500.0									

APPENDIX B.4
TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Cricket Park Name	# of Pitches										UNIT COST (\$/Pitch)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Andrew McCandless Park	-	-	-	-	-	-	-	-	-	1	1	\$200,000
Batsman Park	-	-	-	-	2	2	2	2	2	2	2	\$200,000
Brampton Sports Park	3	3	3	3	3	3	3	3	3	3	3	\$200,000
Camden Park	1	1	1	1	1	1	1	1	1	1	1	\$200,000
Chinguacousy Sandalwood Park (Cassie Campbell)	1	1	1	1	1	1	1	1	1	1	1	\$200,000
Creditview Sandalwood Park	2	2	2	2	2	2	2	2	2	2	2	\$200,000
Dixie Hwy 407 Park	2	2	2	2	2	2	2	2	2	2	2	\$200,000
Dixie Sandalwood Park	2	2	2	2	2	2	2	2	2	2	2	\$200,000
Earncliffe Park	2	2	2	2	2	2	2	2	2	2	2	\$200,000
Flower City Community Campus	-	1	1	1	1	1	1	1	1	1	1	\$200,000
Teramoto Park	-	-	-	-	1	1	1	1	1	1	1	\$200,000
Torbram Sandalwood Community Park	1	1	1	1	1	1	1	1	1	1	1	\$200,000
Subtotal (#)	14	15	15	15	18	18	18	18	18	19	19	
Subtotal (\$)	\$2,800.0	\$3,000.0	\$3,000.0	\$3,000.0	\$3,600.0	\$3,600.0	\$3,600.0	\$3,600.0	\$3,600.0	\$3,800.0	\$3,800.0	

Rugby Park Name	# of Fields										UNIT COST (\$/Field)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Brampton Sports Park	2	2	2	2	2	2	2	2	2	2	2	\$250,000
Subtotal (#)	2											
Subtotal (\$)	\$500.0											

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Track Location	# of Tracks										UNIT COST (\$/Track)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Donald M. Gordon Chinguacousy Park	1	-	-	-	-	-	-	-	-	-	-	\$280,000
Donald M. Gordon Chinguacousy Park (in Terry Fox Stadium)	-	-	1	1	1	1	1	1	1	1	1	\$1,300,000
David Suzuki Secondary School	-	-	-	-	1	1	1	1	1	1	1	\$600,000
Subtotal (#)	1	-	1	1	2							
Subtotal (\$)	\$280.0	\$0.0	\$1,300.0	\$1,300.0	\$1,900.0							

Tennis - Lighted Park Name	# of Courts										UNIT COST (\$/Court)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Chinguacousy Sandalwood Park (Cassie Campbell)	4	4	4	4	4	4	4	4	4	4	4	\$100,000
Century Gardens Park	4	4	4	4	4	-	-	-	-	-	-	\$100,000
Donald M. Gordon Chinguacousy Park	6	6	6	6	6	6	6	6	6	6	6	\$100,000
County Court Park	2	2	2	2	2	2	2	2	2	2	2	\$100,000
Drinkwater Community Park	3	3	3	3	3	3	3	3	3	3	3	\$100,000
Earncliffe Park	3	3	3	3	3	3	3	3	3	3	3	\$100,000
Greenbriar Park South	1	1	1	1	1	1	1	1	1	1	1	\$100,000
Morris Kerbel Park	4	4	4	4	4	4	4	4	4	4	4	\$100,000
Richvale Park	2	2	2	2	2	2	2	2	2	2	2	\$100,000
Sandalwood Park	2	2	2	2	2	2	2	2	2	2	2	\$100,000
Steady Park	3	3	3	3	3	3	3	3	3	3	3	\$100,000
Valleybrook	2	2	2	2	2	2	2	2	2	2	2	\$100,000
White Spruce Park	2	2	2	2	2	2	2	2	2	2	2	\$100,000
Subtotal (#)	38	38	38	38	38	34	34	34	34	34	34	
Subtotal (\$)	\$3,800.0	\$3,800.0	\$3,800.0	\$3,800.0	\$3,800.0	\$3,400.0	\$3,400.0	\$3,400.0	\$3,400.0	\$3,400.0	\$3,400.0	

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Tennis - Unlighted Park Name	# of Courts										UNIT COST (\$/Court)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Allan Kerbel Park	2	2	2	2	2	2	2	2	2	2	\$60,000
Centennial Park	3	3	3	3	3	3	3	3	3	3	\$60,000
Clark Park	2	2	2	2	2	2	2	2	2	2	\$60,000
English St.	2	2	2	2	2	2	2	2	2	2	\$60,000
Ken Park	2	2	2	2	2	2	2	2	2	2	\$60,000
Knightsbridge Park	2	2	2	2	2	2	2	2	2	2	\$60,000
Northwood Park	2	2	2	2	2	2	2	2	2	2	\$60,000
Peel Village Park	2	2	2	2	2	2	2	2	2	2	\$60,000
Vanier Park	2	2	2	2	2	2	2	2	2	2	\$60,000
Subtotal (#)	19										
Subtotal (\$)	\$1,140.0										

Bocce Park Name	# of Courts										UNIT COST (\$/Court)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Lighted											
Calvert Park	4	4	4	4	4	4	4	4	4	4	\$100,000
County Court Park	4	4	4	4	4	4	4	4	4	4	\$100,000
Flower City Community Campus	1	1	1	1	-	-	-	-	-	-	\$100,000
Wildfield Park - St. John Bocce	1	1	1	1	1	1	1	1	1	1	\$100,000
Unlighted											
County Court Park	3	3	3	3	3	3	3	3	3	3	\$60,000
Subtotal (#)	13	13	13	13	12	12	12	12	12	12	
Subtotal (\$)	\$1,180.0	\$1,180.0	\$1,180.0	\$1,180.0	\$1,080.0						

APPENDIX B.4
TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Multi Purpose Courts Park Name	# of Courts										UNIT COST (\$/Court)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Allan Kerbel Park	1	1	1	1	1	1	1	1	1	1	1	\$75,000
Batsman Park	-	-	-	-	-	1	1	1	1	1	1	\$100,000
Blue Lake Parkette	1	1	1	1	1	1	1	1	1	1	1	\$100,000
Burnt Elm Park	1	1	1	1	1	1	1	1	1	1	1	\$100,000
Chinguacousy Sandalwood Park	1	1	1	1	1	1	1	1	1	1	1	\$75,000
Chinguacousy Sandalwood Park	1	1	1	1	1	1	1	1	1	1	1	\$150,000
Creditview Sandalwood Park	-	-	-	-	-	-	-	-	-	-	1	\$150,000
Dearbourne Park	1	1	1	1	1	1	1	1	1	1	1	\$75,000
Dixie Sandalwood Park (east)	1	1	1	1	1	1	1	1	1	1	1	\$75,000
Dixie Sandalwood Park (west)	1	1	1	1	1	1	1	1	1	1	1	\$125,000
Donald M. Gordon Chinguacousy Park	-	-	4	4	4	4	4	4	4	4	4	\$250,000
Earnscliffe Park	1	1	1	1	1	1	1	1	1	1	1	\$100,000
Fairlawn Park	1	1	1	1	1	1	1	1	1	1	1	\$100,000
Gore Meadows Park	-	-	-	-	2	2	2	2	2	2	2	\$100,000
Howden Park	1	1	1	1	1	1	1	1	1	1	1	\$125,000
McMicking Park	1	1	1	1	1	1	1	1	1	1	1	\$100,000
Minaker Park	1	1	1	1	1	1	1	1	1	1	1	\$100,000
Morris Kerbel Park	1	1	1	1	1	1	1	1	1	1	1	\$75,000
Peelton Park	1	1	1	1	1	1	1	1	1	-	-	\$30,000
Teramoto Park	-	-	-	-	1	1	1	1	1	1	1	\$100,000
Timberlane Park	1	1	1	1	1	1	1	1	1	1	1	\$100,000
Todd Edward Baylis Park	1	1	1	1	1	1	-	-	-	-	-	\$50,000
Treeline Park	1	1	1	1	1	1	1	1	1	1	1	\$100,000
Van Scott Parkette	1	1	1	1	1	1	1	1	1	1	1	\$100,000
Wiggins Park	1	1	1	1	1	1	1	1	1	1	1	\$75,000
Subtotal (#)	20	20	24	24	27	28	27	27	27	26	27	
Subtotal (\$)	\$1,830.0	\$1,830.0	\$2,830.0	\$2,830.0	\$3,130.0	\$3,230.0	\$3,180.0	\$3,180.0	\$3,180.0	\$3,150.0	\$3,300.0	

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APPENDIX B.4
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Skateboard Parks Location	# of Skateboard Parks										UNIT COST (\$/Park)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Andrew McCandless Park	-	-	-	-	-	-	-	-	-	1	1	\$500,000
Chinguacousy Sandalwood Park (Cassie Campbell)	1	1	1	1	1	1	1	1	1	1	1	\$500,000
Donald M. Gordon Chinguacousy Park	1	1	1	1	1	1	1	1	1	1	1	\$1,200,000
Fletcher's Green Community Park	1	1	1	1	1	1	1	1	-	-	-	\$300,000
Gore Meadows Community Park - East	-	-	-	-	1	1	1	1	1	1	1	\$500,000
Morris Kerbel Park (old)	1	1	1	1	1	1	1	1	1	1	-	\$300,000
Morris Kerbel Park (new)	-	-	-	-	-	-	-	-	-	-	1	\$500,000
Old Fairgrounds Park	1	1	1	1	1	1	1	1	1	1	1	\$500,000
Robert Post Park	-	-	-	-	-	-	-	-	1	1	1	\$300,000
Worthington Park	1	1	1	1	1	1	1	1	1	1	1	\$300,000
Subtotal (#)	6	6	6	6	7	7	7	7	7	8	8	
Subtotal (\$)	\$3,100.0	\$3,100.0	\$3,100.0	\$3,100.0	\$3,600.0	\$3,600.0	\$3,600.0	\$3,600.0	\$3,600.0	\$4,100.0	\$4,300.0	

APPENDIX B.4
TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Wading Pools / Splashpads Location	# of Pools/Splashpads										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Splash Pads											
Andrew McCandless Park	-	-	-	-	-	-	-	-	1	1	\$250,000
Batsman Park	-	-	-	-	1	1	1	1	1	1	\$250,000
Century Gardens Park	-	-	1	1	1	1	1	1	1	1	\$600,000
Chinguacousy Sandalwood Park (Cassie Campbell)	1	1	1	1	1	1	1	1	1	1	\$600,000
Chris Gibson Park	-	-	-	-	1	1	1	1	1	1	\$600,000
Dixie Sandalwood Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Donald M. Gordon Chinguacousy Park	1	1	1	1	1	1	1	1	1	1	\$900,000
Jim Irons Park	-	-	-	-	-	-	-	-	1	1	\$250,000
Komagata Maru Park	-	-	-	-	-	-	-	-	-	1	\$600,000
Michael Murphy Park	-	-	-	-	-	-	-	1	1	1	\$250,000
Peel Village Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Teramoto Park	-	-	-	-	-	1	1	1	1	1	\$600,000
Wading Pools											
Balmoral Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Gage Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Subtotal (#)	6	6	7	7	9	10	10	11	13	14	
Subtotal (\$)	\$3,200.0	\$3,200.0	\$3,800.0	\$3,800.0	\$4,650.0	\$5,250.0	\$5,250.0	\$5,500.0	\$6,000.0	\$6,600.0	

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

Fitness Stations Park Name	# of Stations										UNIT COST (\$/Station)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Creditview Sandalwood Park	-	-	-	-	-	-	-	-	-	-	1	\$150,000
Donald M. Gordon Chinguacousy Park	-	-	-	-	-	-	-	-	-	-	1	\$150,000
Fenwick Park	-	-	-	-	-	-	1	1	1	1	1	\$150,000
Loafer's Lake Park	-	-	-	1	1	1	1	1	1	1	1	\$150,000
Earncliffe Park	-	-	-	-	-	-	-	-	-	-	1	\$150,000
Lougheed Park	-	-	-	-	-	-	-	-	-	-	1	\$150,000
Subtotal (#)	-	-	-	1	1	1	2	2	2	2	6	
Subtotal (\$)	\$0.0	\$0.0	\$0.0	\$150.0	\$150.0	\$150.0	\$300.0	\$300.0	\$300.0	\$300.0	\$900.0	

Dog Parks Park Name	# of Dog Parks										UNIT COST (\$/Park)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Bramalea Limited Community Park	1	1	1	1	1	1	1	1	1	1	-	\$200,000
Bramalea Limited Community Park	-	-	-	-	-	-	-	-	-	-	1	\$200,000
Chris Gibson Park	1	1	1	1	1	1	1	1	1	1	1	\$200,000
Duggan Park	-	-	-	-	1	1	1	1	1	1	1	\$200,000
White Spruce Park	1	1	1	1	1	1	1	1	1	1	1	\$200,000
Subtotal (#)	3	3	3	3	4	4	4	4	4	4	4	
Subtotal (\$)	\$600.0	\$600.0	\$600.0	\$600.0	\$800.0	\$800.0	\$800.0	\$800.0	\$800.0	\$800.0	\$800.0	

Outdoor Box Arena Park Name	# of Facilities										UNIT COST (\$/Facility)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Brampton Sports Park	1	1	1	1	1	1	1	1	1	-	-	\$700,000
Flower City Community Campus	1	1	1	1	1	1	1	1	1	1	1	\$800,000
Gore Meadows	1	1	1	1	1	1	1	1	1	1	1	\$1,300,000
Subtotal (#)	3	3	3	3	3	3	3	3	3	2	2	
Subtotal (\$)	\$2,800.0	\$2,800.0	\$2,800.0	\$2,800.0	\$2,800.0	\$2,800.0	\$2,800.0	\$2,800.0	\$2,800.0	\$2,100.0	\$2,100.0	

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

SHADE STRUCTURES Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Abraham Block Pond	-	-	-	-	2	2	2	2	2	2	\$40,000
Albert Callaghan Memorial Park	1	1	1	1	1	1	1	1	1	1	\$160,000
Allan Kerbal Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Almond Park	-	-	-	-	1	1	1	1	1	1	\$160,000
Aloma Park	-	-	-	-	-	-	1	1	1	1	\$200,000
American Toad Channel	-	-	-	-	-	-	2	2	2	2	\$120,000
Anderson Family Park	-	-	-	-	-	1	1	1	1	1	\$160,000
Andrew McCandless Park	-	-	-	-	-	-	-	-	2	2	\$160,000
Angus Morrison Park	-	-	-	-	-	1	1	1	1	1	\$120,000
Anne Nash Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Armagh Park	-	-	-	1	1	1	1	1	1	1	\$120,000
Barbreh Brown Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Bayridge Park	-	-	-	1	1	1	1	1	1	1	\$160,000
Belkie Vista	1	1	1	1	1	1	1	1	1	1	\$120,000
Bellcrest Park	-	-	-	-	-	1	1	1	1	1	\$200,000
Beresford Parkette	1	1	1	1	1	1	1	1	1	1	\$40,000
Black Forest Park North	1	1	1	1	1	1	1	1	1	1	\$120,000
Black Forest Park South	1	1	1	1	1	1	1	1	1	1	\$120,000
Blue Lake Parkette	1	1	1	1	1	1	1	1	1	1	\$160,000
Blue Lake Parkette	1	1	1	1	1	1	1	1	1	1	\$40,000
Blue Oak Park	1	1	1	-	-	-	-	-	-	-	\$160,000
Blue Oak Park	-	-	-	1	1	1	1	1	1	1	\$200,000
Bottomwood Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Bovaird House	1	1	1	1	1	1	1	1	1	1	\$120,000
Boyce Park	-	-	-	-	-	-	-	-	1	1	\$160,000
Bramalea Ltd Com Park	1	1	1	1	1	1	1	1	1	1	\$160,000
Bramalea Ltd Com Pk	2	2	2	2	2	2	2	2	2	2	\$40,000
Brampton Sports Park	1	1	1	1	1	1	1	1	1	1	\$160,000
Brampton-Marikina Friendship Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Burlwood Pond	-	-	-	-	-	-	-	-	-	1	\$120,000
Burnt Elm Park	1	1	1	1	1	1	1	1	1	1	\$160,000
Calderstone Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Calvert Park	1	1	1	1	1	1	1	1	1	1	\$200,000
Carabram Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Castlehill Park	-	-	1	1	1	1	1	1	1	1	\$120,000
Centennial Park	2	2	3	3	3	3	3	3	3	3	\$120,000
Century Gardens	1	1	1	1	1	1	1	1	1	1	\$160,000
Century Gardens	-	-	1	1	1	1	1	1	1	1	\$200,000
Chinguacousy Sandalwood Park (Cassie Campbell)	-	-	-	-	-	-	-	-	1	1	\$200,000
Chris Gibson Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Chudleigh Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Cobblehill Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Colonel Baldwin Pond	-	-	-	-	-	-	1	1	1	1	\$40,000

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

SHADE STRUCTURES CONT'D Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Colonel William Claus Valley	-	-	-	-	-	-	1	1	1	1	\$120,000
Colt Parkette	1	1	1	1	1	1	1	1	1	1	\$40,000
Creditview Sandalwood Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Creditview Sandalwood Park	-	-	-	-	-	-	-	-	-	1	\$300,000
Creditview Sandalwood Park	-	-	-	-	-	-	-	-	-	1	\$300,000
Crown Victoria Park	-	-	-	-	-	-	1	1	1	1	\$160,000
Crystalview Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Cunnington Parkette	1	1	1	1	1	1	1	1	1	1	\$120,000
Damatta Park	-	-	-	1	1	1	1	1	1	1	\$120,000
Daniel Boyle Park	-	-	-	-	-	-	-	1	1	1	\$120,000
David Heggie Pond	-	-	-	2	2	2	2	2	2	2	\$40,000
Desert Garden Park	-	-	-	-	-	-	-	-	-	1	\$120,000
Dixie / 407 City Park	1	1	1	1	1	1	1	1	1	1	\$200,000
Dixie Sandalwood Park	1	1	1	1	1	1	1	1	1	1	\$160,000
Donald M Gordon Chinguacousy Park	3	1	1	1							\$120,000
Donald M Gordon Chinguacousy Park	-	-	-	-	3	3	3	3	3	3	\$300,000
Donald M Gordon Chinguacousy Park	-	-	-	-	1	1	1	1	1	1	\$300,000
Donald M Gordon Chinguacousy Park	1	1	1	1	1	1	1	1	1	1	\$300,000
Donald M Gordon Chinguacousy Park	-	-	-	-	-	-	1	1	1	1	\$300,000
Dopp Park	-	-	-	-	-	-	-	-	-	1	\$120,000
Earl Cook Parkette	1	1	1	1	1	1	1	1	1	1	\$160,000
Ebenezer Recreation Centre	1	1	1	1	1	1	1	1	1	1	\$120,000
Eldorado Park	2	2	2	2	2	-	-	-	-	-	\$200,000
Ellen Mitchell Recreation Centre	1	1	1	1	1	1	1	1	1	1	\$120,000
Evening Stars Park	1	1	1	1	1	1	1	1	1	1	\$160,000
Fairlawn Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Fallen Oak Park	-	-	1	1	1	1	1	1	1	1	\$120,000
Father Eugene Oreilly Park	-	-	-	-	-	-	-	1	1	1	\$120,000
Fiddlers Parkette	1	1	1	1	1	1	1	1	1	1	\$120,000
Flower City Com	1	1	1	1	1	1	1	1	1	1	\$40,000
Flower City Community Campus	-	-	1	1	1	1	1	1	1	1	\$120,000
Francis H. Taylor Park	-	-	1	1	1	1	1	1	1	1	\$120,000
Fred Kee Park	-	-	-	-	-	-	-	-	1	1	\$160,000
Gage Park (Bandshell)	1	1	1	1	1	1	1	1	1	1	\$300,000
George M. Lee Park	1	1	1	1	1	1	1	-	-	-	\$120,000
George M. Lee Park	-	-	-	-	-	-	-	1	1	1	\$200,000
George Ransier Park	-	-	-	-	-	1	1	1	1	1	\$120,000
Giffen Family Park	1	1	1	1	1	1	1	1	1	1	\$160,000
Gladys And George Gray Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Gold Parkette	-	-	1	1	1	1	1	1	1	1	\$120,000
Gourley Pond	-	-	-	-	-	-	1	1	1	1	\$300,000
Grey Whale Park	1	1	1	1	1	1	1	1	1	1	\$160,000

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

SHADE STRUCTURES CONT'D Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Hackett Valley	1	1	1	1	1	1	1	1	1	1	\$40,000
Halldorson Park	-	-	-	1	1	1	1	1	1	1	\$120,000
Harry A Shields Parkette	1	1	1	1	1	1	1	1	1	1	\$120,000
Havanna Park	-	-	-	-	-	1	1	1	1	1	\$120,000
Havelock Park	-	-	1	1	1	1	1	1	1	1	\$160,000
Heartview Marsh	1	1	1	1	1	1	1	1	1	1	\$120,000
Heatherglen Park	-	-	-	-	-	-	1	1	1	1	\$160,000
Hedgeline Parkette	1	1	1	1	1	1	1	1	1	1	\$160,000
Henry Verschuren Park	-	-	-	1	1	1	1	1	1	1	\$120,000
Hickory Wood Park	-	-	-	1	1	1	1	1	1	1	\$200,000
Homestead Park	1	1	1	1	1	1	1	1	1	1	\$160,000
Howard Stewart Park	-	-	-	-	-	-	-	1	1	1	\$120,000
Iceland Parkette	1	1	1	1	1	1	1	1	1	1	\$120,000
Jacksonville Park	-	-	-	-	-	-	-	-	1	1	\$120,000
James & Edna Davis Park	1	1	1	1	1	1	1	1	1	1	\$120,000
James and Margaret Mcgie Park	1	1	1	1	1	1	1	1	1	1	\$120,000
James William Hewson Park	2	2	2	2	2	2	2	2	2	2	\$120,000
Jennings Park	-	-	-	-	-	-	-	-	-	1	\$120,000
Jersey John Park	-	-	-	1	1	1	1	1	1	1	\$120,000
Jesse Perry Park	-	-	-	-	-	-	-	1	1	1	\$160,000
Jim Irons Park	-	-	-	-	-	-	-	-	1	1	\$200,000
Johnstone Park	-	-	-	1	1	1	1	1	1	1	\$120,000
Kanashiro Parkette	1	1	1	1	1	1	1	1	1	1	\$120,000
Keirstead Park	-	-	-	-	-	-	-	-	1	1	\$160,000
Ken Whillians Square	1	1	1	1	1	1	1	1	1	1	\$120,000
Kidd Valley	-	-	1	1	1	1	1	1	1	1	\$120,000
Kingknoll Park	-	-	-	-	-	-	1	1	1	1	\$160,000
Kiwanis Memorial Park	1	1	1	1	1	1	1	1	1	1	\$200,000
Komagata Maru Park	-	-	-	-	-	-	-	-	-	1	\$160,000
Koretz Park	3	3	3	3	3	3	3	3	3	3	\$120,000
Laidlaw Park	-	-	-	-	-	1	1	1	1	1	\$120,000
Lake Of Dreams	2	2	2	2	2	2	2	2	2	2	\$40,000
Lakelands Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Lauderhill Valley	-	-	-	1	1	1	1	1	1	1	\$120,000
Lightcatcher Park	-	-	-	1	1	1	1	1	1	1	\$160,000
Lillie Roberts Park	1	1	1	1	1	1	1	1	1	1	\$160,000
Little Minnow Park	-	-	-	-	-	-	-	1	1	1	\$120,000
Lloyd Sanderson Park	-	-	-	1	1	1	1	1	1	1	\$160,000
Loafers Lake Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Lola Pond	-	-	-	-	-	-	-	1	1	1	\$40,000
Lorenville Park	-	-	-	-	-	-	1	1	1	1	\$120,000
Lorenzo Park	-	-	-	-	1	1	1	1	1	1	\$120,000

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

SHADE STRUCTURES CONT'D Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Lougheed Park	1	1	1	1	1	1	1	1	1	1	\$160,000
Luongo Park	-	-	-	-	-	-	-	-	-	1	\$160,000
Major William Sharpe Park	-	-	1	1	1	1	1	1	1	1	\$120,000
Matthew Cation Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Maxwell & Lois Rice Park	-	-	1	1	1	1	1	1	1	1	\$120,000
Maybeck Park	-	-	-	1	1	1	1	1	1	1	\$120,000
McKinney Parkette	1	1	1	1	1	1	1	1	1	1	\$120,000
McMicking Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Michael Murphy Park	-	-	1	1	1	1	1	1	1	1	\$200,000
Midsummer Park	-	-	-	1	1	1	1	1	1	1	\$160,000
Minaker Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Minna Park	-	-	-	-	-	-	-	-	-	1	\$160,000
Moody Family Park	-	-	-	-	-	-	1	1	1	1	\$120,000
Morris Kerbel Park	1	1	1	1	1	1	1	1	1	1	\$40,000
Morrow Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Mount Pleasant Sq	-	-	2	2	2	2	2	2	2	2	\$40,000
Mountainash Park East	-	-	1	1	1	1	1	1	1	1	\$160,000
Northampton Park	-	-	1	1	1	1	1	1	1	1	\$160,000
Norton Place Park	-	-	-	-	-	-	-	-	1	1	\$300,000
Old Fairgrounds Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Patrick Trainor Park	-	-	-	-	-	-	-	-	1	1	\$120,000
Picasso Park	-	-	-	1	1	1	1	1	1	1	\$160,000
Purple Lilac Park	-	-	-	-	2	2	2	2	2	2	\$40,000
Purple Lilac Park	-	-	-	-	1	1	1	1	1	1	\$160,000
R. M. Wells Park	-	-	1	1	1	1	1	1	1	1	\$40,000
RC Charlton Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Rhapsody Park	-	-	-	-	-	-	-	-	1	1	\$160,000
Robert Post Park	-	-	-	-	-	-	-	1	1	1	\$200,000
Rollingwood Park	-	-	-	-	-	-	1	1	1	1	\$160,000
Royal West Pond (Arthur Warner Pond)	-	-	-	-	2	2	2	2	2	2	\$40,000
Runians Park	-	-	-	-	-	-	-	-	1	1	\$120,000
Sesquicentennial Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Sheridan Woodlands	-	-	-	-	-	-	1	1	1	1	\$200,000
Sled Dog Park	-	-	1	1	1	1	1	1	1	1	\$120,000
Steightholme Park	-	1	1	1	1	1	1	1	1	1	\$160,000
Smirle Big Train Lawson Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Snaresbrook Park	-	-	-	-	-	-	-	-	1	1	\$160,000
Snowcap Park	-	-	1	1	1	1	1	1	1	1	\$120,000
Sparrow Park	-	-	-	-	-	-	1	1	1	1	\$120,000
Stanleys Mills Pond	1	1	1	1	1	1	1	1	1	1	\$40,000
Stillman Park	-	-	-	-	-	-	-	-	1	1	\$160,000
Teramoto Park	-	-	-	-	1	1	1	1	1	1	\$200,000

APPENDIX B.4
TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

SHADE STRUCTURES CONT'D Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Thorndale Park	-	-	-	-	-	-	-	1	1	1	\$120,000
Tillacoutry Park	-	-	-	-	-	-	-	-	1	1	\$120,000
Timberlane Park	1	1	1	1	1	1	1	1	1	1	\$160,000
Tony Rinomato Park	-	-	1	1	1	1	1	1	1	1	\$160,000
Torbram Sandalwood Park	-	-	1	1	1	1	1	1	1	1	\$160,000
Trailside Park	-	-	-	-	-	-	1	1	1	1	\$160,000
Treeline Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Trudelle Parkette	-	-	-	1	1	1	1	1	1	1	\$120,000
Tumbleweed Parkette	-	-	-	-	1	1	1	1	1	1	\$120,000
Twin Falls Park	-	-	-	-	1	1	1	1	1	1	\$120,000
Upperlinks Park	-	-	-	1	1	1	1	1	1	1	\$160,000
Upwood Park	-	-	-	-	-	-	1	1	1	1	\$160,000
Valleydown Park	-	-	-	-	-	-	1	1	1	1	\$160,000
Via Romano Parkette	1	1	1	1	1	1	1	1	1	1	\$120,000
Vontress Park	-	-	-	-	1	1	1	1	1	1	\$120,000
Wiggins Park	1	1	1	-	-	-	-	-	-	-	\$160,000
Wiggins Park	-	-	-	1	1	1	1	1	1	1	\$200,000
Worthington Park	1	1	1	1	1	1	1	1	1	1	\$120,000
Subtotal (#) Shade Structures	90	89	110	128	144	148	166	174	190	198	
Subtotal (\$)	\$11,580.0	\$11,500.0	\$14,140.0	\$16,540.0	\$18,860.0	\$19,300.0	\$22,180.0	\$23,260.0	\$25,880.0	\$27,280.0	

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

PLAY EQUIPMENT Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Albert Callaghan Memorial Park	1	1	1	1	1	1	1	1	1	1	\$350,000
Allan Kerbel Park (old)	1	1	1	1	1	1	1	-	-	-	\$175,000
Allan Kerbel Park (new)	-	-	-	-	-	-	-	1	1	1	\$350,000
Almond Park	-	-	-	-	1	1	1	1	1	1	\$350,000
Aloma Park	1	1	1	1	1	1	1	1	1	1	\$200,000
Anderson Family Park	1	1	1	1	1	1	1	1	1	1	\$350,000
Andrew McCandless Park	-	-	-	-	-	-	-	-	1	1	\$350,000
Angus Morrison Park	-	-	-	1	1	1	1	1	1	1	\$350,000
Anne Nash Park	1	1	1	1	1	1	1	1	1	1	\$350,000
Armagh Park	-	-	-	1	1	1	1	1	1	1	\$200,000
Armbro Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Bach Park (old)	1	1	1	1	1	1	-	-	-	-	\$200,000
Bach Park (new)	-	-	-	-	-	-	1	1	1	1	\$250,000
Banas Parkette	-	-	-	-	-	-	1	1	1	1	\$200,000
Banting Park	1	1	1	1	1	1	1	1	1	1	\$150,000
Barbreh Brown Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Batsman Park	-	-	-	1	1	1	1	1	1	1	\$350,000
Bayridge Park	1	1	1	1	1	1	1	1	1	1	\$200,000
Beaconsfield Park (old)	1	1	1	-	-	-	-	-	-	-	\$183,000
Beaconsfield Park (new)	-	-	-	1	1	1	1	1	1	1	\$200,000
Beatty Fleming Park	1	1	1	1	1	1	1	1	1	1	\$200,000
Bellcrest Park	-	-	-	-	-	1	1	1	1	1	\$350,000
Berisford Park (old)	1	1	1	-	-	-	-	-	-	-	\$175,000
Berisford Park (new)	-	-	-	1	1	1	1	1	1	1	\$200,000
Black Forest Park South	1	1	1	1	1	1	1	1	1	1	\$350,000
Blackmere Parkette	1	1	1	1	1	1	1	1	1	1	\$200,000
Bloomingdale Park	1	1	1	1	1	1	1	1	1	1	\$150,000
Blue Lake Parkette	1	1	1	1	1	1	1	1	1	1	\$250,000
Blue Oak Park (old)	1	1	1	1	1	1	-	-	-	-	\$175,000
Blue Oak Park (new)	-	-	-	-	-	-	1	1	1	1	\$350,000
Bonnie Braes Park	-	-	-	-	1	1	1	1	1	1	\$250,000
Boreham Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Bottomwood Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Boyce Park	-	-	-	-	-	-	-	-	1	1	\$350,000
Bramalea Limited Community Park (old)	1	1	1	1	-	-	-	-	-	-	\$183,000
Bramalea Limited Community Park (new)	-	-	-	-	1	1	1	1	1	1	\$200,000
Brampton-Marikina Friendship Park	1	1	1	1	1	1	1	1	1	1	\$350,000
Bridekirk Park	1	1	1	1	1	1	1	1	1	1	\$150,000
Brighton Parkette	1	1	1	1	1	1	1	1	1	1	\$150,000
Brookbank Parkette	1	1	1	1	1	1	1	1	1	1	\$150,000
Bruce Beer Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Buick Park	1	1	1	1	1	1	1	1	1	1	\$350,000

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

PLAY EQUIPMENT CONT'D Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Burnt Elm Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Burton Park	1	1	1	1	1	1	1	1	1	1	\$200,000
Calderstone Park	1	1	1	1	1	1	1	1	1	1	\$200,000
Camden Park (east) (old)	1	1	1	1	1	1	1	-	-	-	\$175,000
Camden Park (east) (new)	-	-	-	-	-	-	-	1	1	1	\$150,000
Camden Park (west) (old)	1	1	-	-	-	-	-	-	-	-	\$175,000
Camden Park (west) (new)	-	-	1	1	1	1	1	1	1	1	\$350,000
Cantrill Park	1	1	1	1	1	1	1	1	1	1	\$150,000
Carabram Park (old)	1	-	-	-	-	-	-	-	-	-	\$175,000
Carabram Park (new)	-	1	1	1	1	1	1	1	1	1	\$250,000
Carleton Park	1	1	1	1	1	1	1	1	1	1	\$150,000
Caruso Park	1	1	1	1	1	1	1	1	1	1	\$150,000
Castlehill Park (old)	1	1	-	-	-	-	-	-	-	-	\$183,000
Castlehill Park (new)	-	-	1	1	1	1	1	1	1	1	\$150,000
Centennial Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Century Gardens Park	1	1	1	1	1	1	1	1	1	1	\$350,000
Chamney Court Parkette (old)	1	1	1	1	1	1	-	-	-	-	\$175,000
Chamney Court Parkette (new)	-	-	-	-	-	-	1	1	1	1	\$150,000
Chinguacousy Lions Club Water Tower Park (old)	1	1	1	1	1	1	1	1	-	-	\$175,000
Chinguacousy Lions Club Water Tower Park (new)	-	-	-	-	-	-	-	-	1	1	\$250,000
Chinguacousy Sandalwood Park (Cassie Campbell)	1	1	1	1	1	1	1	1	1	1	\$350,000
Chris Gibson Park (North) (old)	1	1	1	1	-	-	-	-	-	-	\$175,000
Chris Gibson Park (North) (new)	-	-	-	-	1	1	1	1	1	1	\$200,000
Chris Gibson Park (east)	1	1	1	1	1	1	1	1	1	1	\$200,000
Chris Gibson Park (rec)	-	-	-	-	1	1	1	1	1	1	\$150,000
Chudleigh Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Churchville Park South (old)	1	1	1	1	-	-	-	-	-	-	\$175,000
Churchville Park South (new)	-	-	-	-	1	1	1	1	1	1	\$200,000
Clark Park	1	1	1	1	1	1	1	1	1	1	\$200,000
Clover Bloom Parkette (old)	1	1	1	1	1	1	1	-	-	-	\$175,000
Clover Bloom Parkette (new)	-	-	-	-	-	-	-	1	1	1	\$150,000
Cobblehill Park	1	1	1	1	1	1	1	1	1	1	\$250,000
Conservation Drive Park (old)	1	1	1	1	1	1	1	1	-	-	\$175,000
Conservation Drive Park (new)	-	-	-	-	-	-	-	-	1	1	\$200,000
County Court Park (old)	1	1	1	-	-	-	-	-	-	-	\$175,000
County Court Park (new)	-	-	-	1	1	1	1	1	1	1	\$150,000
Creditview Sandalwood Park	-	-	-	-	-	-	-	-	-	1	\$750,000
Crenshaw Parkette	1	1	1	1	1	1	1	1	1	1	\$150,000
Crescent Hill Park (old)	1	1	1	1	1	1	1	-	-	-	\$175,000
Crescent Hill Park (new)	-	-	-	-	-	-	-	1	1	1	\$250,000
Cresthaven Park (old)	1	1	1	1	1	-	-	-	-	-	\$175,000
Cresthaven Park (new)	-	-	-	-	-	1	1	1	1	1	\$250,000

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

PLAY EQUIPMENT CONT'D Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Crown Victoria Parkette	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Crystalview Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Cunnington Park	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Curtis Park	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Cutters Parkette (old)	1	1	1	1	-	-	-	-	-	-	\$ 175,000
Cutters Parkette (new)	-	-	-	-	1	1	1	1	1	1	\$ 150,000
Dafoe Parkette	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Damatta Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Daniel Boyle Park	-	-	-	-	-	-	1	1	1	1	\$ 250,000
Dearbourne Park (old)	1	1	1	1	-	-	-	-	-	-	\$ 175,000
Dearbourne Park (new)	-	-	-	-	1	1	1	1	1	1	\$ 350,000
Desert Garden Park	-	-	-	-	-	-	-	-	1	1	\$ 350,000
Dexfield Park	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Dixie Sandalwood Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Donald M. Gordon Chinguacousy Park (East)	1	1	1	1	1	1	1	1	1	1	\$ 750,000
Donald M. Gordon Chinguacousy Park (West)	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Donn Reynolds Parkette	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Donnelly Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Donwoods Parkette	-	-	1	1	1	1	1	1	1	1	\$ 150,000
Dopp Park	-	-	-	-	-	-	-	-	1	1	\$ 350,000
Dorchester Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Dorset Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Drinkwater Community Park (old)	1	1	1	-	-	-	-	-	-	-	\$ 175,000
Drinkwater Community Park (new)	-	-	-	1	1	1	1	1	1	1	\$ 250,000
Duggan Park (old)	1	1	1	1	-	-	-	-	-	-	\$ 175,000
Duggan Park (new)	-	-	-	-	1	1	1	1	1	1	\$ 250,000
Dumfries Parkette	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Durham Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Earl Cook Parkette	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Earncliffe Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Eastbourne Park	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Eccles Park	-	-	-	-	-	-	-	-	1	1	\$ 200,000
Egerton Park	-	-	-	-	1	1	1	1	1	1	\$ 200,000
Eldorado Park (East) (old)	1	1	1	1	1	1	-	-	-	-	\$ 183,000
Eldorado Park (East) (new)	-	-	-	-	-	-	1	1	1	1	\$ 350,000
Eldorado Park (West) (old)	1	1	1	-	-	-	-	-	-	-	\$ 183,000
Eldorado Park (West) (new)	-	-	-	1	1	1	1	1	1	1	\$ 250,000
Elmcrest Park	-	-	-	-	-	-	1	1	1	1	\$ 350,000
English Street Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Ernest and Edith Parr Parkette	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Ernest Majury Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Evening Stars Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000

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PLAY EQUIPMENT CONT'D Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Ezard Park (old)	1	1	1	1	1	1	1	-	-	-	\$ 159,000
Ezard Park (new)	-	-	-	-	-	-	-	1	1	1	\$ 200,000
Old Fairgrounds Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Fairhill Parkette	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Fairlawn Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Fallen Oak Park (old)	1	-	-	-	-	-	-	-	-	-	\$ 175,000
Fallen Oak Park (new)	-	1	1	1	1	1	1	1	1	1	\$ 250,000
Fallingdale Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Fanshawe Parkette	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Father Eugene Oreilly Park	-	-	-	-	-	-	1	1	1	1	\$ 250,000
Fenwick Park	-	-	-	-	-	-	1	1	1	1	\$ 250,000
Fern Valley Parkette (old)	1	1	1	-	-	-	-	-	-	-	\$ 175,000
Fern Valley Parkette (new)	-	-	-	1	1	1	1	1	1	1	\$ 150,000
Fernforest Way West (old)	1	1	1	1	-	-	-	-	-	-	\$ 175,000
Fernforest Way West (new)	-	-	-	-	1	1	1	1	1	1	\$ 150,000
Ferri Parkette (old)	1	1	1	1	1	1	1	1	1	-	\$ 175,000
Ferri Parkette (new)	-	-	-	-	-	-	-	-	-	1	\$ 150,000
Fiddlers Parkette	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Fletchers Parkette (old)	1	1	1	1	1	1	1	-	-	-	\$ 175,000
Fletcher's Parkette (new)	-	-	-	-	-	-	-	1	1	1	\$ 200,000
Folkstone Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Francis H. Taylor Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Frank Harkema Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Fred Kee Park (old)	1	1	1	1	1	1	-	-	-	-	\$ 175,000
Fred Kee Park (new)	-	-	-	-	-	-	1	1	1	1	\$ 200,000
Fred Kline Park	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Gage Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Gatesgill Park (old)	1	1	-	-	-	-	-	-	-	-	\$ 175,000
Gatesgill Park (new)	-	-	1	1	1	1	1	1	1	1	\$ 200,000
George M. Lee Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
George Ransier Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Giffen Family Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Gladstone-Shaw Park	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Gladys and George Gray Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Glenforest Park South (old)	1	-	-	-	-	-	-	-	-	-	\$ 175,000
Glenforest Park South (new)	-	1	1	1	1	1	1	1	1	1	\$ 350,000
Glenmanor Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Gold Parkette	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Goldcrest Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Gore Meadows Community Park - East	-	-	-	1	1	1	1	1	1	1	\$ 200,000
Great Lakes Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Greenbriar Park South	1	1	1	1	1	1	1	1	1	1	\$ 250,000

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PLAY EQUIPMENT CONT'D Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Greenmount Park North (old)	1	1	1	1	1	1	1	1	-	-	\$ 159,000
Greenmount Park North (new)	-	-	-	-	-	-	-	-	1	1	\$ 250,000
Grey Whale Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Halldorson Park (old)	1	1	-	-	-	-	-	-	-	-	\$ 183,000
Halldorson Park (new)	-	-	1	1	1	1	1	1	1	1	\$ 250,000
Harry A. Shields Parkette	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Havanna Park	-	-	-	-	1	1	1	1	1	1	\$ 350,000
Havelock Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Hazelwood Park South	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Heartview Marsh	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Heatherglen Park	-	-	-	-	-	-	1	1	1	1	\$ 350,000
Hedgeline Parkette	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Henry Verschuren Park	-	-	-	1	1	1	1	1	1	1	\$ 350,000
Hickory Wood Park (old)	1	1	-	-	-	-	-	-	-	-	\$ 175,000
Hickory Wood Park (new)	-	-	1	1	1	1	1	1	1	1	\$ 350,000
Hilldale Park North (old)	1	1	1	1	1	1	1	1	-	-	\$ 40,000
Hilldale Park North (new)	-	-	-	-	-	-	-	1	1	1	\$ 150,000
Hilldale Park South	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Homestead Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Howard Stewart Park	-	-	-	-	-	-	-	1	1	1	\$ 350,000
Howden Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Iceland Parkette	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Inder Heights Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Ironblock Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Ivy Bridge Parkette	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Jacksonville Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Jacob Shook Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
James and Edna Davis Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
James and Margaret McGie Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
James William Hewson Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Jefferson Park (old)	1	1	1	1	1	1	1	1	-	-	\$ 175,000
Jefferson Park (new)	-	-	-	-	-	-	-	1	1	1	\$ 350,000
Jellicoe Parkette (old)	1	-	-	-	-	-	-	-	-	-	\$ 175,000
Jellicoe Parkette (new)	-	1	1	1	1	1	1	1	1	1	\$ 200,000
Jennings Park	-	-	-	-	-	-	-	1	1	1	\$ 350,000
Jersey John Park	-	-	-	1	1	1	1	1	1	1	\$ 200,000
Jesse Perry Park	-	-	-	-	-	-	1	1	1	1	\$ 350,000
Jim Irons Park	-	-	-	-	-	-	-	1	1	1	\$ 250,000
Johnstone Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Jordan Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Jordana's Rainbow Park	-	-	-	-	-	-	-	1	1	1	\$ 350,000
Joseph Lawson Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000

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PLAY EQUIPMENT CONT'D Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
JP Hutton Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Kanashiro Parkette	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Keirstead Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Ken Park	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Kincaid Parkette	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Kindle Parkette (old)	1	1	1	1	1	1	1	-	-	-	\$ 104,000
Kindle Parkette (new)	-	-	-	-	-	-	-	-	1	1	\$ 150,000
Kingfisher Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Kingknoll Park (old)	1	1	-	-	-	-	-	-	-	-	\$ 183,000
Kingknoll Park (new)	-	-	1	1	1	1	1	1	1	1	\$ 200,000
Kingswood Park (old)	1	1	1	1	-	-	-	-	-	-	\$ 175,000
Kingswood Park (new)	-	-	-	-	1	1	1	1	1	1	\$ 250,000
Knightsbridge Park (old)	1	1	-	-	-	-	-	-	-	-	\$ 175,000
Knightsbridge Park (new)	-	-	1	1	1	1	1	1	1	1	\$ 200,000
Komagata Maru Park	-	-	-	-	-	-	-	-	-	1	\$ 350,000
Koretz Park (old)	1	1	1	1	1	1	1	1	1	-	\$ 159,000
Koretz Park (new)	-	-	-	-	-	-	-	-	-	1	\$ 200,000
La France Park (old)	1	1	1	1	1	1	1	-	-	-	\$ 175,000
Lafrance Park (new)	-	-	-	-	-	-	1	1	1	1	\$ 350,000
Laidlaw Park	-	-	-	-	-	-	-	-	1	1	\$ 350,000
Lake Louise Parkette	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Lakelands Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Larande Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Lascelles Park (old)	1	1	-	-	-	-	-	-	-	-	\$ 175,000
Lascelles Park (new)	-	-	1	1	1	1	1	1	1	1	\$ 200,000
Laurelcrest Park North	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Leander Park (old)	1	1	1	1	-	-	-	-	-	-	\$ 175,000
Leander Park (new)	-	-	-	-	1	1	1	1	1	1	\$ 350,000
Leflar Park	-	-	-	-	-	1	1	1	1	1	\$ 350,000
Lethbridge Park (old)	1	-	-	-	-	-	-	-	-	-	\$ 175,000
Lethbridge Park (new)	-	1	1	1	1	1	1	1	1	1	\$ 250,000
Lightcatcher Park	-	-	-	1	1	1	1	1	1	1	\$ 250,000
Lillie Roberts Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Little Minnow Park	-	-	-	-	-	-	1	1	1	1	\$ 200,000
Lloyd Sanderson Park (old)	1	1	1	1	1	1	1	-	-	-	\$ 175,000
Lloyd Sanderson Park (new)	-	-	-	-	-	-	-	1	1	1	\$ 200,000
Loafer's Lake Park	-	-	-	1	1	1	1	1	1	1	\$ 350,000
Lola Park	-	-	-	-	-	-	1	1	1	1	\$ 350,000
Lorenville Park	-	-	-	1	1	1	1	1	1	1	\$ 250,000
Lorenzo Park	-	-	-	-	1	1	1	1	1	1	\$ 350,000
Lougheed Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Lower Thames Park	-	-	-	-	-	-	-	-	1	1	\$ 350,000

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PLAY EQUIPMENT CONT'D Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Luongo Park	-	-	-	1	1	1	1	1	1	1	\$ 350,000
Mahaffy Park	-	-	-	-	-	-	1	1	1	1	\$ 350,000
Major William Sharpe Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Manitou Park (old)	1	1	1	1	1	1	-	-	-	-	\$ 175,000
Manitou Park (new)	-	-	-	-	-	-	1	1	1	1	\$ 350,000
Manorcrest Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Maplehurst Parkette	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Martindale Parkette	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Mary Goodwillie Young Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Massey Park (old)	1	-	-	-	-	-	-	-	-	-	\$ 183,000
Massey Park (new)	-	1	1	1	1	1	1	1	1	1	\$ 250,000
Matthew Cation Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Maxwell and Lois Rice Park	-	-	1	1	1	1	1	1	1	1	\$ 250,000
Maybeck Park	-	-	-	1	1	1	1	1	1	1	\$ 350,000
McKinney Parkette	1	1	1	1	1	1	1	1	1	1	\$ 350,000
McMicking Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Meadowland Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Meadowlark Parkette (old)	1	1	1	1	1	1	1	-	-	-	\$ 159,000
Meadowlark Parkette (new)	-	-	-	-	-	-	-	1	1	1	\$ 150,000
Merganser Parkette (old)	1	1	-	-	-	-	-	-	-	-	\$ 183,000
Merganser Parkette (new)	-	-	1	1	1	1	1	1	1	1	\$ 150,000
Michael Murphy Park	-	-	-	-	-	-	1	1	1	1	\$ 350,000
Midsummer Park	-	-	1	1	1	1	1	1	1	1	\$ 200,000
Millstone Parkette	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Minaker Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Minna Park	-	-	-	-	-	-	-	1	1	1	\$ 350,000
Moody Family Park	-	-	-	-	-	-	1	1	1	1	\$ 350,000
Moorehead Park (old)	1	-	-	-	-	-	-	-	-	-	\$ 183,000
Moorehead Park (new)	-	1	1	1	1	1	1	1	1	1	\$ 350,000
Morris Kerbel Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Morrow Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Mosswood Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Mount Pleasant Square	-	1	1	1	1	1	1	1	1	1	\$ 150,000
Mountainash Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Murray Street Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Nancy McCredie Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Nasmith Park (old)	1	1	1	1	1	1	1	1	-	-	\$ 175,000
Nasmith Park (new)	-	-	-	-	-	-	-	-	1	1	\$ 200,000
Native Landing Parkette	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Newton Park (old)	1	1	1	1	1	1	1	-	-	-	\$ 175,000
Newton Park (new)	-	-	-	-	-	-	-	1	1	1	\$ 200,000
Northampton Park (North) (old)	1	1	1	1	1	-	-	-	-	-	\$ 175,000

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PLAY EQUIPMENT CONT'D Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Northampton Park (South) (old)	1	1	1	-	-	-	-	-	-	-	\$ 175,000
Northampton Park (new)	-	-	-	1	1	1	1	1	1	1	\$ 350,000
Northwood Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Norton Place Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Notre Dame Park (old)	1	1	1	1	1	1	-	-	-	-	\$ 159,000
Notre Dame Park (new)	-	-	-	-	-	-	1	1	1	1	\$ 150,000
Omega Parkette (old)	1	1	1	-	-	-	-	-	-	-	\$ 175,000
Omega Parkette (new)	-	-	-	1	1	1	1	1	1	1	\$ 150,000
Patrick O'Leary Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Patrick Trainor Park	-	-	-	-	-	-	-	1	1	1	\$ 350,000
Peddle Family Wood	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Peel Village Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Piane Park	1	1	1	1	-	-	-	-	-	-	\$ 175,000
Picasso Park	-	-	-	1	1	1	1	1	1	1	\$ 350,000
Pickard Park	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Professor's Lake Park (East) (old)	1	1	1	1	1	1	1	1	-	-	\$ 175,000
Professor's Lake Park (East) (new)	-	-	-	-	-	-	-	-	1	1	\$ 250,000
Professor's Lake Park (West)	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Purple Lilac Park	-	-	-	-	1	1	1	1	1	1	\$ 350,000
Ravenscliffe Parkette	1	1	1	1	1	1	1	1	1	1	\$ 150,000
RC Charlton Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Reed Parkette	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Rhapsody Park	-	-	-	-	-	-	-	-	1	1	\$ 350,000
Richvale Park (North)	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Richvale Park (South)	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Ridgehill Park (old)	1	1	1	1	1	1	1	-	-	-	\$ 175,000
Ridgehill Park (new)	-	-	-	-	-	-	-	1	1	1	\$ 250,000
River Heights Park	-	-	-	1	1	1	1	1	1	1	\$ 200,000
RM Wells Park	-	1	1	1	1	1	1	1	1	1	\$ 250,000
Robert Post Park	-	-	-	-	-	-	-	1	1	1	\$ 350,000
Robert Reid Park	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Roehampton Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Rollingwood Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Rosepac Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Royal Salisbury Parkette (old)	1	1	1	1	1	1	-	-	-	-	\$ 175,000
Royal Salisbury Parkette (new)	-	-	-	-	-	-	1	1	1	1	\$ 150,000
Runians Park	-	-	-	-	-	-	-	1	1	1	\$ 350,000
Rushmore Parkette (old)	1	1	1	1	1	1	1	1	1	-	\$ 175,000
Rushmore Parkette (new)	-	-	-	-	-	-	-	-	-	1	\$ 150,000
Salisbury Circle Parkette	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Scottsdale Parkette South (old)	1	1	1	1	-	-	-	-	-	-	\$ 159,000
Scottsdale Parkette South (new)	-	-	-	-	1	1	1	1	1	1	\$ 200,000

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

PLAY EQUIPMENT CONT'D Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Seaborn Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Seapines Park	-	-	-	-	1	1	1	1	1	1	\$ 200,000
Sheridan Parkette	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Sheridan Woodlands	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Sid Manser Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Sled Dog Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Sleighholme Park	-	1	1	1	1	1	1	1	1	1	\$ 350,000
Smirle 'Big Train' Lawson Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Snaresbrook Parkette	-	-	-	-	-	-	-	-	1	1	\$ 150,000
Snowcap Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Snuretown Park East	-	-	-	-	-	-	-	1	1	1	\$ 250,000
Softneedle Parkette (old)	1	1	1	1	1	1	1	-	-	-	\$ 150,000
Softneedle Parkette (new)	-	-	-	-	-	-	-	1	1	1	\$ 200,000
Southwell Parkette (old)	1	1	1	1	1	1	1	-	-	-	\$ 40,000
Southwell Parkette (new)	-	-	-	-	-	-	-	1	1	1	\$ 150,000
Sparrow Park	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Stillman Park	-	1	1	1	1	1	1	1	1	1	\$ 350,000
Summer Valley Parkette (old)	1	1	1	1	1	1	1	1	-	-	\$ 175,000
Summer Valley Parkette (new)	-	-	-	-	-	-	-	1	1	1	\$ 200,000
Suncrest Parkette	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Sunforest Parkette (old)	1	1	1	1	1	-	-	-	-	-	\$ 175,000
Sunforest Parkette (new)	-	-	-	-	-	1	1	1	1	1	\$ 250,000
Sunny Meadow Parkette	1	1	1	1	1	1	1	1	1	1	\$ 150,000
Talbot Park (old)	1	1	1	1	1	1	1	-	-	-	\$ 175,000
Talbot Park (new)	-	-	-	-	-	-	-	1	1	1	\$ 250,000
Tara Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Teramoto Park	-	-	-	-	1	1	1	1	1	1	\$ 350,000
Thorndale Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Tillacoutry Park	-	-	-	-	-	-	-	1	1	1	\$ 350,000
Timberlane Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Todd Edward Baylis Park (old)	1	1	1	1	1	-	-	-	-	-	\$ 175,000
Todd Edward Baylis Park (new)	-	-	-	-	-	1	1	1	1	1	\$ 250,000
Tony Rinomato Park	-	1	1	1	1	1	1	1	1	1	\$ 350,000
Torbram Sandalwood Community Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Trailside Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Treeline Park	-	-	1	1	1	1	1	1	1	1	\$ 350,000
Treleaven Park (old)	1	-	-	-	-	-	-	-	-	-	\$ 175,000
Treleaven Park (new)	-	1	1	1	1	1	1	1	1	1	\$ 250,000
Trudelle Parkette	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Tumbleweed Parkette (old)	1	1	1	1	1	1	1	1	-	-	\$ 175,000
Tumbleweed Parkette (new)	-	-	-	-	-	-	-	-	1	1	\$ 200,000
Turtle Creek Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK FACILITIES

PLAY EQUIPMENT CONT'D Park Name	# of Structures										UNIT COST (\$/Structure)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Twin Falls Park	-	-	-	-	1	1	1	1	1	1	\$ 350,000
Upperlinks Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Upwood Park (old)	1	1	1	1	1	1	1	-	-	-	\$ 200,000
Upwood Park (new)	-	-	-	-	-	-	-	1	1	1	\$ 200,000
Valleybrook Park (old)	1	1	1	1	1	-	-	-	-	-	\$ 200,000
Valleybrook Park (new)	-	-	-	-	-	1	1	1	1	1	\$ 200,000
Valleydown Park (old)	1	1	1	1	1	1	1	1	-	-	\$ 200,000
Valleydown Park (new)	-	-	-	-	-	-	-	-	1	1	\$ 150,000
Van Scott Parkette	1	1	1	1	1	1	1	1	1	1	\$ 250,000
Vanier Park (old)	1	1	1	-	-	-	-	-	-	-	\$ 183,000
Vanier Park (new)	-	-	-	1	1	1	1	1	1	1	\$ 200,000
Via Romano Parkette	1	1	1	1	1	1	1	1	1	1	\$ 350,000
W.A. Russell Parkette (old)	1	1	1	1	1	1	1	-	-	-	\$ 200,000
W.A. Russell Parkette (new)	-	-	-	-	-	-	-	1	1	1	\$ 250,000
Watchman Park	1	1	1	1	1	1	1	1	1	1	\$ 200,000
Watson Valley (East)	1	1	1	1	-	-	-	-	-	-	\$ 200,000
Watson Valley (West)	1	1	1	1	-	-	-	-	-	-	\$ 200,000
Weybridge Park (old)	1	-	-	-	-	-	-	-	-	-	\$ 200,000
Weybridge Park (new)	-	1	1	1	1	1	1	1	1	1	\$ 350,000
Whitewash Parkette	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Wiggins Park	1	1	1	1	1	1	1	1	1	1	\$ 250,000
William Porter Park	-	-	1	1	1	1	1	1	1	1	\$ 200,000
William Sheard Park (old)	1	1	1	1	-	-	-	-	-	-	\$ 200,000
William Sheard Park (new)	-	-	-	-	1	1	1	1	1	1	\$ 200,000
Winterfold Park (old)	1	1	1	1	1	1	1	1	-	-	\$ 200,000
Winterfold Park (new)	-	-	-	-	-	-	-	-	1	1	\$ 250,000
Woodview Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Worthington Park	1	1	1	1	1	1	1	1	1	1	\$ 350,000
Wynview Park	-	-	-	1	1	1	1	1	1	1	\$ 350,000
Subtotal (#)	257	262	267	281	288	289	301	313	321	322	
Subtotal (\$)	\$58,201.0	\$60,535.0	\$62,128.0	\$66,529.0	\$69,412.0	\$70,162.0	\$74,470.0	\$79,493.0	\$82,300.0	\$83,000.0	

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
OUTDOOR BUILDINGS

OUTDOOR BUILDINGS (sq.ft.)	# of Square Feet										UNIT COST (\$/sq.ft)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Batsman Park Comfort Station	-	-	-	-	2,142	2,142	2,142	2,142	2,142	2,142	2,142	\$286
Cemetery Maintenance Building (old)	950	950	950	950	-	-	-	-	-	-	-	\$410
Cemetery Maintenance Building (new)	-	-	-	-	2,470	2,470	2,470	2,470	2,470	2,470	2,470	\$301
Cemetery Office Building	762	762	762	762	762	762	762	762	762	762	762	\$325
Century Gardens Fieldhouse	330	330	330	330	330	330	330	330	330	330	330	\$185
Ching. Park Barn	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	\$84
Ching. Park Central Electrical Metering Room	-	77	77	77	77	77	77	77	77	77	77	\$247
Ching. Park Change Room (Terry Fox Fieldhouse)	-	-	-	-	-	-	-	4,820	4,820	4,820	4,820	\$368
Ching. Park Electrical Bunker (Hilltop Electrical Room)	-	-	91	91	91	91	91	91	91	91	91	\$187
Ching. Park Garage	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	\$76
Ching. Park Garage (Tubing Storage Shed)	-	-	973	973	973	973	973	973	973	973	973	\$73
Ching. Park Greenhouses	12,886	12,886	12,886	12,886	12,886	12,886	12,886	12,886	12,886	12,886	12,886	\$235
Ching. 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	3,385	\$201
Ching. Park NE Electrical Metering Room	-	91	91	91	91	91	91	91	91	91	91	\$209
Ching. Park NW Electrical Metering Room	-	169	169	169	169	169	169	169	169	169	169	\$142
Ching. Park Outdoor Skating Rink Building	-	-	-	-	-	-	-	3,218	3,218	3,218	3,218	\$806
Ching. Park Paddle Boat Pavilion	-	-	-	2,396	2,396	2,396	2,396	2,396	2,396	2,396	2,396	\$942
Ching. Park Parks Building	3,502	3,502	3,502	3,502	3,502	3,502	3,502	3,502	3,502	3,502	3,502	\$160
Ching. Park Pump House	-	674	674	674	674	674	674	674	674	674	674	\$214
Ching. Park SE Electrical Metering Room	-	173	173	173	173	173	173	173	173	173	173	\$104
Ching. Park Snow Making Pump House	-	674	674	674	674	674	674	674	674	674	674	\$88
Ching. Park Splash Pad Building	-	-	84	84	84	84	84	84	84	84	84	\$190
Ching. Park Sports Box	450	450	-	-	-	-	-	-	-	-	-	\$93
Ching. Park Tea House	3,607	3,607	3,607	3,607	3,607	3,607	3,607	3,607	3,607	3,607	3,607	\$232
Ching. Park Tennis & Baseball Storage	613	613	613	613	613	613	613	613	613	613	613	\$157
Ching. Park Tennis Bubble	-	-	42,228	42,228	42,228	42,228	42,228	42,228	42,228	42,228	42,228	\$37
Ching. Park Tennis Facility (old)	38,606	38,606	-	-	-	-	-	-	-	-	-	\$110

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
OUTDOOR BUILDINGS

OUTDOOR BUILDINGS (sq.ft.) CONT'D	# of Square Feet										UNIT COST (\$/sq.ft)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Ching. Park Track Building (old)	2,200	2,200	2,200	-	-	-	-	-	-	-	-	\$210
Chinguacousy Wellness Centre Fieldhouse	249	249	249	249	249	249	249	249	249	249	249	\$145
County Court Field House	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	\$346
Creditview Park Fieldhouse	7,311	7,311	7,311	7,311	7,311	7,311	7,311	7,311	7,311	7,311	7,311	\$474
Duggan Park Field House	1,681	1,681	1,681	1,681	1,681	1,681	1,681	1,681	1,681	1,681	1,681	\$293
Duval House - Parks Depot	7,265	7,265	7,265	7,265	7,265	7,265	7,265	7,265	7,265	7,265	-	\$207
Eldorado Park Pavilion	1,288	1,288	1,288	1,288	1,288	1,288	1,288	1,288	1,288	1,288	1,288	\$782
Eldorado Parks Shed	921	921	921	921	921	921	921	921	921	921	921	\$105
Eldorado Pool Change house	7,657	7,657	7,657	7,657	7,657	7,657	7,657	7,657	7,657	7,657	7,657	\$37
Ellen Street Parks Garage	898	898	898	898	898	898	898	898	898	898	898	\$192
Fairgrounds Park Indoor Batting Cages	2,354	2,354	2,354	2,354	2,354	2,354	2,354	2,354	2,354	2,354	2,354	\$223
Fairgrounds Park Scorebox / Snack Bar / Washrooms	681	681	681	681	681	681	681	681	681	681	681	\$308
FCCC Park Maintenance Warehouse	4,718	4,718	4,718	4,718	4,718	4,718	4,718	4,718	4,718	4,718	4,718	\$182
Fred Kline Field House	756	756	756	756	756	756	756	756	756	756	756	\$885
Gage Park Mechanical	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	\$580
Glidden Parks Operation Centre	-	64,363	64,363	64,363	64,363	64,363	64,363	64,363	64,363	64,363	64,363	\$233
Loafer's Lake Fieldhouses	500	500	500	500	500	500	500	500	500	500	500	\$446
Norton Place Fieldhouse (old)	1,580	1,580	1,580	1,580	1,580	-	-	-	-	-	-	\$210
Norton Place Parks Depot	-	-	-	-	-	8,700	8,700	8,700	8,700	8,700	8,700	\$371
Orenda Parks Operation Centre	24,698	-	-	-	-	-	-	-	-	-	-	\$210
Orenda Parks West Building	7,687	7,687	7,687	7,687	7,687	7,687	7,687	7,687	7,687	7,687	7,687	\$189
Peel Village Clubhouse	2,820	2,820	2,820	2,820	2,820	2,820	2,820	2,820	2,820	2,820	2,820	\$368
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	1,809	\$129
Peel Village Pump house	98	98	98	98	98	98	98	98	98	98	98	\$908
Quonset Hut/Ogada Wilderness Centre	3,600	3,600	-	-	-	-	-	-	-	-	-	\$210
Rotary Fieldhouse-1	150	150	150	150	150	150	150	150	150	150	150	\$63
Rotary Fieldhouse-2	128	128	128	128	128	128	128	128	128	128	128	\$210
Sesquicentennial Park Sports field House	4,874	4,874	4,874	4,874	4,874	4,874	4,874	4,874	4,874	4,874	4,874	\$801
Teramoto Park Comfort Station	-	-	-	1,410	1,410	1,410	1,410	1,410	1,410	1,410	1,410	\$348
Teramoto Parks Depot	-	-	-	9,063	9,063	9,063	9,063	9,063	9,063	9,063	9,063	\$252
Valleybrook Fieldhouse	560	560	560	560	560	560	560	560	560	560	560	\$311
Victoria Park Bleachers/Score Box	125	125	125	125	125	125	125	125	125	125	125	\$160
Total (sq.ft.)	167,623	209,146	209,866	220,535	224,197	231,317	231,317	239,355	239,355	232,090		
Total (\$000)	\$36,061.8	\$46,140.6	\$42,756.9	\$47,327.9	\$48,294.4	\$51,188.6	\$51,188.6	\$55,555.9	\$55,555.9	\$54,053.9		

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
OUTDOOR BUILDINGS

LAND FOR OUTDOOR BUILDINGS (acres)	# of Acres										UNIT COST (\$/acre)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Batsman Park Comfort Station	-	-	-	-	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$1,100,000
Cemetery Maintenance Building	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	\$1,500,000
Cemetery Office Building	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$1,500,000
Century Gardens Fieldhouse	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$2,200,000
Ching. Park Barn/Greenhouses/Paddocks/Parking	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	\$1,500,000
Ching. Park Central Electrical Metering Room	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$1,500,000
Ching. Park Change Room (Terry Fox Fieldhouse)	-	-	-	-	-	-	-	-	0.11	0.11	0.11	\$1,500,000
Ching. Park Electrical Bunker (Hilltop Electrical Room)	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$1,500,000
Ching. Park Garage	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$1,500,000
Ching. Park Garage (Tubing Storage Shed)	-	-	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$1,500,000
Ching. Park Greenhouses	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	\$1,500,000
Ching. Park Mini Golf & Snack Bar	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	\$1,500,000
Ching. Park NE Electrical Metering Room	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$1,500,000
Ching. Park NW Electrical Metering Room	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$1,500,000
Ching. Park Outdoor Skating Rink Building	-	-	-	-	-	-	-	-	0.07	0.07	0.07	\$1,500,000
Ching. Park Paddle Boat Pavilion	-	-	-	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	\$1,500,000
Ching. Park Parks Building	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$1,500,000
Ching. Park Pump House	-	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$1,500,000
Ching. Park SE Electrical Metering Room	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$1,500,000
Ching. Park Snow Making Pump House	-	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$1,500,000
Ching. Park Splash Pad Building	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$1,500,000
Ching. Park Sports Box	0.02	0.02	-	-	-	-	-	-	-	-	-	\$1,500,000
Ching. Park Tea House	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$1,500,000
Ching. Park Tennis & Baseball Storage	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$1,500,000
Ching. Park Tennis Bubble	-	-	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	\$1,500,000
Ching. Park Tennis Facility (old)	1.41	1.41	-	-	-	-	-	-	-	-	-	\$1,500,000
Ching. Park Track and Field Stadium	-	-	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	\$1,500,000

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APPENDIX B.4
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
OUTDOOR BUILDINGS

LAND FOR OUTDOOR BUILDINGS (acres) CONT'D	# of Acres										UNIT COST (\$/acre)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Ching. Park Track Building (old)	0.06	0.06	0.06	-	-	-	-	-	-	-	-	\$1,500,000
Chinguacousy Wellness Centre Fieldhouse	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$1,500,000
County Court Field House	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$2,200,000
Creditview Sandalwood Field House	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$2,200,000
Duggan Park Field House	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$2,200,000
Duval House - Parks Depot	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	\$1,100,000
Eldorado Park Pavilion	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	\$1,500,000
Eldorado Parks Shed	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,500,000
Eldorado Pool Change house	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	\$1,500,000
Ellen Street Parks Garage	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	\$1,100,000
Fairgrounds Park Indoor Batting Cages	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	\$1,100,000
Fairgrounds Scorebox / Snack Bar / Washrooms	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	\$1,100,000
FCCC Park Maintenance Warehouse	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	\$1,500,000
Fred Kline Field House	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$1,500,000
Gage Park Mechanical	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,500,000
Glidden Parks Operations Centre	-	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	\$1,500,000
Loafer's Lake Fieldhouses	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$1,100,000
Norton Place Fieldhouse (old)	0.04	0.04	0.04	0.04	0.04	-	-	-	-	-	-	\$1,500,000
Norton Place Parks Depot	-	-	-	-	-	0.20	0.20	0.20	0.20	0.20	0.20	\$1,500,000
Orenda Road Parks Operation Centre	3.08	-	-	-	-	-	-	-	-	-	-	\$1,500,000
Orenda Parks West Building	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	\$1,500,000
Peel Village Clubhouse	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$2,200,000
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	0.32	\$2,200,000
Quonset Hut/Ogoda Wilderness Centre	0.33	0.33	-	-	-	-	-	-	-	-	-	\$2,200,000
Rotary Fieldhouses	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	\$1,500,000
Sesquicentennial Park Depot	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	\$2,200,000
Teramoto Park Comfort Station	-	-	-	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	\$2,200,000
Teramoto Parks Depot	-	-	-	2.51	2.51	2.51	2.51	2.51	2.51	2.51	2.51	\$2,200,000
Valleybrook Field House	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$2,200,000
Victoria Park Shed	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$1,500,000
Total (acres)	19.03	21.14	21.33	24.91	25.11	25.28	25.28	25.46	25.46	25.30		
Total (\$000)	\$30,029.1	\$33,198.1	\$33,246.6	\$40,408.4	\$40,628.4	\$40,873.6	\$40,873.6	\$41,150.4	\$41,150.4	\$40,966.9		

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APPENDIX B.4
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
OUTDOOR BUILDINGS

EQUIPMENT FOR OUTDOOR BUILDINGS Description	Total Value of Equipment for Outdoor Buildings (\$000)										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Brampton Cemetery Mtce Bldg	\$14.1	\$14.1	\$14.1	\$14.1	\$14.1	\$14.11	\$14.1	\$14.1	\$14.1	\$14.1	\$14.1
Brampton Cemetery Office	\$23.1	\$23.1	\$23.1	\$23.1	\$23.1	\$23.1	\$23.1	\$23.1	\$23.1	\$23.1	\$23.1
Ellen Street Parks Garage	\$16.6	\$16.6	\$16.6	\$16.6	\$16.6	\$16.6	\$16.6	\$16.6	\$16.6	\$16.6	\$16.6
Century Gardens Fieldhouse	\$6.1	\$6.1	\$6.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Ching. Park Parks building	\$64.8	\$64.8	\$64.8	\$64.8	\$64.8	\$64.8	\$64.8	\$64.8	\$64.8	\$64.8	\$64.8
Ching. Ski-hill Pump House	\$9.4	\$9.4	\$9.4	\$9.4	\$9.4	\$9.4	\$9.4	\$9.4	\$9.4	\$9.4	\$9.4
Ching. Ski-hill Rope-tow Hut	\$2.8	\$2.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Ching. Ski-hill T-bar Line Hut	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Ching. Park Mini Golf / Snack Bar	\$62.7	\$62.7	\$62.7	\$62.7	\$62.7	\$62.7	\$62.7	\$62.7	\$62.7	\$62.7	\$62.7
Ching. Park Garage	\$48.6	\$48.6	\$48.6	\$48.6	\$48.6	\$48.6	\$48.6	\$48.6	\$48.6	\$48.6	\$48.6
Ching. Park Wading Pool Buildings	\$5.3	\$5.3	\$5.3	\$5.3	\$5.3	\$5.3	\$5.3	\$5.3	\$5.3	\$5.3	\$5.3
Chinguacousy Sports Box	\$8.3	\$8.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Ching. Park Track Building	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
County Court Field House	\$24.0	\$24.0	\$24.0	\$24.0	\$24.0	\$24.0	\$24.0	\$24.0	\$24.0	\$24.0	\$24.0
Crescent Hill Storage Bldg	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Duggan Park Fieldhouse	\$31.1	\$31.1	\$31.1	\$31.1	\$31.1	\$31.1	\$31.1	\$31.1	\$31.1	\$31.1	\$31.1
Earnscliffe Storage Shed	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Eldorado Parks Shed	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3
Eldorado Storage Well Building	\$0.7	\$0.7	\$0.7	\$0.7	\$0.7	\$0.7	\$0.7	\$0.7	\$0.7	\$0.7	\$0.7

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APPENDIX B.4
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
OUTDOOR BUILDINGS

EQUIPMENT FOR OUTDOOR BUILDINGS CONT'D Description	Total Value of Equipment for Outdoor Buildings (\$000)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Eldorado Well Holding Tank Building	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Fred Kline Fieldhouse	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3
Glidden Parks Operations Centre	\$0.0	\$549.8	\$549.8	\$549.8	\$549.8	\$549.8	\$549.8	\$549.8	\$549.8	\$549.8
Loafer's Lake Sheds	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3
Northwood Park Wading Pool	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Norton Park Shed	\$29.3	\$29.3	\$29.3	\$29.3	\$29.3	\$29.3	\$29.3	\$29.3	\$29.3	\$29.3
Orenda Road Parks Operation Centre	\$549.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
OPP - Helicopter Hanger (Park Maintenance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
OPP - Greenhouse (Chapel Building)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Peel Village Golf Course Garage	\$33.5	\$33.5	\$33.5	\$33.5	\$33.5	\$33.5	\$33.5	\$33.5	\$33.5	\$33.5
Rotary Club House & Shed	\$23.7	\$23.7	\$23.7	\$23.7	\$23.7	\$23.7	\$23.7	\$23.7	\$23.7	\$23.7
Valleybrook Field House	\$3.9	\$3.9	\$3.9	\$3.9	\$3.9	\$3.9	\$3.9	\$3.9	\$3.9	\$3.9
Victoria Park Shed	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0
White Spruce Park Storage Bldg.	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Chinguacousy Wellness Centre Fieldhouse	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3
Memorial Snack Bar/Washrooms	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3	\$9.3
Quonset Hut/Ogada Wilderness Centre	\$66.6	\$66.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Ching. Park Tennis & Baseball Storage	\$11.3	\$11.3	\$11.3	\$11.3	\$11.3	\$11.3	\$11.3	\$11.3	\$11.3	\$11.3
Sesquicentennial Park Fieldhouse	\$87.0	\$87.0	\$87.0	\$87.0	\$87.0	\$87.0	\$87.0	\$87.0	\$87.0	\$87.0
Park Maintenance Equipment	\$2,913.4	\$2,913.4	\$2,913.4	\$2,913.4	\$2,913.4	\$2,913.4	\$2,913.4	\$2,913.4	\$2,913.4	\$2,913.4
Total (\$000)	\$4,084.5	\$4,084.5	\$4,006.7	\$4,000.6						

APPENDIX B.4
TABLE 1CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARK VEHICLES AND EQUIPMENT

MAINTENANCE VEHICLES & EQUIPMENT (#s)	# of Equipment										UNIT COST (\$/equip)	Allocation to Parks
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
(A) Cars, Station Wagons	30	31	31	28	23	15	13	13	2	2	\$38,400	0%
(B) Compact Pickups	6	5	5	4	3	3	3	3	3	3	\$26,000	100%
(C) Compact SUVs (2X4 & 4X4)	91	91	84	125	123	108	104	103	113	118	\$64,700	25%
(D) 3/4 & 1 Ton Pickups	38	36	36	36	36	33	13	11	8	6	\$61,300	90%
(E) 3/4 & 1 Ton 4X4 Pickups	50	60	58	79	76	105	128	126	131	133	\$71,600	60%
(F) Compact Vans	7	7	9	8	8	17	17	17	17	7	\$35,700	38%
(G) 3/4 & 1 Ton Vans	9	10	12	12	10	10	10	10	10	11	\$65,100	50%
(H) 1 - 7.5 Ton S Axle, Dual Axle Dump, Flat Bed	46	48	47	49	50	54	54	54	55	59	\$164,900	65%
(I) 7.5 - 20 Ton S Axle, D Wheeldump, Flat Bed, Tank	40	34	37	39	37	37	37	36	36	36	\$294,900	40%
(J) 20 - 34 Ton Tandem Axle Dumps, Flusher, Flat Bed	15	15	14	14	14	14	14	14	14	14	\$409,200	20%
(L) 7.5 - 20 Ton Spec Vehicle, Buck, Crane, Bodyinter	2	2	2	2	2	2	2	3	3	3	\$361,700	100%
(N) Trailer	47	54	68	69	69	68	68	68	68	67	\$308,500	70%
(O) Ice Resurfacers	20	19	20	20	20	21	21	21	21	22	\$106,200	100%
(P) Loader Backhoe Combinations and Excavators	5	5	5	6	6	6	8	7	6	6	\$182,000	65%
(Q) Front End Loaders Rubber Tire and Crawler	8	8	8	8	8	10	10	10	10	10	\$326,900	50%
(R) Graders	1	-	-	-	-	-	-	-	-	-	\$275,400	0%
(S) Street Sweepers Mechanical And Vacuum	7	6	6	5	5	4	4	4	4	-	\$269,800	20%
(T) Tractors Farm Type All Sizes	25	25	25	23	26	27	28	28	28	28	\$156,300	65%
(U) Sidewalk Plows and Skid Steer Loaders	7	6	7	7	7	7	7	7	8	9	\$118,100	85%
Turf Equipment Mowers, Trimmers, Gators	68	65	65	68	68	116	116	116	124	124	\$114,400	95%
(X) Asphrollers, Grinders, Hotbx, Con/Asphsaw, Tamp	8	9	11	12	12	13	13	13	13	13	\$57,300	15%
(Y) Rd Maint Eqp, Signbrds, Stmrns, Leafloadrs, Comp	13	8	8	10	11	12	12	12	12	11	\$19,400	0%
(Z) Specialty Equipment Not Classified	56	56	69	68	72	89	96	89	89	85	\$590,700	60%
Total (#)	599	600	627	692	686	771	778	765	775	767		
Sub-total Recreation Share Only (#)	334	337	356	382	382	456	457	450	461	459		
Total (\$000)	\$108,799.6	\$109,038.0	\$121,291.1	\$125,946.8	\$127,680.6	\$145,224.1	\$149,964.5	\$145,383.9	\$146,798.8	\$143,965.0		
Sub-total Recreation Share Only (\$000)	\$62,958.5	\$63,724.6	\$71,636.7	\$73,670.3	\$75,011.7	\$87,913.8	\$90,552.9	\$87,984.9	\$89,154.7	\$87,895.7		

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
OUTDOOR BUILDINGS

Miscellaneous Special Facilities (\$000)	Total Value of Miscellaneous Special Facilities (\$000)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Century Gardens Lawn Bowling Club	\$1,465.1	\$1,465.1	\$1,465.1	\$1,465.1	\$1,465.1	\$1,465.1	\$1,465.1	\$1,465.1	\$1,465.1	\$1,465.1
Chinguacousy Formal Gardens	\$5,267.0	\$5,267.0	\$5,267.0	\$5,267.0	\$5,267.0	\$5,267.0	\$5,267.0	\$5,267.0	\$5,267.0	\$5,267.0
Chinguacousy Park Skating Trail/Canal	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,045.7	\$4,045.7	\$4,045.7
Cassie Campbell Field Hockey Water Based Turf	\$0.0	\$0.0	\$0.0	\$0.0	\$1,876.1	\$1,876.1	\$1,876.1	\$1,876.1	\$1,876.1	\$1,876.1
Civic Centre Outdoor Rink	\$1,198.3	\$1,198.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Eldorado Outdoor Pool	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9
Ezard Park Silo	\$199.1	\$199.1	\$199.1	\$199.1	\$199.1	\$199.1	\$199.1	\$199.1	\$199.1	\$199.1
FCCC Lawn Bowling	\$0.0	\$0.0	\$4,443.6	\$4,443.6	\$4,443.6	\$4,443.6	\$4,443.6	\$4,443.6	\$4,443.6	\$4,443.6
Gage Park Artificial Ice	\$3,983.6	\$3,983.6	\$3,983.6	\$3,983.6	\$3,983.6	\$3,983.6	\$3,983.6	\$3,983.6	\$3,983.6	\$3,983.6
Mount Pleasant Ice Skating / Reflecting Pond	\$0.0	\$0.0	\$926.9	\$926.9	\$926.9	\$926.9	\$926.9	\$926.9	\$926.9	\$926.9
Peel Village Golf Course	\$21,000	\$21,000.0	\$21,000.0	\$21,000.0	\$21,000.0	\$21,000.0	\$21,000.0	\$21,000.0	\$21,000.0	\$21,000.0
Total (\$000)	\$34,109.0	\$34,109.0	\$38,281.2	\$38,281.2	\$40,157.3	\$40,157.3	\$40,157.3	\$44,203.0	\$44,203.0	\$44,203.0

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APPENDIX B.4
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
OUTDOOR BUILDINGS

Miscellaneous Special Facilities (acres)	# of Acres										UNIT COST
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	(\$/acre)
Brampton Lawn Bowling Club	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	\$2,200,000
Chinguacousy Formal Gardens	11.37	11.37	11.37	11.37	11.37	11.37	11.37	11.37	11.37	11.37	\$1,500,000
Chinguacousy Park Skating Trail/Canal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.37	1.37	1.37	\$1,500,000
Cassie Campbell Field Hockey Water Based Turf	0.00	0.00	0.00	0.00	2.99	2.99	2.99	2.99	2.99	2.99	\$1,500,000
Civic Centre Outdoor Rink	1.36	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$1,500,000
Eldorado Outdoor Pool	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	\$1,500,000
Ezard Park Silo	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$2,200,000
FCCC Lawn Bowling Facility	0.00	0.00	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	\$1,500,000
Gage Park Artificial Ice	2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	\$1,500,000
Mount Pleasant Ice Skating / Reflecting Pond	0.00	0.00	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	\$1,100,000
Total (#)	17.56	17.56	18.28	18.28	21.27	21.27	21.27	22.64	22.64	22.64	
Total (\$000)	\$27,166.0	\$27,166.0	\$28,122.0	\$28,122.0	\$32,607.0	\$32,607.0	\$32,607.0	\$34,662.0	\$34,662.0	\$34,662.0	

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APPENDIX B.4
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
RECREATION
PARKLAND

PARKLAND (acres)	# of Acres										UNIT COST
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	(\$/acre)
City & Community Parks	1,361	1,361	1,362	1,392	1,457	1,457	1,457	1,498	1,498	1,498	\$104,000
Neighbourhood Parks	894	900	909	923	934	944	951	973	988	995	\$167,000
Natural Heritage Lands	2,894	2,945	3,022	3,105	3,228	3,254	3,499	3,533	3,533	3,533	\$21,000
Total (acre)	5,149	5,206	5,292	5,420	5,619	5,655	5,907	6,003	6,019	6,025	
Total (\$000)	\$351,584.9	\$353,650.1	\$356,791.9	\$364,088.4	\$375,321.6	\$377,571.9	\$383,814.5	\$392,388.8	\$394,956.8	\$396,070.6	

APPENDIX B.4
TABLE 1CITY OF BRAMPTON
CALCULATION OF SERVICE LEVELS
RECREATION

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historic Population	485,808	504,495	523,900	537,275	550,992	565,059	579,485	594,280	607,036	620,067

INVENTORY SUMMARY (\$000)

Indoor Recreation - Facilities	\$548,140.9	\$551,639.9	\$553,756.4	\$562,695.4	\$589,195.7	\$590,105.8	\$595,850.5	\$595,850.5	\$584,883.0	\$584,883.0
Indoor Recreation - Equipment	\$41,848.1	\$42,148.9	\$42,294.4	\$42,839.0	\$44,164.7	\$44,220.3	\$44,507.6	\$44,507.6	\$43,576.8	\$43,576.8
Indoor Recreation - Land	\$224,667.0	\$229,392.0	\$232,445.0	\$233,383.0	\$244,823.0	\$244,823.0	\$244,823.0	\$244,823.0	\$237,475.0	\$237,475.0
Park Facilities	\$189,961.0	\$187,885.0	\$196,368.0	\$203,219.0	\$215,372.0	\$216,862.0	\$224,150.0	\$230,803.0	\$237,600.0	\$241,250.0
Outdoor Buildings	\$36,061.8	\$46,140.6	\$42,756.9	\$47,327.9	\$48,294.4	\$51,188.6	\$51,188.6	\$55,555.9	\$55,555.9	\$54,053.9
Outdoor Buildings - Land	\$30,029.1	\$33,198.1	\$33,246.6	\$40,408.4	\$40,628.4	\$40,873.6	\$40,873.6	\$41,150.4	\$41,150.4	\$40,966.9
Outdoor Buildings - Equipment	\$4,084.5	\$4,084.5	\$4,006.7	\$4,000.6	\$4,000.6	\$4,000.6	\$4,000.6	\$4,000.6	\$4,000.6	\$4,000.6
Parkland	\$351,584.9	\$353,650.1	\$356,791.9	\$364,088.4	\$375,321.6	\$377,571.9	\$383,814.5	\$392,388.8	\$394,956.8	\$396,070.6
Special Facilities - Buildings	\$34,109.0	\$34,109.0	\$38,281.2	\$38,281.2	\$40,157.3	\$40,157.3	\$40,157.3	\$44,203.0	\$44,203.0	\$44,203.0
Special Facilities - Land	\$27,166.0	\$27,166.0	\$28,122.0	\$28,122.0	\$32,607.0	\$32,607.0	\$32,607.0	\$34,662.0	\$34,662.0	\$34,662.0
Park Vehicles & Equipment	\$62,958.5	\$63,724.6	\$71,636.7	\$73,670.3	\$75,011.7	\$87,913.8	\$90,552.9	\$87,984.9	\$89,154.7	\$87,895.7
Total (\$000)	\$1,550,610.7	\$1,573,138.6	\$1,599,705.8	\$1,638,035.3	\$1,709,576.5	\$1,730,323.8	\$1,752,525.6	\$1,775,929.6	\$1,767,218.1	\$1,769,037.5

Average
Service
Level

SERVICE LEVEL (\$/capita)

Indoor Recreation - Facilities	\$1,128.31	\$1,093.45	\$1,056.99	\$1,047.31	\$1,069.34	\$1,044.33	\$1,028.24	\$1,002.64	\$963.51	\$943.26	\$1,037.74
Indoor Recreation - Equipment	\$86.14	\$83.55	\$80.73	\$79.73	\$80.15	\$78.26	\$76.81	\$74.89	\$71.79	\$70.28	\$78.23
Indoor Recreation - Land	\$462.46	\$454.70	\$443.68	\$434.38	\$444.33	\$433.27	\$422.48	\$411.97	\$391.20	\$382.98	\$428.15
Park Facilities	\$391.02	\$372.42	\$374.82	\$378.24	\$390.88	\$383.79	\$386.81	\$388.37	\$391.41	\$389.07	\$384.68
Outdoor Buildings	\$74.23	\$91.46	\$81.61	\$88.09	\$87.65	\$90.59	\$88.33	\$93.48	\$91.52	\$87.17	\$87.41
Outdoor Buildings - Land	\$61.81	\$65.80	\$63.46	\$75.21	\$73.74	\$72.34	\$70.53	\$69.24	\$67.79	\$66.07	\$68.60
Outdoor Buildings - Equipment	\$8.41	\$8.10	\$7.65	\$7.45	\$7.26	\$7.08	\$6.90	\$6.73	\$6.59	\$6.45	\$7.26
Parkland	\$723.71	\$701.00	\$681.03	\$677.66	\$681.17	\$668.20	\$662.34	\$660.28	\$650.63	\$638.75	\$674.48
Special Facilities - Buildings	\$70.21	\$67.61	\$73.07	\$71.25	\$72.88	\$71.07	\$69.30	\$74.38	\$72.82	\$71.29	\$71.39
Special Facilities - Land	\$55.92	\$53.85	\$53.68	\$52.34	\$59.18	\$57.71	\$56.27	\$58.33	\$57.10	\$55.90	\$56.03
Park Vehicles & Equipment	\$129.60	\$126.31	\$136.74	\$137.12	\$136.14	\$155.58	\$156.26	\$148.05	\$146.87	\$141.75	\$141.44
Total (\$/capita)	\$3,191.82	\$3,118.25	\$3,053.46	\$3,048.78	\$3,102.72	\$3,062.20	\$3,024.28	\$2,988.37	\$2,911.22	\$2,852.98	\$3,035.41

CITY OF BRAMPTON
CALCULATION OF MAXIMUM ALLOWABLE
RECREATION

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$3,035.41
Net Population Growth 2019 - 2028	129,388
Maximum Allowable Funding Envelope	\$392,746,429
Less: 10% Legislated Reduction	\$39,274,643
Discounted Maximum Allowable Funding Envelope	\$353,471,786

CITY OF BRAMPTON
2019 DEVELOPMENT CHARGES BACKGROUND STUDY
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Cost		Total DC Eligible Costs	Available DC Reserves	DC Eligible Costs	
						Replacement and BTE Share	10% Reduction			2019-2028	Post 2028
4.0 RECREATION											
4.1 Buildings, Land & Furnishings											
4.1.1	Loafer's Lake Recreation Centre - Expansion	2019 - 2019	\$ 1,200,000	\$ -	\$ 1,200,000	\$ -	\$ 120,000	\$ 1,080,000	\$ 1,080,000	\$ -	\$ -
4.1.2	Chris Gibson Recreation Centre - Expansion	2019 - 2019	\$ 24,200,000	\$ -	\$ 24,200,000	\$ -	\$ 2,420,000	\$ 21,780,000	\$ 21,780,000	\$ -	\$ -
4.1.3	Balmoral Recreation Centre - Expansion and Redevelopment	2019 - 2019	\$ 11,300,000	\$ -	\$ 11,300,000	\$ 5,901,000	\$ 539,900	\$ 4,859,100	\$ 4,859,100	\$ -	\$ -
4.1.4	Riverstone Furniture, Fixtures & Equipment	2019 - 2019	\$ 550,000	\$ -	\$ 550,000	\$ -	\$ 55,000	\$ 495,000	\$ 495,000	\$ -	\$ -
4.1.5	Howden Recreation Centre - Land Acquisition	2019 - 2019	\$ 3,000,000	\$ -	\$ 3,000,000	\$ -	\$ 300,000	\$ 2,700,000	\$ 2,700,000	\$ -	\$ -
4.1.6	Howden Recreation Centre - Design of Expansion and Redevelopment	2019 - 2019	\$ 2,000,000	\$ -	\$ 2,000,000	\$ 1,067,000	\$ 93,300	\$ 839,700	\$ 839,700	\$ -	\$ -
4.1.7	Innovation Hub Centre	2019 - 2020	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -	\$ 100,000	\$ 900,000	\$ 900,000	\$ -	\$ -
4.1.8	New Scoreboards & Score Clocks	2019 - 2028	\$ 6,500,000	\$ -	\$ 6,500,000	\$ -	\$ 650,000	\$ 5,850,000	\$ 5,850,000	\$ -	\$ -
4.1.9	Howden Recreation Centre - Expansion and Redevelopment	2020 - 2020	\$ 22,000,000	\$ -	\$ 22,000,000	\$ 11,734,000	\$ 1,026,600	\$ 9,239,400	\$ 9,239,400	\$ -	\$ -
4.1.10	Innovation Hub Centre - Program Equipment	2019 - 2020	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 7,500	\$ 67,500	\$ 67,500	\$ -	\$ -
4.1.11	Year-Round Indoor Sport Facility	2020 - 2022	\$ 10,000,000	\$ -	\$ 10,000,000	\$ -	\$ 1,000,000	\$ 9,000,000	\$ 9,000,000	\$ -	\$ -
4.1.12	Mississauga/Embleton Facility - Design	2020 - 2020	\$ 8,000,000	\$ -	\$ 8,000,000	\$ -	\$ 800,000	\$ 7,200,000	\$ 7,200,000	\$ -	\$ -
4.1.13	Mississauga/Embleton Facility - Construction	2021 - 2021	\$ 62,000,000	\$ -	\$ 62,000,000	\$ -	\$ 6,200,000	\$ 55,800,000	\$ 8,349,649	\$ 47,450,351	\$ -
4.1.14	Centennial Recreation Centre - Expansion and Redevelopment	2021 - 2021	\$ 2,000,000	\$ -	\$ 2,000,000	\$ -	\$ 200,000	\$ 1,800,000	\$ -	\$ 1,800,000	\$ -
4.1.15	Land for Year-Round Tennis Facility and Clubhouse	2021 - 2023	\$ 2,200,000	\$ -	\$ 2,200,000	\$ -	\$ 220,000	\$ 1,980,000	\$ -	\$ 1,980,000	\$ -
4.1.16	Year-Round Tennis Facility and Clubhouse	2023 - 2025	\$ 25,000,000	\$ -	\$ 25,000,000	\$ -	\$ 2,500,000	\$ 22,500,000	\$ -	\$ 22,500,000	\$ -
4.1.17	Land for Downtown Recreational Facility	2023 - 2025	\$ 24,200,000	\$ -	\$ 24,200,000	\$ -	\$ 2,420,000	\$ 21,780,000	\$ -	\$ 21,780,000	\$ -
4.1.18	Indoor Bocce Facility - Land Acquisition and Construction	2024 - 2024	\$ 5,000,000	\$ -	\$ 5,000,000	\$ -	\$ 500,000	\$ 4,500,000	\$ -	\$ 4,500,000	\$ -
4.1.19	Domed Sports Facility - Construction	2024 - 2024	\$ 4,000,000	\$ -	\$ 4,000,000	\$ -	\$ 400,000	\$ 3,600,000	\$ -	\$ 3,600,000	\$ -
4.1.20	Land for Year-Round Sport Facility for Outdoor Sports	2024 - 2026	\$ 6,600,000	\$ -	\$ 6,600,000	\$ -	\$ 660,000	\$ 5,940,000	\$ -	\$ 5,940,000	\$ -
4.1.21	Land for Alternative Sports Facility	2024 - 2026	\$ 8,800,000	\$ -	\$ 8,800,000	\$ -	\$ 880,000	\$ 7,920,000	\$ -	\$ 7,920,000	\$ -
4.1.22	Greenbriar Community Centre - Expansion	2025 - 2025	\$ 5,000,000	\$ -	\$ 5,000,000	\$ -	\$ 500,000	\$ 4,500,000	\$ -	\$ 4,500,000	\$ -
4.1.23	Downtown Recreational Facility	2025 - 2027	\$ 25,000,000	\$ -	\$ 25,000,000	\$ -	\$ 2,500,000	\$ 22,500,000	\$ -	\$ 22,500,000	\$ -
4.1.24	East Brampton Community Centre	2026 - 2026	\$ 31,000,000	\$ -	\$ 31,000,000	\$ -	\$ 3,100,000	\$ 27,900,000	\$ -	\$ 27,900,000	\$ -
4.1.25	Year-Round Sport Facility for Outdoor Sports	2026 - 2028	\$ 40,000,000	\$ -	\$ 40,000,000	\$ -	\$ 4,000,000	\$ 36,000,000	\$ -	\$ 36,000,000	\$ -
4.1.26	Indoor Alternative Sports Facility	2026 - 2028	\$ 20,000,000	\$ -	\$ 20,000,000	\$ -	\$ 2,000,000	\$ 18,000,000	\$ -	\$ 4,214,370	\$ 13,785,630
4.1.27	North West Brampton Community Centre (RPA 'A') - Land Acquisition	2028 - 2028	\$ 24,200,000	\$ -	\$ 24,200,000	\$ -	\$ 2,420,000	\$ 21,780,000	\$ -	\$ -	\$ 21,780,000
	Subtotal Buildings, Land & Furnishings		\$ 374,825,000	\$ -	\$ 374,825,000	\$ 18,702,000	\$ 35,612,300	\$ 320,510,700	\$ 72,360,349	\$ 212,584,720	\$ 35,565,630
4.2 Parkland Development											
4.2.1	Gore Meadows Community Park East	2019 - 2020	\$ 30,380,000	\$ -	\$ 30,380,000	\$ -	\$ 3,038,000	\$ 27,342,000	\$ 27,342,000	\$ -	\$ -
4.2.2	Torbram/Sandalwood Community Park	2020 - 2020	\$ 6,120,000	\$ -	\$ 6,120,000	\$ -	\$ 612,000	\$ 5,508,000	\$ 5,508,000	\$ -	\$ -
4.2.3	Mississauga/Embleton Community Park	2021 - 2021	\$ 8,052,000	\$ -	\$ 8,052,000	\$ -	\$ 805,200	\$ 7,246,800	\$ -	\$ 7,246,800	\$ -
4.2.4	Gore Meadows Community Park Expansion	2021 - 2021	\$ 6,000,000	\$ -	\$ 6,000,000	\$ -	\$ 600,000	\$ 5,400,000	\$ -	\$ 5,400,000	\$ -
4.2.5	Gore Meadows Community Park West	2024 - 2024	\$ 11,380,569	\$ -	\$ 11,380,569	\$ -	\$ 1,138,057	\$ 10,242,512	\$ -	\$ 10,242,512	\$ -
4.2.6	Gore Castlemore Community Park (47-2)	2025 - 2025	\$ 9,000,000	\$ -	\$ 9,000,000	\$ -	\$ 900,000	\$ 8,100,000	\$ -	\$ 8,100,000	\$ -
4.2.7	Provision for future Campus Park	2025 - 2025	\$ 8,100,000	\$ -	\$ 8,100,000	\$ -	\$ 810,000	\$ 7,290,000	\$ -	\$ 7,290,000	\$ -
4.2.8	Heritage Bovaird (Siemens) Park	2027 - 2027	\$ 7,200,000	\$ -	\$ 7,200,000	\$ -	\$ 720,000	\$ 6,480,000	\$ -	\$ 6,480,000	\$ -
4.2.9	NW Brampton (Heritage Heights) Community Park	2028 - 2028	\$ 10,380,000	\$ -	\$ 10,380,000	\$ -	\$ 1,038,000	\$ 9,342,000	\$ -	\$ -	\$ 9,342,000
	Subtotal Parkland Development		\$ 96,612,569	\$ -	\$ 96,612,569	\$ -	\$ 9,661,257	\$ 86,951,312	\$ 32,850,000	\$ 44,759,312	\$ 9,342,000

CITY OF BRAMPTON
2019 DEVELOPMENT CHARGES BACKGROUND STUDY
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Cost		Total DC Eligible Costs	Available DC Reserves	DC Eligible Costs	
						Replacement and BTE Share	10% Reduction			2019-2028	Post 2028
4.0 RECREATION											
4.3 Parkland Redevelopment											
4.3.1	Chinguacousy Park - Queen St Frontage	2019 - 2019	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ 50,000	\$ 450,000	\$ 450,000	\$ -	\$ -
4.3.2	Chinguacousy Park - SW Gateway Entry	2019 - 2019	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ 20,000	\$ 180,000	\$ 180,000	\$ -	\$ -
4.3.3	Teramoto Cricket Pitch Lighting field improvement	2019 - 2019	\$ 750,000	\$ -	\$ 750,000	\$ 200,000	\$ 55,000	\$ 495,000	\$ 495,000	\$ -	\$ -
4.3.4	Trail Connection from CAA Centre to Etobicoke Creek	2019 - 2019	\$ 250,000	\$ -	\$ 250,000	\$ -	\$ 25,000	\$ 225,000	\$ 225,000	\$ -	\$ -
4.3.5	Inder Heights Park Expansion	2019 - 2019	\$ 1,000,000	\$ -	\$ 1,000,000	\$ 250,000	\$ 75,000	\$ 675,000	\$ 675,000	\$ -	\$ -
4.3.6	Adult Fitness Station	2019 - 2019	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 10,000	\$ 90,000	\$ 90,000	\$ -	\$ -
4.3.7	Dixie/407 Sports Park - Cricket Pitch	2019 - 2019	\$ 750,000	\$ -	\$ 750,000	\$ -	\$ 75,000	\$ 675,000	\$ 675,000	\$ -	\$ -
4.3.8	Activity Hub - Sesquicentennial Park - Design	2019 - 2019	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ 50,000	\$ 450,000	\$ 450,000	\$ -	\$ -
4.3.9	Activity Hub - Sesquicentennial Park	2020 - 2020	\$ 2,250,000	\$ -	\$ 2,250,000	\$ -	\$ 225,000	\$ 2,025,000	\$ 2,025,000	\$ -	\$ -
4.3.10	Eldorado - Large Ropes Course	2020 - 2020	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 10,000	\$ 90,000	\$ 90,000	\$ -	\$ -
4.3.11	Professors Lake - WIBIT (Outdoor Water Park)	2020 - 2020	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ 20,000	\$ 180,000	\$ 180,000	\$ -	\$ -
4.3.12	McCandless Cricket Pitch Lighting field improvement	2020 - 2020	\$ 750,000	\$ -	\$ 750,000	\$ 200,000	\$ 55,000	\$ 495,000	\$ 495,000	\$ -	\$ -
4.3.13	Balmoral Park	2020 - 2020	\$ 2,010,000	\$ -	\$ 2,010,000	\$ -	\$ 201,000	\$ 1,809,000	\$ 1,809,000	\$ -	\$ -
4.3.14	Cricket Pitch Lighting - Various Parks	2020 - 2022	\$ 1,500,000	\$ -	\$ 1,500,000	\$ -	\$ 150,000	\$ 1,350,000	\$ 1,350,000	\$ -	\$ -
4.3.15	Credit Valley Trail	2020 - 2028	\$ 18,000,000	\$ -	\$ 18,000,000	\$ -	\$ 1,800,000	\$ 16,200,000	\$ -	\$ 16,200,000	\$ -
4.3.16	Design - 9 fields	2021 - 2021	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 10,000	\$ 90,000	\$ -	\$ 90,000	\$ -
4.3.17	Gatesgill	2021 - 2021	\$ 1,645,200	\$ -	\$ 1,645,200	\$ -	\$ 164,520	\$ 1,480,680	\$ -	\$ 1,480,680	\$ -
4.3.18	Riverstone Trail/Naturalization	2021 - 2021	\$ 2,300,000	\$ -	\$ 2,300,000	\$ -	\$ 230,000	\$ 2,070,000	\$ -	\$ 2,070,000	\$ -
4.3.19	Eldorado Park Site Improvements	2021 - 2021	\$ 7,178,415	\$ -	\$ 7,178,415	\$ -	\$ 717,842	\$ 6,460,574	\$ -	\$ 6,460,574	\$ -
4.3.20	Construction - 9 fields	2022 - 2022	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -	\$ 100,000	\$ 900,000	\$ -	\$ 900,000	\$ -
4.3.21	Fletcher's Recreation trail	2022 - 2022	\$ 1,800,000	\$ -	\$ 1,800,000	\$ -	\$ 180,000	\$ 1,620,000	\$ -	\$ 1,620,000	\$ -
4.3.22	Construction - 9 fields	2023 - 2023	\$ 2,000,000	\$ -	\$ 2,000,000	\$ -	\$ 200,000	\$ 1,800,000	\$ -	\$ 1,800,000	\$ -
4.3.23	White Spruce Community Park Redev.	2024 - 2024	\$ 3,060,000	\$ -	\$ 3,060,000	\$ -	\$ 306,000	\$ 2,754,000	\$ -	\$ 2,754,000	\$ -
4.3.24	Field Hockey Facility	2025 - 2025	\$ 2,000,000	\$ -	\$ 2,000,000	\$ -	\$ 200,000	\$ 1,800,000	\$ -	\$ 1,800,000	\$ -
4.3.25	Dixie/407 Community Park	2028 - 2028	\$ 8,895,780	\$ -	\$ 8,895,780	\$ -	\$ 889,578	\$ 8,006,202	\$ -	\$ -	\$ 8,006,202
Subtotal Parkland Redevelopment			\$ 58,839,395	\$ -	\$ 58,839,395	\$ 650,000	\$ 5,818,940	\$ 52,370,456	\$ 9,189,000	\$ 35,175,254	\$ 8,006,202
4.4 Parks Annual Programs											
4.4.1	Neighbourhood park development (subdivisions - open space)	2019 - 2028	\$ 36,000,000	\$ -	\$ 36,000,000	\$ -	\$ 3,600,000	\$ 32,400,000	\$ 3,240,000	\$ 29,160,000	\$ -
4.4.2	Intermunicipal trails	2019 - 2028	\$ 6,000,000	\$ -	\$ 6,000,000	\$ -	\$ 600,000	\$ 5,400,000	\$ 540,000	\$ 4,860,000	\$ -
4.4.3	Valley Trails and Pedestrian Bridges	2019 - 2028	\$ 6,500,000	\$ -	\$ 6,500,000	\$ -	\$ 650,000	\$ 5,850,000	\$ 585,000	\$ 5,265,000	\$ -
4.4.4	Valleyland Renaturalization	2019 - 2028	\$ 7,500,000	\$ -	\$ 7,500,000	\$ -	\$ 750,000	\$ 6,750,000	\$ 675,000	\$ 6,075,000	\$ -
4.4.5	Civic Design Improvements	2019 - 2028	\$ 2,000,000	\$ -	\$ 2,000,000	\$ -	\$ 200,000	\$ 1,800,000	\$ 180,000	\$ 1,620,000	\$ -
4.4.6	Wayfinding and Signage	2019 - 2028	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ 50,000	\$ 450,000	\$ 45,000	\$ 405,000	\$ -
4.4.7	Shade Structure Program	2019 - 2028	\$ 8,000,000	\$ -	\$ 8,000,000	\$ -	\$ 800,000	\$ 7,200,000	\$ 720,000	\$ 6,480,000	\$ -
4.4.8	Leash free dog parks	2019 - 2028	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -	\$ 100,000	\$ 900,000	\$ 90,000	\$ 810,000	\$ -
4.4.9	Adult Fitness Stations	2019 - 2028	\$ 750,000	\$ -	\$ 750,000	\$ -	\$ 75,000	\$ 675,000	\$ 67,500	\$ 607,500	\$ -
4.4.10	Tennis	2019 - 2028	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ 50,000	\$ 450,000	\$ 45,000	\$ 405,000	\$ -
4.4.11	Multi purpose courts	2019 - 2028	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ 50,000	\$ 450,000	\$ 45,000	\$ 405,000	\$ -
4.4.12	Splash pads	2019 - 2028	\$ 6,000,000	\$ -	\$ 6,000,000	\$ -	\$ 600,000	\$ 5,400,000	\$ 540,000	\$ 4,860,000	\$ -
Subtotal Parks Annual Programs			\$ 75,250,000	\$ -	\$ 75,250,000	\$ -	\$ 7,525,000	\$ 67,725,000	\$ 6,772,500	\$ 60,952,500	\$ -
TOTAL RECREATION			\$ 605,526,964	\$ -	\$ 605,526,964	\$ 19,352,000	\$ 58,617,496	\$ 527,557,468	\$ 121,171,849	\$ 353,471,786	\$ 52,913,832

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	100%	\$353,471,786
10 Year Growth in Population in New Units		144,563
Unadjusted Development Charge Per Capita (\$)		\$2,445.11
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	0%	\$ -
10 Year Growth in Square Meters		4,832,564
Unadjusted Development Charge Per Sq.M (\$)		\$0.00

2019 - 2028 Net Funding Envelope for Parks & Recreation	\$ 353,471,786
Reserve Fund Balance	\$ 121,171,849

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APPENDIX B.4
TABLE 3

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
RECREATION SERVICES
RESIDENTIAL DEVELOPMENT CHARGE

RECREATION SERVICES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE (\$000)	\$0.0	\$34,321.9	\$62,510.0	\$15,766.4	\$42,038.4	\$55,088.3	\$43,404.7	\$22,553.8	(\$4,287.3)	(\$10,758.4)	
2019-2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Recreation Services : Non Inflated	\$0.0	\$8,572.5	\$81,230.9	\$11,752.5	\$25,792.5	\$49,049.0	\$57,142.5	\$61,997.3	\$35,957.3	\$21,977.3	\$353,471.8
- Recreation Services: Inflated	\$0.0	\$8,744.0	\$84,512.6	\$12,471.8	\$27,918.6	\$54,154.1	\$64,351.7	\$71,215.4	\$42,129.7	\$26,264.9	\$391,762.9
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	13,886	14,233	14,596	14,643	14,945	15,252	15,565	15,884	12,670	12,889	144,563
REVENUE											
- DC Receipts: Inflated	\$33,731.6	\$35,266.7	\$36,890.8	\$37,749.6	\$39,298.1	\$40,906.7	\$42,580.4	\$44,324.4	\$36,061.3	\$37,419.8	\$384,229.3
INTEREST											
- Interest on Opening Balance	\$0.0	\$1,201.3	\$2,187.9	\$551.8	\$1,471.3	\$1,928.1	\$1,519.2	\$789.4	(\$235.8)	(\$591.7)	\$8,821.4
- Interest on In-year Transactions	\$590.3	\$464.1	(\$1,309.6)	\$442.4	\$199.1	(\$364.3)	(\$598.7)	(\$739.5)	(\$166.9)	\$195.2	(\$1,287.8)
TOTAL REVENUE	\$34,321.9	\$36,932.1	\$37,769.0	\$38,743.8	\$40,968.6	\$42,470.5	\$43,500.8	\$44,374.3	\$35,658.6	\$37,023.3	\$391,762.9
CLOSING CASH BALANCE	\$34,321.9	\$62,510.0	\$15,766.4	\$42,038.4	\$55,088.3	\$43,404.7	\$22,553.8	(\$4,287.3)	(\$10,758.4)	\$0.0	

2019 Adjusted Charge Per Capita \$2,429.25

Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.5

PUBLIC WORKS

APPENDIX B.5

PUBLIC WORKS

This appendix covers the yards and fleet components of the City's operations. The Public Works Department operates from several works facilities located throughout the City to provide repair and maintenance services for roads, sidewalks, streetlights and other infrastructure. Information regarding Roads & Related infrastructure can be found in Appendix D. Only engineering related fleet and equipment are included in this service.

TABLE 1 HISTORICAL SERVICE LEVELS

The Public Works Department operates out of two primary locations: Williams Parkway Works Operation Centre and Sandalwood Yard. The current inventory of capital assets for Public Works includes building space, salt domes and sheds with a total replacement value of \$76.35 million. The 55.23 acres of land associated with the Public Works yards is valued at \$82.85 million. Furniture and equipment, excluding computers totals \$1.33 million. All of the City's vehicles are split between General Government, Recreation and Public Works. In 2018, Public Works has 339 vehicles and related equipment (including rentals) that add an additional \$54.59 million to the value of the capital assets.

The total value of the Public Works capital inventory is \$215.12 million. The 10-year historical average service level is \$245.07 per population and employee, and this, multiplied by the 10-year forecast growth in net population and employment, results in a maximum allowable funding envelope of \$45.60 million. Under the *Development Charges Act, 1997*, services related to a highway as defined in subsection 1(1) of the *Municipal Act, 2001*, need not to be reduced by the legislated 10 per cent (as with other general services). The services and capital assets of Public Works are considered to be related to a highway, and as such, the maximum allowable of \$45.60 million is brought forward to the development charges calculation.

TABLE 2 2019 – 2028 PROVISIONAL DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The first project in the Public Works capital program is for the recovery of the negative reserve fund balance. The negative DC reserve fund balance for Public

Works services amounts to \$37.23 million and this full amount is brought forward for recovery through development charges.

The capital program also provides for the construction of the Williams Parkway Operations Centre from 2019 to 2020 for a combined gross cost of \$8.60 million. Finally, a provision for additional fleet and equipment adds \$5.88 million to the gross program cost.

The 10-year capital forecast for Public Works totals \$51.71 million. No provincial government grants or subsidies or replacement shares are anticipated to offset the cost of the program. \$6.11 million, the portion of the development-related cost which exceeds the maximum allowable funding envelope and this amount is deemed to benefit growth beyond 2028 and can be recovered through subsequent development charges studies.

The 2019-2028 DC costs eligible for recovery total to \$45.60 million. This development-related cost is allocated 70 per cent, or \$31.92 million against new residential development, and 30 per cent, or \$13.68 million against non-residential development. This yields an unadjusted residential development charge of \$220.79 per capita and \$2.83 per square metre of new non-residential development.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, both the residential and non-residential calculated charges increase to \$256.04 per capita and \$3.35 per square metre, respectively.

The following table summarizes the calculation of the Public Works development charge.

10-year Hist. Service Level per pop & emp	2019 - 2028		Unadjusted		Adjusted	
	Development-Related Total	Capital Program Net DC Recoverable	Development Charge		Development Charge	
			\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$245.07	\$51,709,556	\$45,596,173	\$220.79	\$2.83	\$256.04	\$3.35

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APPENDIX B.5
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

BUILDINGS (\$000) Facility Name	# of Square Feet										UNIT COST (\$/sq.ft)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Old Williams Parkway Works Yard											
Williams Parkway East Storage Shed	4,000	4,000	4,000	-	-	-	-	-	-	-	\$40
Williams Parkway Salt Dome	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	-	\$80
Williams Parkway Sand Dome	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	-	\$80
Williams Parkway South Storage Shed	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	-	\$50
Williams Parkway Vehicle Wash	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	-	\$250
Williams Parkway Works Operation Centre	62,273	62,273	62,273	62,273	62,273	62,273	62,273	62,273	62,273	-	\$250
New Williams Parkway Operations Centre											
Williams Parkway Administrative Building	-	-	-	-	-	-	-	-	-	38,513	\$380
Williams Parkway Operations Building	-	-	-	-	-	-	-	-	-	82,452	\$359
Williams Parkway Sand Salt Storage Building	-	-	-	-	-	-	-	-	-	63,560	\$130
Williams Parkway Truck Wash Building	-	-	-	-	-	-	-	-	-	3,605	\$540
Old Sandalwood Parkway Works Yard											
Sandalwood Yard	2,000	2,000	-	-	-	-	-	-	-	-	\$1,631
Sandalwood Salt Dome (old)	11,300	11,300	-	-	-	-	-	-	-	-	\$45
Sandalwood Sand Dome (old)	11,300	11,300	-	-	-	-	-	-	-	-	\$45
Sandalwood Yard Storage Bays Building (old)	4,424	4,424	-	-	-	-	-	-	-	-	\$33
New Sandalwood Parkway Works Yard											
Sandalwood Fabric Building	-	-	1,915	1,915	1,915	1,915	1,915	1,915	1,915	1,915	\$61
Sandalwood Pole Barn Phase-2	-	-	12,486	12,486	12,486	12,486	12,486	12,486	12,486	12,486	\$110
Sandalwood Pole Barn Phase-3	-	-	2,522	2,522	2,522	2,522	2,522	2,522	2,522	2,522	\$1,014
Sandalwood Sand & Salt Storage and Garage Building	-	-	41,506	41,506	41,506	41,506	41,506	41,506	41,506	41,506	\$330
Sandalwood Works Administration Building	-	-	8,019	8,019	8,019	8,019	8,019	8,019	8,019	8,019	\$385
Sandalwood Yard Storage Bays Building	-	-	4,424	4,424	4,424	4,424	4,424	4,424	4,424	4,424	\$245
Total (sq. ft.)	116,847	116,847	158,695	154,695	154,695	154,695	154,695	154,695	154,695	259,002	258,972
Total (\$000)	\$22,076.9	\$22,076.9	\$39,551.8	\$39,391.8	\$39,391.8	\$39,391.8	\$39,391.8	\$39,391.8	\$39,391.8	\$76,355.8	\$76,345.0

LAND Facility Name	# of Acres										UNIT COST (\$/acre)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Williams Parkway Operations Centre	45.12	45.12	45.12	45.12	45.12	45.12	45.12	45.12	45.12	45.12	\$1,500,000
Sandalwood Parkway Works Yard	10.11	10.11	10.11	10.11	10.11	10.11	10.11	10.11	10.11	10.11	\$1,500,000
Total (acres)	55.23										
Total (\$000)	\$82,845.0										

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

FURNITURE AND EQUIPMENT (excluding computers) Facility Name	Total Value of Furniture and Equipment (\$000)										UNIT COST (\$/item)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Williams Parkway East Storage Shed	\$108.00	\$108.00	\$108.00	\$108.00	\$108.00	\$108.00	\$108.00	\$108.00	\$108.00	\$108.00	\$108.00	\$27
Williams Parkway South Storage Shed	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$27
Williams Parkway Vehicle Wash	\$223.20	\$223.20	\$223.20	\$223.20	\$223.20	\$223.20	\$223.20	\$223.20	\$223.20	\$223.20	\$223.20	\$144
Williams Parkway Works Operation Centre	\$934.10	\$934.10	\$934.10	\$934.10	\$934.10	\$934.10	\$934.10	\$934.10	\$934.10	\$934.10	\$934.10	\$15
Sandalwood Yard	\$14.00	\$14.00	\$14.00	\$14.00	\$14.00	\$14.00	\$14.00	\$14.00	\$14.00	\$14.00	\$14.00	\$7
Sandalwood Yard - Storage Building	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	\$0.2
Total (\$000)	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	

FLEET & MAINTENANCE EQUIPMENT (#) City-Owned Items	# of Vehicles or Pieces of Equipment										UNIT COST (\$/item)	Allocation to Public Works
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
(A) Cars, Station Wagons	30	31	31	28	23	15	13	13	2	2	\$38,400	60%
(B) Compact Pickups	6	5	5	4	3	3	3	3	3	3	\$26,000	0%
(C) Compact SUVs (2X4 & 4X4)	91	91	84	125	123	108	104	103	113	118	\$64,700	45%
(D) 3/4 & 1 Ton Pickups	38	36	36	36	36	33	13	11	8	6	\$61,300	5%
(E) 3/4 & 1 Ton 4X4 Pickups	50	60	58	79	76	105	128	126	131	133	\$71,600	35%
(F) Compact Vans	7	7	9	8	8	17	17	17	17	7	\$35,700	38%
(G) 3/4 & 1 Ton Vans	9	10	12	12	10	10	10	10	10	11	\$65,100	40%
(H) 1 - 7.5 Ton S Axle, Dual Axle Dump, Flat Bed	46	48	47	49	50	54	54	54	55	59	\$164,900	35%
(I) 7.5 - 20 Ton S Axle, D Wheeldump, Flat Bed, Tanker	40	34	37	39	37	37	37	36	36	36	\$294,900	60%
(J) 20 - 34 Ton Tandem Axle Dumps, Flusher, Flat Bed	15	15	14	14	14	14	14	14	14	14	\$409,200	80%
(L) 7.5 - 20 Ton Spec Vehicle, Buck, Crane, Bodyinterch	2	2	2	2	2	2	2	3	3	3	\$361,700	0%
(N) Trailer	47	54	68	69	69	68	68	68	68	67	\$308,500	25%
(P) Loader Backhoe Combinations and Excavators	5	5	5	6	6	6	8	7	6	6	\$182,000	35%
(Q) Front End Loaders Rubber Tire and Crawler	8	8	8	8	8	10	10	10	10	10	\$326,900	50%
(R) Graders	1	-	-	-	-	-	-	-	-	-	\$275,400	0%
(S) Street Sweepers Mechanical And Vacuum	7	6	6	5	5	4	4	4	4	-	\$269,800	80%
(T) Tractors Farm Type All Sizes	25	25	25	23	26	27	28	28	28	28	\$156,300	35%
(U) Sidewalk Plows and Skid Steer Loaders	7	6	7	7	7	7	7	7	8	9	\$118,100	15%
Turf Equipment Mowers, Trimmers, Gators	68	65	65	68	68	116	116	116	124	124	\$114,400	5%
(X) Asphrollers, Grinders, Hotbx, Con/Asphsaw, Tamper	8	9	11	12	12	13	13	13	13	13	\$57,300	85%
(Y) Rd Maint Eqp, Signbrds, Stmr, Leafloadrs, Compres	13	8	8	10	11	12	12	12	12	11	\$19,400	100%
(Z) Specialty Equipment Not Classified	56	56	69	68	72	89	96	89	89	85	\$590,700	40%
Total (#)	579	581	607	672	666	750	757	744	754	745		
Sub-total Public Works Share Only (#)	215	213	222	249	246	261	269	264	264	259		
Total (\$000)	\$106,675.6	\$107,020.2	\$119,167.1	\$123,822.8	\$125,556.6	\$142,993.9	\$147,734.3	\$143,153.7	\$144,568.6	\$141,628.6		
Sub-total Public Works Share Only (\$000)	\$42,197.1	\$41,785.3	\$46,022.5	\$47,813.2	\$48,345.0	\$53,240.9	\$55,429.5	\$53,449.5	\$53,660.8	\$52,086.1		

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

FLEET & MAINTENANCE EQUIPMENT (#) Rented Items	# of Vehicles or Pieces of Equipment										UNIT COST (\$/Item)	% of Year Rented
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
(A) Cars, Station Wagons	6	6	6	5	6	6	11	6	6	6	\$38,400	33%
(B) Compact Pickups	68	22	47	30	17	6	7	16	8	9	\$26,000	52%
(C) Compact SUVs (2X4 & 4X4)	-	46	14	14	30	-	-	-	-	-	\$64,700	55%
(D) 3/4 & 1 Ton Pickups	-	-	2	27	-	-	-	-	-	-	\$61,300	43%
(E) 3/4 & 1 Ton 4X4 Pickups	-	-	-	-	20	35	29	49	52	63	\$71,600	48%
(P) Loader Backhoe Combinations and Excavators	12	9	9	6	4	2	2	2	2	2	\$182,000	39%
Sub-total (#)	86	83	78	82	77	49	49	73	68	80		
Sub-total City's Share (\$000)	\$1,850.9	\$2,652.0	\$1,904.0	\$2,106.6	\$2,345.9	\$1,502.6	\$1,373.3	\$2,119.0	\$2,113.9	\$2,505.5		

APPENDIX B.5
TABLE 1CITY OF BRAMPTON
CALCULATION OF SERVICE LEVELS
PUBLIC WORKS

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historic Population	485,808	504,495	523,900	537,275	550,992	565,059	579,485	594,280	607,036	620,067
Historic Employment	<u>155,914</u>	<u>159,165</u>	<u>162,490</u>	<u>165,928</u>	<u>169,444</u>	<u>173,040</u>	<u>176,718</u>	<u>180,480</u>	<u>184,386</u>	<u>188,398</u>
Total Historic Population & Employment	641,723	663,660	686,390	703,203	720,437	738,100	756,204	774,760	791,423	808,464

INVENTORY SUMMARY (\$000)

Buildings	\$22,076.9	\$22,076.9	\$39,551.8	\$39,391.8	\$39,391.8	\$39,391.8	\$39,391.8	\$39,391.8	\$76,355.8	\$76,345.0
Land	\$82,845.0	\$82,845.0	\$82,845.0	\$82,845.0	\$82,845.0	\$82,845.0	\$82,845.0	\$82,845.0	\$82,845.0	\$82,845.0
Furniture	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0	\$1,334.0
Fleet	\$44,047.9	\$44,437.2	\$47,926.4	\$49,919.8	\$50,690.9	\$54,743.5	\$56,802.8	\$55,568.5	\$55,774.7	\$54,591.6
Total (\$000)	\$150,303.8	\$150,693.1	\$171,657.2	\$173,490.5	\$174,261.6	\$178,314.2	\$180,373.5	\$179,139.2	\$216,309.5	\$215,115.6

Average
Service
Level

SERVICE LEVEL (\$/population & employment)

Buildings	\$34.40	\$33.27	\$57.62	\$56.02	\$54.68	\$53.37	\$52.09	\$50.84	\$96.48	\$94.43	\$58.32
Land	\$129.10	\$124.83	\$120.70	\$117.81	\$114.99	\$112.24	\$109.55	\$106.93	\$104.68	\$102.47	\$114.33
Furniture	\$2.08	\$2.01	\$1.94	\$1.90	\$1.85	\$1.81	\$1.76	\$1.72	\$1.69	\$1.65	\$1.84
Fleet	\$68.64	\$66.96	\$69.82	\$70.99	\$70.36	\$74.17	\$75.12	\$71.72	\$70.47	\$67.53	\$70.58
Total (\$/pop & employee)	\$234.22	\$227.06	\$250.09	\$246.71	\$241.88	\$241.59	\$238.52	\$231.22	\$273.32	\$266.08	\$245.07

CITY OF BRAMPTON
CALCULATION OF MAXIMUM ALLOWABLE
PUBLIC WORKS

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$245.07
Net Population & Employment Growth 2019 - 2028	186,054
Maximum Allowable Funding Envelope	\$45,596,173
Discounted Maximum Allowable Funding Envelope	\$45,596,173

CITY OF BRAMPTON
DEVELOPMENT-RELATED CAPITAL PROGRAM
PUBLIC WORKS

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Cost		Total DC Eligible Costs	Available DC Reserves	DC Eligible Costs	
						Replacement and BTE Share	0% Reduction			2019-2028	Post 2028
5.0 PUBLIC WORKS											
	5.1 Recovery of Negative Reserve Fund Balance	2019 - 2019	\$ 37,229,556	\$ -	\$ 37,229,556	\$ -	\$ -	\$ 37,229,556	\$ -	\$ 37,229,556	\$ -
5.2 Buildings, Land & Equipment											
	5.1.1 WPOC - Phase 3 Design	2019 - 2019	\$ 700,000	\$ -	\$ 700,000	\$ -	\$ -	\$ 700,000	\$ -	\$ 700,000	\$ -
	5.1.2 WPOC - Phase 3 Construction	2020 - 2020	\$ 6,900,000	\$ -	\$ 6,900,000	\$ -	\$ -	\$ 6,900,000	\$ -	\$ 6,900,000	\$ -
	5.1.3 WPOC - Phase 3 Addition	2020 - 2020	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -	\$ -	\$ 1,000,000	\$ -	\$ 766,617	\$ 233,383
	Subtotal Buildings, Land & Equipment		\$ 8,600,000	\$ -	\$ 8,600,000	\$ -	\$ -	\$ 8,600,000	\$ -	\$ 8,366,617	\$ 233,383
5.3 Equipment											
	5.3.1 Additional Fleet and Equipment	2019 - 2028	\$ 5,880,000	\$ -	\$ 5,880,000	\$ -	\$ -	\$ 5,880,000	\$ -	\$ -	\$ 5,880,000
	Subtotal Equipment		\$ 5,880,000	\$ -	\$ 5,880,000	\$ -	\$ -	\$ 5,880,000	\$ -	\$ -	\$ 5,880,000
TOTAL PUBLIC WORKS			\$ 51,709,556	\$ -	\$ 51,709,556	\$ -	\$ -	\$ 51,709,556	\$ -	\$ 45,596,173	\$ 6,113,383

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	70%	\$31,917,321
10 Year Growth in Population in New Units		144,563
Unadjusted Development Charge Per Capita (\$)		\$220.79
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	30%	\$ 13,678,852
10 Year Growth in Square Meters		4,832,564
Unadjusted Development Charge Per Sq.M (\$)		\$2.83

2019 - 2028 Net Funding Envelope for Public Works	\$	45,596,173
Reserve Fund Balance	\$	(37,229,556)

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TABLE 3

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS
RESIDENTIAL DEVELOPMENT CHARGE

PUBLIC WORKS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE (\$000)	\$0.0	(\$23,627.8)	(\$26,732.5)	(\$24,246.5)	(\$21,531.7)	(\$18,501.5)	(\$15,132.1)	(\$11,397.9)	(\$7,271.2)	(\$3,803.8)	
2019-2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Public Works : Non Inflated	\$26,550.7	\$5,366.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$31,917.3
- Public Works: Inflated	\$26,550.7	\$5,474.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$32,024.7
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	13,886	14,233	14,596	14,643	14,945	15,252	15,565	15,884	12,670	12,889	144,563
REVENUE											
- DC Receipts: Inflated	\$3,555.3	\$3,717.1	\$3,888.3	\$3,978.8	\$4,142.0	\$4,311.5	\$4,487.9	\$4,671.7	\$3,800.8	\$3,944.0	\$40,497.4
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1,299.5)	(\$1,470.3)	(\$1,333.6)	(\$1,184.2)	(\$1,017.6)	(\$832.3)	(\$626.9)	(\$399.9)	(\$209.2)	(\$8,373.5)
- Interest on In-year Transactions	(\$632.4)	(\$48.3)	\$68.0	\$69.6	\$72.5	\$75.5	\$78.5	\$81.8	\$66.5	\$69.0	(\$99.3)
TOTAL REVENUE	\$2,922.9	\$2,369.2	\$2,486.0	\$2,714.8	\$3,030.2	\$3,369.4	\$3,734.2	\$4,126.6	\$3,467.4	\$3,803.8	\$32,024.7
CLOSING CASH BALANCE	(\$23,627.8)	(\$26,732.5)	(\$24,246.5)	(\$21,531.7)	(\$18,501.5)	(\$15,132.1)	(\$11,397.9)	(\$7,271.2)	(\$3,803.8)	\$0.0	

2019 Adjusted Charge Per Capita	\$256.04
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Allocation of Capital Program	
Residential Sector	70.0%
Non-Residential Sector	30.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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TABLE 3

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS
NON-RESIDENTIAL DEVELOPMENT CHARGE

PUBLIC WORKS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE (\$000)	\$0.0	(\$10,659.1)	(\$12,581.2)	(\$12,165.7)	(\$10,843.9)	(\$9,344.0)	(\$7,650.3)	(\$5,746.2)	(\$3,613.6)	(\$1,896.2)	
2019-2028 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Public Works: Non Inflated	\$11,378.9	\$2,300.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$13,678.9
- Public Works: Inflated	\$11,378.9	\$2,346.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$13,724.9
NEW NON-RESIDENTIAL DEVELOPMENT											
- Square Meters in New Buildings	300,464	306,529	312,748	551,201	569,019	587,458	606,543	626,299	480,489	491,814	4,832,564
REVENUE											
- DC Receipts: Inflated	\$1,005.1	\$1,045.9	\$1,088.4	\$1,956.7	\$2,060.3	\$2,169.6	\$2,284.9	\$2,406.5	\$1,883.2	\$1,966.1	\$17,866.6
INTEREST											
- Interest on Opening Balance	\$0.0	(\$586.2)	(\$692.0)	(\$669.1)	(\$596.4)	(\$513.9)	(\$420.8)	(\$316.0)	(\$198.7)	(\$104.3)	(\$4,097.5)
- Interest on In-year Transactions	(\$285.3)	(\$35.8)	\$19.0	\$34.2	\$36.1	\$38.0	\$40.0	\$42.1	\$33.0	\$34.4	(\$44.3)
TOTAL REVENUE	\$719.8	\$423.9	\$415.5	\$1,321.8	\$1,499.9	\$1,693.7	\$1,904.1	\$2,132.6	\$1,717.4	\$1,896.2	\$13,724.9
CLOSING CASH BALANCE	(\$10,659.1)	(\$12,581.2)	(\$12,165.7)	(\$10,843.9)	(\$9,344.0)	(\$7,650.3)	(\$5,746.2)	(\$3,613.6)	(\$1,896.2)	\$0.0	

2019 Adjusted Charge Per Square Metre	\$3.35
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Allocation of Capital Program	
Residential Sector	70.0%
Non-Residential Sector	30.0%
Rates for 2019	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.6

PARKING

APPENDIX B.6

PARKING

The City of Brampton currently owns and operates five structured lots and one outdoor surface parking lot. The benefits of the parking service are deemed to be City-wide for the purpose of calculating the development charge.

TABLE 1 HISTORICAL SERVICE LEVELS

The current inventory of capital assets for parking includes 1,530 parking spaces, of which roughly 1,480 are in structured lots and 50 are on surface lots. The total cost to develop the spaces amounts to \$75.74 million. Land associated with the spaces, totalling 4.42 acres, is valued at \$6.63 million. The equipment associated with municipal parking lots adds an additional \$1.85 million to the value of the inventory.

The current total value of parking capital infrastructure is estimated to be \$84.22 million. This infrastructure has provided the City with a 10-year average service level of \$113.56 per population and employment. The service level, when multiplied by the 10-year net population and employment growth in the City, results in a maximum allowable funding envelope of \$21.13 million. The resulting development charge eligible Parking capital costs must be reduced by 10 per cent (\$2.11 million) under the *DCA*. The discounted maximum allowable funding envelope brought forward to the development charges calculation is \$19.02 million.

TABLE 2 2019 – 2028 PROVISIONAL DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The 10-year development-related capital program for Parking includes the annual lease payments associated with the construction of a building and parking lot in the South West Quadrant of the City. Over the 10-year period, the total lease payments, solely related to parking infrastructure, amount to \$23.55 million. No provincial government grants or subsidies are anticipated to offset the cost of the program. A benefit to existing share equivalent to the non-public parking spaces made available through the construction of the new lot is deducted from the net municipal cost. The replacement and benefit to existing share amounts to \$19.01 million, and this amount will not be recovered from development charges. The 10 per cent reduction required by the *DCA* amounts to \$454,110.

The remaining \$4.09 million development-related cost will be funded entirely by available Parking DC reserve funds. Therefore, no shares remain to be brought forward to the development charge calculation.

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TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
PARKING

PARKING LOTS Lot Name	# of Parking Spaces										UNIT COST (\$/space)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Garages											
City Hall	349	349	349	349	349	349	349	349	349	349	\$55,000
John Street	225	225	225	225	225	225	225	225	225	225	\$55,000
Market Square	542	542	542	542	542	542	542	542	542	542	\$55,000
Nelson Square	278	278	278	278	275	275	275	275	275	275	\$33,350
West Tower	-	-	-	-	-	-	-	91	91	91	\$55,000
Outdoor Surface Parking Lots											
Alderlea Lot	60	60	60	-	-	-	-	-	-	-	\$3,800
Church Street Lot	136	136	136	136	136	136	-	-	-	-	\$3,800
Rosalea Upper Deck	43	43	43	43	43	43	-	-	-	-	\$3,800
Old George Street Lot	38	38	38	-	-	-	-	-	-	-	\$3,800
YMCA Lot	192	192	192	-	-	-	-	-	-	-	\$3,800
20 George Street Lot	-	-	-	-	-	-	-	-	-	48	\$3,800
Total # (spaces)	1,863	1,863	1,863	1,573	1,570	1,570	1,391	1,482	1,482	1,530	
Total (\$000)	\$72,433.5	\$72,433.5	\$72,433.5	\$71,331.5	\$71,231.5	\$71,231.5	\$70,551.3	\$75,556.3	\$75,556.3	\$75,738.7	

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APPENDIX B.6
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
PARKING

LAND Lot Name	# of Acres										UNIT COST (\$/acre)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Garages											
City Hall	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	\$1,500,000
John Street	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	\$1,500,000
Market Square	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	\$1,500,000
Nelson Square	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	\$1,500,000
West Tower	-	-	-	-	-	-	-	0.74	0.74	0.74	\$1,500,000
Outdoor Surface Parking Lots											
Alderlea Lot	0.94	0.94	0.94	-	-	-	-	-	-	-	\$1,500,000
Church Street Lot	1.06	1.06	1.06	1.06	1.06	1.06	-	-	-	-	\$1,500,000
Rosalea Upper Deck	0.40	0.40	0.40	0.40	0.40	0.40	-	-	-	-	\$1,500,000
George Street Lot	0.34	0.34	0.34	-	-	-	-	-	-	-	\$1,500,000
YMCA Lot	1.88	1.88	1.88	-	-	-	-	-	-	-	\$1,500,000
20 George Street Lot	-	-	-	-	-	-	-	-	-	0.35	\$1,500,000
Total # (acres)	7.95	7.95	7.95	4.79	4.79	4.79	3.33	4.07	4.07	4.42	
Total (\$000)	\$11,925.0	\$11,925.0	\$11,925.0	\$7,185.0	\$7,185.0	\$7,185.0	\$4,995.0	\$6,105.0	\$6,105.0	\$6,630.0	

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
PARKING

EQUIPMENT Lot Name	Equipment Value (\$000)										UNIT COST (\$/unit)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
City Hall Garage	\$33.3	\$33.3	\$33.3	\$235.0	\$235.0	\$235.0	\$235.0	\$235.0	\$235.0	\$235.0	\$235.0	
John Street Garage	\$160.0	\$160.0	\$160.0	\$160.0	\$160.0	\$160.0	\$160.0	\$160.0	\$160.0	\$160.0	\$160.0	
Market Square Garage	\$33.3	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	
Nelson Square Garage	\$27.4	\$27.4	\$27.4	\$27.4	\$150.0	\$150.0	\$150.0	\$150.0	\$150.0	\$150.0	\$150.0	
West Tower Garage	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$235.0	\$235.0	\$235.0	
Electric Vehicle Charging Stations	-	-	-	-	-	-	-	-	2	2	12	\$8,500
Pay on Foot Machines	1	1	6	6	7	7	8	8	8	8	8	\$40,000
Pay and Display Machines (On Street)	16	16	16	33	33	33	45	45	45	45	45	\$10,000
Total (\$000)	\$453.85	\$620.6	\$820.6	\$1,192.4	\$1,355.0	\$1,355.0	\$1,515.0	\$1,767.0	\$1,767.0	\$1,767.0	\$1,852.0	

APPENDIX B.6
TABLE 1CITY OF BRAMPTON
CALCULATION OF SERVICE LEVELS
PARKING

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historic Population	485,808	504,495	523,900	537,275	550,992	565,059	579,485	594,280	607,036	620,067
Historic Employment	<u>155,914</u>	<u>159,165</u>	<u>162,490</u>	<u>165,928</u>	<u>169,444</u>	<u>173,040</u>	<u>176,718</u>	<u>180,480</u>	<u>184,386</u>	<u>188,398</u>
Total Historic Population & Employment	641,723	663,660	686,390	703,203	720,437	738,100	756,204	774,760	791,423	808,464

INVENTORY SUMMARY (\$000)

Parking Lots	\$72,433.5	\$72,433.5	\$72,433.5	\$71,331.5	\$71,231.5	\$71,231.5	\$70,551.3	\$75,556.3	\$75,556.3	\$75,738.7
Land	\$11,925.0	\$11,925.0	\$11,925.0	\$7,185.0	\$7,185.0	\$7,185.0	\$4,995.0	\$6,105.0	\$6,105.0	\$6,630.0
Equipment	\$453.9	\$620.6	\$820.6	\$1,192.4	\$1,355.0	\$1,355.0	\$1,515.0	\$1,767.0	\$1,767.0	\$1,852.0
Total (\$000)	\$84,812.4	\$84,979.1	\$85,179.1	\$79,708.9	\$79,771.5	\$79,771.5	\$77,061.3	\$83,428.3	\$83,428.3	\$84,220.7

SERVICE LEVEL (\$/population & employment)											Average Service Level
Parking Lots	\$112.87	\$109.14	\$105.53	\$101.44	\$98.87	\$96.51	\$93.30	\$97.52	\$95.47	\$93.68	\$100.43
Land	\$18.58	\$17.97	\$17.37	\$10.22	\$9.97	\$9.73	\$6.61	\$7.88	\$7.71	\$8.20	\$11.42
Equipment	\$0.71	\$0.94	\$1.20	\$1.70	\$1.88	\$1.84	\$2.00	\$2.28	\$2.23	\$2.29	\$1.71
Total (\$/pop & employ)	\$132.16	\$128.05	\$124.10	\$113.36	\$110.72	\$108.08	\$101.91	\$107.68	\$105.41	\$104.17	\$113.56

CITY OF BRAMPTON
CALCULATION OF MAXIMUM ALLOWABLE
PARKING

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$113.56
Net Population & Employment Growth 2019 - 2028	186,054
Maximum Allowable Funding Envelope	\$21,128,255
Less: 10% Legislated Reduction	\$2,112,825
Discounted Maximum Allowable Funding Envelope	\$19,015,429

CITY OF BRAMPTON
2019 DEVELOPMENT CHARGES BACKGROUND STUDY
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Cost		Total DC Eligible Costs	Available DC Reserves	DC Eligible Costs	
						Replacement and BTE Share	10% Reduction			2019-2028	Post 2028
6.0 PARKING											
6.1 Parking Facilities											
6.1.1	Parking Garage - Lease Payments	2019 - 2019	\$ 2,355,019	\$ -	\$ 2,355,019	\$ 1,900,912	\$ 45,411	\$ 408,696	\$ 408,696	\$ -	\$ -
6.1.2	Parking Garage - Lease Payments	2020 - 2020	\$ 2,355,019	\$ -	\$ 2,355,019	\$ 1,900,912	\$ 45,411	\$ 408,696	\$ 408,696	\$ -	\$ -
6.1.3	Parking Garage - Lease Payments	2021 - 2021	\$ 2,355,019	\$ -	\$ 2,355,019	\$ 1,900,912	\$ 45,411	\$ 408,696	\$ 408,696	\$ -	\$ -
6.1.4	Parking Garage - Lease Payments	2022 - 2022	\$ 2,355,019	\$ -	\$ 2,355,019	\$ 1,900,912	\$ 45,411	\$ 408,696	\$ 408,696	\$ -	\$ -
6.1.5	Parking Garage - Lease Payments	2023 - 2023	\$ 2,355,019	\$ -	\$ 2,355,019	\$ 1,900,912	\$ 45,411	\$ 408,696	\$ 408,696	\$ -	\$ -
6.1.6	Parking Garage - Lease Payments	2024 - 2024	\$ 2,355,019	\$ -	\$ 2,355,019	\$ 1,900,912	\$ 45,411	\$ 408,696	\$ 408,696	\$ -	\$ -
6.1.7	Parking Garage - Lease Payments	2025 - 2025	\$ 2,355,019	\$ -	\$ 2,355,019	\$ 1,900,912	\$ 45,411	\$ 408,696	\$ 408,696	\$ -	\$ -
6.1.8	Parking Garage - Lease Payments	2026 - 2026	\$ 2,355,019	\$ -	\$ 2,355,019	\$ 1,900,912	\$ 45,411	\$ 408,696	\$ 408,696	\$ -	\$ -
6.1.9	Parking Garage - Lease Payments	2027 - 2027	\$ 2,355,019	\$ -	\$ 2,355,019	\$ 1,900,912	\$ 45,411	\$ 408,696	\$ 408,696	\$ -	\$ -
6.1.10	Parking Garage - Lease Payments	2028 - 2028	\$ 2,355,019	\$ -	\$ 2,355,019	\$ 1,900,912	\$ 45,411	\$ 408,696	\$ 408,696	\$ -	\$ -
	Subtotal Parking Facilities		\$ 23,550,186	\$ -	\$ 23,550,186	\$ 19,009,119	\$ 454,107	\$ 4,086,961	\$ 4,086,961	\$ -	\$ -
TOTAL PARKING			\$ 23,550,186	\$ -	\$ 23,550,186	\$ 19,009,119	\$ 454,107	\$ 4,086,961	\$ 4,086,961	\$ -	\$ -

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	70%	\$0
10 Year Growth in Population in New Units		144,563
Unadjusted Development Charge Per Capita (\$)		\$0.00
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	30%	\$ -
10 Year Growth in Square Meters		4,832,564
Unadjusted Development Charge Per Sq.M (\$)		\$0.00

2019 - 2028 Net Funding Envelope for Parking	\$	19,015,429
Reserve Fund Balance	\$	7,389,163

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APPENDIX B.6
TABLE 3

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PARKING
RESIDENTIAL DEVELOPMENT CHARGE

PARKING	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE (\$000)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
2019-2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Parking : Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Parking: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	13,886	14,233	14,596	14,643	14,945	15,252	15,565	15,884	12,670	12,889	144,563
REVENUE											
- DC Receipts: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Interest on In-year Transactions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
TOTAL REVENUE	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
CLOSING CASH BALANCE	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	

2019 Adjusted Charge Per Capita	\$0.00
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Allocation of Capital Program	
Residential Sector	70.0%
Non-Residential Sector	30.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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 APPENDIX B.6
 TABLE 3

CITY OF BRAMPTON
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 PARKING
 NON-RESIDENTIAL DEVELOPMENT CHARGE

PARKING	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE (\$000)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
2019-2028 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Parking: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Parking: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
NEW NON-RESIDENTIAL DEVELOPMENT											
- Square Meters in New Buildings	300,464	306,529	312,748	551,201	569,019	587,458	606,543	626,299	480,489	491,814	4,832,564
REVENUE											
- DC Receipts: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Interest on In-year Transactions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
TOTAL REVENUE	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
CLOSING CASH BALANCE	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	

2019 Adjusted Charge Per Square Metre	\$0.00
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Allocation of Capital Program	
Residential Sector	70.0%
Non-Residential Sector	30.0%
Rates for 2019	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX C

***TRANSIT SERVICES
TECHNICAL APPENDIX***

APPENDIX C

TRANSIT SERVICES

The City of Brampton's Transit Services is one of the fastest growing transit providers in Canada, providing connections to other transit systems including GO Transit, Toronto Transit Commission and MiWay Transit. Brampton Transit owns and operates about 450 buses with 66 bus routes.

A. RIDERSHIP ANALYSIS

A development charge background study that incorporates Transit Services into the calculation must now include the following:

- An assessment of ridership forecast for all modes of transit and whether ridership is generated from existing or planned development (O.Reg. 82/98 s.8(2)4).
- An assessment of ridership capacity for all modes of transit over the 10-year forecast period (O. Reg. 82/98 s.8(2)4).

The ridership forecast was prepared by HDR on behalf of the City for the 2011, 2031 and 2041 planning horizons for the purposes of the DC Background Study. The allocation of ridership for the interim planning years from 2019 to 2028 is based on the DC Background Study shares of population and employment growth. The ridership analysis is discussed further in Appendix C.1.

B. PLANNED LEVEL OF SERVICE

The *DCA* (s.5.2 (3)) requires that in estimating the increase in need for Transit Services, the increased need "shall not exceed the planned level of service over the 10-year period immediately following the preparation of the background study". For the purposes of the development charge calculations, the "planned level of service" is considered the 10-year development-related capital program (2019-2028), as informed by the City's current and proposed capital budgets, long range plans, Transportation Master Plan Update, Transit Business Plan and discussions with City and Brampton Transit staff. Through its approval of the DC Background Study and the related underlying capital program, Council will express its intent to ensure that the increase in need in Transit Services arising from development over the planning period will be met. In accordance with the changes to the *DCA*, Transit Services are now considered to be 100 per cent DC eligible and thus are no longer subject to the 10 per cent

statutory discount. The proposed Transit Services capital program is discussed in further detail in Appendix C.2.

C. OTHER TRANSIT REQUIREMENTS: ASSET MANAGEMENT PLAN AND LONG-TERM CAPITAL AND OPERATING IMPACTS

Section 10 of the *DCA* identifies what must be included in a development charge background study, this appendix deals with two of those requirements for Transit Services, namely:

- s.10 (2) The development charge background study shall include,
- (c) an examination, for each service to which the development charge by-law would relate, of the long term capital and operating costs for capital infrastructure required for the service;
 - (c.2) an asset management plan prepared in accordance with subsection (3);

Asset management plan

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

The requirement to produce an Asset Management Plan (AMP) is part of the *DCA* amendments that came into effect on January 1, 2016. A key function of the AMP is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle.

In addition to the requirements set out in section 10 of the *DCA*, the associated regulation, *O.Reg. 82/98*, identifies additional direction on the contents of the AMP for Transit Services to be addressed in a DC Background Study. However, the Regulations are silent with respect to the AMP requirements for any other services. This analysis is discussed further in Appendix C.3.

D. OVERVIEW OF TRANSIT TECHNICAL APPENDICES

The following describes the Transit Services analysis contained in this appendix.

Appendix C.1 – Transit Ridership Analysis

- Provides an overview of the ridership analysis required under section 8(2) of *O.Reg. 82/98*.

Appendix C.2 – Transit Development-Related Capital Program (2019-2028)

- Contains details on the development-related capital program including a description of projects, timing and costing.
- Includes details on cash flow considerations.

Appendix C.3 – Transit Cost of Growth Analysis

- Addresses the requirements of section 10(1) of the *DCA* relating to the examination of long-term capital and operating impact costs for capital infrastructure and section 8(3) of *O.Reg. 82/98* for a DC Background Study to include an asset management plan relating to Transit Services.

APPENDIX C.1

TRANSIT RIDERSHIP FORECAST

APPENDIX C.1

TRANSIT RIDERSHIP FORECAST

A. TRANSIT SERVICE DELIVERY IN THE CITY OF BRAMPTON

As demonstrated in Appendix A, Brampton has experienced significant population and employment growth which is anticipated to continue over the forecast period. As the City continues to develop, so will the need to provide adequate levels of Transit service.

The assessment of ridership forecasts are based on the transit model developed by City's Transportation Consultant, HDR, and discussions with City staff. The following summarizes information provided by HDR regarding the transit ridership forecast. Additional information on the underlying model inputs and assumptions are provided in the 2019 Transportation Background Study Report.

B. TRAVEL DEMAND MODEL

The 2019 Transportation Background Study Report (Section 3.2) prepared by HDR provides the following description of the travel demand model:

This study utilizes the City's travel demand model, which was based on the GTAModelv4, developed by the Travel Modelling Group (TMG) at the University of Toronto. The model was recently further calibrated to the City of Brampton. The GTAModelv4 is a 24-hour model and forecasts auto, transit, walk and bicycle demands. The focus of the auto and transit assignment calibration was for the PM Peak Period (3-7 pm). There are three horizon years for this model: 2011, 2031, and 2041.

C. TRANSIT DEMAND FORECAST METHODOLOGY AND KEY ASSUMPTIONS

The 2019 Transportation Background Study Report (Section 7.2) also describes the forecast methodology and key assumptions:

- The travel demand model estimates all modes of travel, including auto, transit, pedestrian, cyclist, carpool/shared ride, considering the travel time/cost of trips, congestion and the overall utility of the system. The model assigns auto and transit trips to the network.
- The City's travel demand model was calibrated to the year 2011 using:
 1. Population and employment data at the traffic zone level, based on the 2011 Transportation Tomorrow Survey (TTS). Population and employment zonal data provided by the City was used within its borders;

2. Road and transit network based on 2011 conditions;
 3. Regional travel patterns based on the 2011 TTS (an approach used in most ridership forecasts in the region); and
 4. Auto and transit counts around the year 2011.
- The ridership model analysis examined the proposed 2031 transit network which includes the following major transit network improvements:
 - Queen Street Bus Rapid Transit (BRT), which includes BRT on Queen Street and Highway 50 between Brampton Downtown Terminal and Vaughan Metropolitan Centre (VMC);
 - Hurontario LRT between Port Credit GO and Gateway Terminal;
 - Brampton LRT Extension, which is the extension of the Hurontario LRT from Gateway Terminal to Brampton GO Terminal through Main Street;
 - Züm service on Bovaird, Steeles, Mississauga, Bramalea, and Airport, as recommended in the City's 2014 TMP Update; and
 - Regional Express Rail, a project by Metrolinx to provide all-day, two-way service to GO Rail lines, including the Kitchener Go Rail line.

Details about these lines, such as capacity, headway, and speed, have been developed using publicly available information, along with information provided by City staff. This is the standard approach for producing future ridership forecasts.

D. ANTICIPATED RIDERSHIP

As required by the DCA, the anticipated ridership forecast includes an assessment of all modes (collectively) of transit proposed to be funded by development charges over the forecast period. The forecast includes both bus and rapid rail transit. Table 1 summarizes the direct ridership model outputs of the PM peak period transit demand for 2011 (2011 network), 2011 (2031 network) and 2041 (2031 network). By applying the proposed 2031 transit network to the anticipated population and employment in 2041, the total PM peak period trips are anticipated to increase from 28,995 in 2011 (base) to 69,343 in 2041 (2031 network). It is noted that the ridership only includes riders who have used Brampton Transit as a portion of their trips (including the Hurontario LRT Extension in Brampton). This excludes riders who access the City using only GO Rail, GO Bus, or transit lines from other municipalities that start/end in Brampton.

Table 1 - Summary of Ridership Analysis			
Scenario	Land Use	Network	PM Peak Period Transit Demand
A	2011	2011	28,995
B	2011	2031	40,649
C	2041	2031	69,343

Hemson utilized the ridership forecast prepared by HDR in Table 1 to allocate trips arising from development over the 2011 and 2041 planning period. Table 2 below provides a summary of the ridership growth over from 2011 to 2041 as informed from the scenarios identified in Table 1.

Item D in Table 2 below equals the increased ridership arising from Scenario C (69,343 PM peak period trips) less Scenario A (28,995 PM peak period trips) for a total of 40,348 PM peak period trips over the 2011 to 2041 planning period. In order to determine the share of the ridership related to existing development, the 2011 (base) scenario was applied to the proposed 2031 network (shown in Scenario B). The difference between Scenario B and A is 11,654 PM peak period trips (40,649 – 28,995 PM peak period trips) which reflects the increase in trips generated from existing population and employment if the 2031 network were available in 2011.

The PM peak period trips arising from new development is calculated based on the total identified trips for the planning period (40,348 PM peak period trips) less the trips that relate to the existing population (11,654 PM peak period trips). After adjusting for trips added from the existing base, the trips identified as being generated by development occurring over the 2011 to 2041 planning period is equal to 28,694 PM peak period trips (40,348 – 11,654 PM peak period trips).

Table 2 - Summary of Ridership Growth		
	Analysis of Ridership Growth	PM Peak Period Trips
D	Increased Ridership 2011-2041 (C - A)	40,348
	Trips from 2011 Base (B - A)	
E	Added trips if network improvements available in 2011 (B-A)	11,654
F	Trips Generated from Growth 2011 to 2041 (D – E)	28,694

The ridership model and input data limitations prohibit the production of ridership forecasts for the interim planning years of 2019 and 2028. As a result, the anticipated ridership growth for these years were extrapolated using shares of population and

employment growth. Table 3 provides a summary of the population and employment assumptions used for the purposes of allocating the ridership analysis for the 2019 to 2028 period. The population and employment estimates align with the forecast identified in Appendix A.

Table 3 - Summary of Population and Employment				
Year	Population	Employment	Total	%
Total Population and Employment				
2011	523,900	162,490	686,390	
2019	633,377	192,518	825,895	
2028	749,455	245,063	994,518	
2041	861,650	309,090	1,170,740	
Population and Employment Growth (2011-2041)				
2011-2019	109,477	30,028	139,505	29%
2019-2028	116,078	52,545	168,623	35%
2028-2041	112,195	64,027	176,222	36%
2011-2041	337,750	146,600	484,350	100%

The ridership forecast is allocated using the shares of population and employment growth shown in Table 3. As shown in Table 4, the 28,694 PM peak period trips deemed to benefit growth occurring from 2011 to 2041 is then allocated at 29 per cent, or 8,265 trips, to the 2011-2019 period, 35 per cent, or 9,990 trips, to the 2019-2028 period, and 36 per cent, or 10,440 trips to the 2028-2041 period.

Table 4 - Allocation of Ridership Forecast		
Year	PM Peak Period Ridership	% of Allocation
Ridership Analysis		
Pre 2011	11,654	
2011-2041	28,694	
Total	40,348	
Allocation of Increased Ridership (2011-2041)		
2011-2019	8,265	29%
2019-2028	9,990	35%
2028-2041	10,440	36%
Total	28,694	100%

E. ASSESSMENT OF RIDERSHIP CAPACITY

The proposed transit infrastructure included in the Transit capital program is required to achieve the total PM peak period trips of 40,348 by 2041. However, recognizing that 9,990 PM peak period transit trips will be added over 2019-2028, there is available ridership capacity at the end of the 10-year planning period.

F. TRANSIT RIDERSHIP BENEFIT TO EXISTING SHARE (BTE) AND POST-PERIOD BENEFIT CALCULATION

Table 5 provides a summary of the transit ridership allocations used to arrive at the benefit to existing, in-period and post-period share calculations for select Transit related projects. The allocations of benefit were determined on a project-by-project basis and are discussed further in Appendix C.2.

Using the scenarios identified in Table 1 and the ridership allocations in Table 4, the benefit to existing share is calculated based on the 2011 (base) trips (11,654 PM peak period trips) plus the 2011-2019 trips (8,265 PM peak period trips). In total, this amounts to 19,919 PM peak period trips, or 49 per cent.

The post-period benefit is based on the trips identified in Table 4 occurring from beyond 2028 to 2041. As shown in Table 5, in total 10,440, or 26 per cent of trips are deemed to relate to development occurring beyond the 10-year planning horizon. The remaining portion, 9,990 trips, or 25 per cent, is related to development occurring within the planning period.

Table 5 - Ridership Allocations			
Allocation	Year	PM Peak Period	% of Allocation
Benefit to Existing	2011 + 2011-2019	19,919	49%
In-Period	2019-2028	9,900	25%
Post-Period	2028 and beyond	10,440	26%
	Total	40,348	100%

APPENDIX C.2

***TRANSIT DEVELOPMENT-RELATED
CAPITAL PROGRAM (2019-2028)***

APPENDIX C.2

TRANSIT DEVELOPMENT-RELATED CAPITAL PROGRAM (2019-2028)

A. DESCRIPTION OF PROJECTS INCLUDED IN THE CAPITAL PROGRAM

Table 1 provides details on the 2019-2028 development-related capital program for Transit services. The capital program includes projects associated with bus related infrastructure, ancillary equipment related to higher order transit, conventional transit and other equipment. The program also provides for the recovery of a negative reserve fund balance of \$60.21 million for Transit services. The capital programs have been developed with City staff with reference to key planning documents:

1. City of Brampton: 2019 – 2022 Capital Budget
2. Brampton Transit 2018 – 2022 Business Plan
3. City of Brampton Transportation Master Plan Update

1. Buildings, Land & Equipment

The capital program includes provisions for a new transit facility in Brampton. The building will be able to accommodate up to 350 buses.

2. Vehicles

The capital program includes the acquisition of buses over the 10-year planning period from 2019-2028. These buses include Züm 60' Articulated Low-floor Buses, Conventional Low-floor Buses and High Capacity Articulated Bus Additions.

3. Bus Pads and Shelters

This portion of the capital program includes infrastructure relating to bus shelters and pads on new and existing bus routes. The provision for bus shelters and pads is provided where no existing infrastructure is in place on both existing and new routes.

4. Higher Order Transit

The capital program also includes provisions for various transit services and studies, including a Downtown Mobility Hub, Bus Rapid Transit on Queen Street and Light Rail Transit on Main Street.

B. CALCULATION OF DISCOUNTED DEVELOPMENT-RELATED CAPITAL COSTS

The 2019–2028 gross development-related capital program for Transit amounts to \$1.61 billion. Approximately \$930 million in funding from upper levels of government has been identified and as such, is reduced from the total DC eligible cost.

The Transit reserve fund balance is currently in a negative position of \$60.21 million. The 2019-2028 capital program includes a provision for the recovery of the negative balance.

The capital program includes for the acquisition of land, the design and construction of a new transit facility in 2020. The facility is planned to accommodate 350 buses and will house nearly all the new buses acquired over the 10-year planning period from 2019-2028. The total gross project cost is \$162.00 million, although, \$110.00 million is anticipated to be funded by upper-level government grants. As the facility will be constructed to accommodate 350 buses, a share equal to the remaining capacity of the facility to accommodate buses acquired outside the planning period is deemed to be “pre-built” servicing capacity and is considered as committed excess capacity to be considered in future development charges studies. Therefore, approximately \$1.49 million of the costs related to the new transit facility is attributed to a post-period benefit and has been reduced from the total eligible costs for recovery.

The capital program includes for the acquisition of 340 additional buses at a total cost of \$404.50 million over the 10-year planning period. Of the \$404.50 million, about \$193.69 million is anticipated to be funded by government grants and subsidies. A benefit to existing share of \$104.07 million has been applied to total project costs. The ridership forecast discussed in Appendix C.1 has been used to inform the benefit to existing shares for the bus acquisitions throughout the planning period. The calculation is based on a point in time and available information. Subsequent studies will review the benefit to existing allocations based on available information at that time.

Approximately \$15.43 million has been identified for additional bus pads and shelters. The City is anticipating to receive \$11.31 million in grants and subsidies that will be netted off total project costs. A benefit to existing share of \$419,000 has also been reduced from the total DC eligible cost.

For the remaining higher order transit projects, a gross project cost of \$968.40 million has been identified and largely related to construction of a new Downtown Mobility Hub, Bus Rapid Transit on Queen Street and Light Rail Transit on Main Street.

Although funding sources are not confirmed, it is assumed that two-thirds (or \$615.00 million) of upper-level government funding will be received to offset the cost of both the Bus Rapid Transit on Queen Street and Light Rail Transit on Main Street projects. Furthermore, based on the ridership analysis, about \$174.46 million is deducted from the gross project cost to account for benefit to existing shares associated with these capital projects – this amount will not be recovered through development charges. For the transit investments associated with the downtown mobility hub, as well as the BRT and LRT projects, a portion of the capital program will service development that will not occur until after 2028. This portion of the capital program is deemed to be “pre-built” service capacity and is considered as committed excess capacity to be considered in future development charges studies and amounts to \$91.44 million. The ridership analysis that supports both the benefit to existing and post-period share allocations is discussed further in Appendix C.1.

The 2019–2028 DC costs eligible for recovery amount to \$401.58 million. In total, \$92.93 million has been identified as post-period benefit shares, reducing the 2019–2028 DC eligible share to \$308.66 million and this amount is brought forward to the DC calculation.

C. CALCULATION OF RESIDENTIAL AND NON-RESIDENTIAL DISCOUNTED DEVELOPMENT-RELATED CAPITAL COSTS AND CASH FLOW ANALYSIS

1. Residential and Non-Residential Allocation

The development charge eligible cost of \$308.66 million is allocated 70 per cent against residential development, or \$216.06 million, and 30 per cent against non-residential development, or \$92.60 million, based on the ratio of forecast growth in population and employment. This yields unadjusted development charge rates of \$1,494.58 per capita and \$19.16 per square metre, respectively.

2. Cash Flow Analysis

After cash flow and reserve fund consideration, the residential calculated charge increases to \$1,520.39 per capita and the non-residential charge increases slightly to \$19.81 per square metre. This is a reflection of the timing of the capital program and development charges revenues.

The following table summarizes the calculation of the Transit development charge:

TRANSIT SUMMARY					
2019 - 2028		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$1,610,531,496	\$308,657,748	\$1,494.58	\$19.16	\$1,520.39	\$19.81

CITY OF BRAMPTON
2019 DEVELOPMENT CHARGES BACKGROUND STUDY
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Cost		Total DC Eligible Costs	DC Eligible Costs			
						Replacement and BTE Share	0% Reduction		Available DC Reserves	2019-2028	Post 2028	
7.0 TRANSIT												
7.1	Recovery of Negative Reserve Fund Balance	2019 - 2019	\$ 60,209,496	\$ -	\$ 60,209,496	\$ -	\$ -	\$ 60,209,496	\$ -	\$ 60,209,496	\$ -	
7.2	Buildings, Land & Equipment											
7.2.1	New Transit Facility - Land	2019 - 2019	\$ 12,000,000	\$ -	\$ 12,000,000	\$ -	\$ -	\$ 12,000,000	\$ -	\$ 11,657,143	\$ 342,857	
7.2.2	New Transit Facility - Design	2019 - 2019	\$ 15,000,000	\$ 11,000,000	\$ 4,000,000	\$ -	\$ -	\$ 4,000,000	\$ -	\$ 3,885,714	\$ 114,286	
7.2.3	New Transit Facility - Construction	2020 - 2020	\$ 135,000,000	\$ 99,000,000	\$ 36,000,000	\$ -	\$ -	\$ 36,000,000	\$ -	\$ 34,971,429	\$ 1,028,571	
	Subtotal Buildings, Land & Equipment		\$ 162,000,000	\$ 110,000,000	\$ 52,000,000	\$ -	\$ -	\$ 52,000,000	\$ -	\$ 50,514,286	\$ 1,485,714	
7.3	Vehicles											
7.3.1	Zum 60' Articulated Low-floor Buses (5)	2019 - 2019	\$ 7,275,000	\$ 5,335,000	\$ 1,940,000	\$ 958,000	\$ -	\$ 982,000	\$ -	\$ 982,000	\$ -	
7.3.2	Conventional Low-floor Buses (7)	2019 - 2019	\$ 4,970,000	\$ 3,644,900	\$ 1,325,100	\$ 654,000	\$ -	\$ 671,100	\$ -	\$ 671,100	\$ -	
7.3.3	Zum 60' Articulated Low-floor Buses (10)	2020 - 2020	\$ 14,550,000	\$ 10,670,000	\$ 3,880,000	\$ 1,915,000	\$ -	\$ 1,965,000	\$ -	\$ 1,965,000	\$ -	
7.3.4	Conventional Low-floor Buses (10)	2020 - 2020	\$ 7,100,000	\$ 5,207,000	\$ 1,893,000	\$ 935,000	\$ -	\$ 958,000	\$ -	\$ 958,000	\$ -	
7.3.5	Zum 60' Articulated Low-floor Buses (10)	2021 - 2021	\$ 14,550,000	\$ 10,670,000	\$ 3,880,000	\$ 1,915,000	\$ -	\$ 1,965,000	\$ -	\$ 1,965,000	\$ -	
7.3.6	Conventional Low-floor Buses (29)	2021 - 2021	\$ 20,590,000	\$ 15,100,300	\$ 5,489,700	\$ 2,710,000	\$ -	\$ 2,779,700	\$ -	\$ 2,779,700	\$ -	
7.3.7	Zum 60' Articulated Low-floor Buses (24)	2022 - 2022	\$ 34,920,000	\$ 14,892,000	\$ 20,028,000	\$ 9,887,000	\$ -	\$ 10,141,000	\$ -	\$ 10,141,000	\$ -	
7.3.8	Conventional Low-floor Buses (14)	2022 - 2022	\$ 9,940,000	\$ 4,239,000	\$ 5,701,000	\$ 2,814,000	\$ -	\$ 2,887,000	\$ -	\$ 2,887,000	\$ -	
7.3.9	Zum 60' Articulated Low-floor Buses (7) - Chinguacousy Zum Corridor	2022 - 2022	\$ 10,185,000	\$ 4,343,000	\$ 5,842,000	\$ 2,884,000	\$ -	\$ 2,958,000	\$ -	\$ 2,958,000	\$ -	
7.3.10	Zum 60' Articulated Low-floor Buses (15)	2023 - 2023	\$ 21,825,000	\$ 9,307,000	\$ 12,518,000	\$ 6,180,000	\$ -	\$ 6,338,000	\$ -	\$ 6,338,000	\$ -	
7.3.11	Conventional Low-floor Buses (15)	2023 - 2023	\$ 10,650,000	\$ 4,542,000	\$ 6,108,000	\$ 3,015,000	\$ -	\$ 3,093,000	\$ -	\$ 3,093,000	\$ -	
7.3.12	Zum 60' Articulated Low-floor Buses (16)	2024 - 2024	\$ 23,280,000	\$ 9,928,000	\$ 13,352,000	\$ 6,591,000	\$ -	\$ 6,761,000	\$ -	\$ 6,761,000	\$ -	
7.3.13	Conventional Low-floor Buses (16)	2024 - 2024	\$ 11,360,000	\$ 4,845,000	\$ 6,515,000	\$ 3,216,000	\$ -	\$ 3,299,000	\$ -	\$ 3,299,000	\$ -	
7.3.14	Zum 60' Articulated Low-floor Buses (25)	2025 - 2025	\$ 36,375,000	\$ 15,512,000	\$ 20,863,000	\$ 10,299,000	\$ -	\$ 10,564,000	\$ -	\$ 10,564,000	\$ -	
7.3.15	Conventional Low-floor Buses (11)	2025 - 2025	\$ 7,810,000	\$ 3,331,000	\$ 4,479,000	\$ 2,211,000	\$ -	\$ 2,268,000	\$ -	\$ 2,268,000	\$ -	
7.3.16	Zum 60' Articulated Low-floor Buses (18)	2026 - 2026	\$ 26,190,000	\$ 11,169,000	\$ 15,021,000	\$ 7,415,000	\$ -	\$ 7,606,000	\$ -	\$ 7,606,000	\$ -	
7.3.17	Conventional Low-floor Buses (18)	2026 - 2026	\$ 12,780,000	\$ 5,450,000	\$ 7,330,000	\$ 3,619,000	\$ -	\$ 3,711,000	\$ -	\$ 3,711,000	\$ -	
7.3.18	High Capacity Articulated Bus Additions (18)	2027 - 2027	\$ 36,000,000	\$ 15,353,000	\$ 20,647,000	\$ 10,193,000	\$ -	\$ 10,454,000	\$ -	\$ 10,454,000	\$ -	
7.3.19	Conventional Low-floor Buses (20)	2027 - 2027	\$ 14,200,000	\$ 6,056,000	\$ 8,144,000	\$ 4,020,000	\$ -	\$ 4,124,000	\$ -	\$ 4,124,000	\$ -	
7.3.20	High Capacity Articulated Bus Additions (27)	2028 - 2028	\$ 54,000,000	\$ 23,029,000	\$ 30,971,000	\$ 15,289,000	\$ -	\$ 15,682,000	\$ -	\$ 15,682,000	\$ -	
7.3.21	Conventional Low-floor Buses (14)	2028 - 2028	\$ 9,940,000	\$ 4,239,000	\$ 5,701,000	\$ 2,814,000	\$ -	\$ 2,887,000	\$ -	\$ 2,887,000	\$ -	
7.3.22	Zum 60' Articulated Low-floor Buses (11) - Bramalea Zum Corridor	2025 - 2027	\$ 16,005,000	\$ 6,825,000	\$ 9,180,000	\$ 4,532,000	\$ -	\$ 4,648,000	\$ -	\$ 4,648,000	\$ -	
	Subtotal Vehicles		\$ 404,495,000	\$ 193,687,200	\$ 210,807,800	\$ 104,066,000	\$ -	\$ 106,741,800	\$ -	\$ 106,741,800	\$ -	
7.4	Bus Pads and Shelters											
7.4.1	Bus Shelters/Pads/Stops	2019 - 2019	\$ 439,000	\$ 322,000	\$ 117,000	\$ 42,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	
7.4.2	Bus Shelters/Pads/Stops	2020 - 2020	\$ 416,000	\$ 305,000	\$ 111,000	\$ 41,000	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ -	
7.4.3	Bus Shelters/Pads/Stops	2021 - 2021	\$ 420,000	\$ 308,000	\$ 112,000	\$ 42,000	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ -	
7.4.4	Bus Shelters/Pads/Stops	2022 - 2022	\$ 420,000	\$ 308,000	\$ 112,000	\$ 42,000	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ -	
7.4.5	Pads and Stations for Future Zum Corridor	2022 - 2022	\$ 5,212,000	\$ 3,822,000	\$ 1,390,000	\$ -	\$ -	\$ 1,390,000	\$ -	\$ 1,390,000	\$ -	
7.4.6	Bus Shelters/Pads/Stops	2023 - 2023	\$ 420,000	\$ 308,000	\$ 112,000	\$ 42,000	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ -	
7.4.7	Bus Shelters/Pads/Stops	2024 - 2024	\$ 420,000	\$ 308,000	\$ 112,000	\$ 42,000	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ -	
7.4.8	Bus Shelters/Pads/Stops	2025 - 2025	\$ 420,000	\$ 308,000	\$ 112,000	\$ 42,000	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ -	
7.4.9	Bus Shelters/Pads/Stops	2026 - 2026	\$ 420,000	\$ 308,000	\$ 112,000	\$ 42,000	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ -	
7.4.10	Bus Shelters/Pads/Stops	2027 - 2027	\$ 420,000	\$ 308,000	\$ 112,000	\$ 42,000	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ -	
7.4.11	Pads and Stations for Future Zum Corridor	2027 - 2028	\$ 6,000,000	\$ 4,400,000	\$ 1,600,000	\$ -	\$ -	\$ 1,600,000	\$ -	\$ 1,600,000	\$ -	
7.4.12	Bus Shelters/Pads/Stops	2028 - 2028	\$ 420,000	\$ 308,000	\$ 112,000	\$ 42,000	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ -	
	Subtotal Bus Pads and Shelters		\$ 15,427,000	\$ 11,313,000	\$ 4,114,000	\$ 419,000	\$ -	\$ 3,695,000	\$ -	\$ 3,695,000	\$ -	

CITY OF BRAMPTON
2019 DEVELOPMENT CHARGES BACKGROUND STUDY
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Cost		Total DC Eligible Costs	DC Eligible Costs		
						Replacement and BTE Share	0% Reduction		Available DC Reserves	2019-2028	Post 2028
7.0 TRANSIT											
7.5 Higher Order Transit Infrastructure											
7.5.1	Main St LRT Extension EA	2019 - 2019	\$ 2,500,000	\$ -	\$ 2,500,000	\$ 1,234,174	\$ -	\$ 1,265,826	\$ -	\$ 618,967	\$ 646,859
7.5.2	Bus Rapid Transit on McLaughlin and Kennedy - EA	2019 - 2019	\$ 4,400,000	\$ -	\$ 4,400,000	\$ 2,172,146	\$ -	\$ 2,227,854	\$ -	\$ 1,089,382	\$ 1,138,472
7.5.3	Downtown Mobility Hub Study	2019 - 2019	\$ 500,000	\$ -	\$ 500,000	\$ 246,835	\$ -	\$ 253,165	\$ -	\$ 123,793	\$ 129,372
7.5.4	Queen St Rapid Transit Preliminary Design & TPAP	2020 - 2020	\$ 11,000,000	\$ -	\$ 11,000,000	\$ 5,430,366	\$ -	\$ 5,569,634	\$ -	\$ 2,723,455	\$ 2,846,180
7.5.5	Downtown Mobility Hub	2023 - 2023	\$ 30,000,000	\$ -	\$ 30,000,000	\$ 14,810,088	\$ -	\$ 15,189,912	\$ -	\$ 7,427,603	\$ 7,762,309
7.5.6	Bus Rapid Transit on Queen Street	2027 - 2028	\$ 500,000,000	\$ 335,000,000	\$ 165,000,000	\$ 81,455,484	\$ -	\$ 83,544,516	\$ -	\$ 40,851,818	\$ 42,692,698
7.5.7	Light Rail Transit on Main St (Surface)	2027 - 2028	\$ 420,000,000	\$ 280,000,000	\$ 140,000,000	\$ 69,113,744	\$ -	\$ 70,886,256	\$ -	\$ 34,662,149	\$ 36,224,107
	Subtotal Higher Order Transit Infrastructure		\$ 968,400,000	\$ 615,000,000	\$ 353,400,000	\$ 174,462,838	\$ -	\$ 178,937,162	\$ -	\$ 87,497,167	\$ 91,439,996
TOTAL TRANSIT			\$ 1,610,531,496	\$ 930,000,200	\$ 680,531,296	\$ 278,947,838	\$ -	\$ 401,583,458	\$ -	\$ 308,657,748	\$ 92,925,710

Residential Development Charge Calculation			
Residential Share of 2019 - 2028 DC Eligible Costs	70%	\$216,060,423	
10 Year Growth in Population in New Units		144,563	
Unadjusted Development Charge Per Capita (\$)		\$1,494.58	
Non-Residential Development Charge Calculation			
Non-Residential Share of 2019 - 2028 DC Eligible Costs	30%	\$ 92,597,324	
10 Year Growth in Square Meters		4,832,564	
Unadjusted Development Charge Per Sq.M (\$)		\$19.16	

Reserve Fund Balance	\$ (60,209,496)
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APPENDIX B.7
TABLE 2

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
TRANSIT
RESIDENTIAL DEVELOPMENT CHARGE

TRANSIT	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE (\$000)	\$0.0	(\$35,353.5)	(\$44,468.7)	(\$26,989.4)	(\$17,620.5)	(\$6,615.1)	\$11,105.3	\$27,018.5	\$45,607.0	\$24,251.2	
2019-2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Transit : Non Inflated	\$55,518.8	\$28,481.5	\$3,370.3	\$12,212.2	\$11,850.0	\$7,091.0	\$10,115.9	\$9,055.4	\$38,328.0	\$40,037.2	\$216,060.4
- Transit: Inflated	\$55,518.8	\$29,051.1	\$3,506.4	\$12,959.7	\$12,826.8	\$7,829.0	\$11,392.2	\$10,401.8	\$44,907.4	\$47,848.1	\$236,241.5
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	13,886	14,233	14,596	14,643	14,945	15,252	15,565	15,884	12,670	12,889	144,563
REVENUE											
- DC Receipts: Inflated	\$21,111.5	\$22,072.3	\$23,088.8	\$23,626.3	\$24,595.5	\$25,602.2	\$26,649.7	\$27,741.3	\$22,569.6	\$23,419.9	\$240,477.2
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1,944.4)	(\$2,445.8)	(\$1,484.4)	(\$969.1)	(\$363.8)	\$388.7	\$945.6	\$1,596.2	\$848.8	(\$3,428.2)
- Interest on In-year Transactions	(\$946.2)	(\$191.9)	\$342.7	\$186.7	\$206.0	\$311.0	\$267.0	\$303.4	(\$614.3)	(\$671.8)	(\$807.4)
TOTAL REVENUE	\$20,165.3	\$19,936.0	\$20,985.7	\$22,328.6	\$23,832.3	\$25,549.4	\$27,305.4	\$28,990.3	\$23,551.6	\$23,596.9	\$236,241.5
CLOSING CASH BALANCE	(\$35,353.5)	(\$44,468.7)	(\$26,989.4)	(\$17,620.5)	(\$6,615.1)	\$11,105.3	\$27,018.5	\$45,607.0	\$24,251.2	\$0.0	

2019 Adjusted Charge Per Capita	\$1,520.39
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Allocation of Capital Program	
Residential Sector	70.0%
Non-Residential Sector	30.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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APPENDIX B.7
TABLE 2

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
TRANSIT
NON-RESIDENTIAL DEVELOPMENT CHARGE

TRANSIT	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE (\$000)	\$0.0	(\$18,332.0)	(\$25,768.8)	(\$22,156.2)	(\$17,235.3)	(\$11,361.2)	(\$2,325.9)	\$6,347.2	\$16,535.1	\$8,798.1	
2019-2028 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Transit: Non Inflated	\$23,793.8	\$12,206.4	\$1,444.4	\$5,233.8	\$5,078.6	\$3,039.0	\$4,335.4	\$3,880.9	\$16,426.3	\$17,158.8	\$92,597.3
- Transit: Inflated	\$23,793.8	\$12,450.5	\$1,502.8	\$5,554.2	\$5,497.2	\$3,355.3	\$4,882.4	\$4,457.9	\$19,246.0	\$20,506.3	\$101,246.4
NEW NON-RESIDENTIAL DEVELOPMENT											
- Square Meters in New Buildings	300,464	306,529	312,748	551,201	569,019	587,458	606,543	626,299	480,489	491,814	4,832,564
REVENUE											
- DC Receipts: Inflated	\$5,952.4	\$6,194.0	\$6,446.1	\$11,588.1	\$12,201.9	\$12,849.3	\$13,532.1	\$14,252.3	\$11,152.9	\$11,644.0	\$105,813.0
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1,008.3)	(\$1,417.3)	(\$1,218.6)	(\$947.9)	(\$624.9)	(\$127.9)	\$222.2	\$578.7	\$307.9	(\$4,236.1)
- Interest on In-year Transactions	(\$490.6)	(\$172.1)	\$86.5	\$105.6	\$117.3	\$166.1	\$151.4	\$171.4	(\$222.6)	(\$243.7)	(\$330.6)
TOTAL REVENUE	\$5,461.8	\$5,013.7	\$5,115.3	\$10,475.1	\$11,371.3	\$12,390.6	\$13,555.5	\$14,645.8	\$11,509.0	\$11,708.3	\$101,246.4
CLOSING CASH BALANCE	(\$18,332.0)	(\$25,768.8)	(\$22,156.2)	(\$17,235.3)	(\$11,361.2)	(\$2,325.9)	\$6,347.2	\$16,535.1	\$8,798.1	\$0.0	

2019 Adjusted Charge Per Square Metre	\$19.81
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Allocation of Capital Program	
Residential Sector	70.0%
Non-Residential Sector	30.0%
Rates for 2019	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX C.3

TRANSIT COST OF GROWTH ANALYSIS

APPENDIX C.3

TRANSIT COST OF GROWTH ANALYSIS

This appendix examines how the City of Brampton utilizes long-term financial planning and asset management planning to ensure the fiscal sustainability of Transit services operations, including the full life cycle cost of assets. Although all Transit assets have a useful life longer than 10 years, the analysis contained in this appendix will focus on the *DCA* legislated 10-year transit planning horizon (the period immediately following the preparation of the 2019 DC Background Study) of 2019–2028. Likewise, the analysis will focus on the share of capital assets included in the calculation of the DC rates.

The cost of growth (COG) analysis contained herein has been developed by Hemson in consultation with City Staff. The COG analysis included in this appendix addresses all of the identified transit assets described in Appendix C.2.

A. OPERATING & CAPITAL COST IMPACTS AND ASSET MANAGEMENT PLAN LEGISLATIVE REQUIREMENTS

Section 10 of the *Development Charges Act* identifies what must be included in a development charges background study, this appendix deals with two of those requirements for Transit services, namely:

- s.10 (2) The development charge background study shall include,
 - (c) an examination, for each service to which the development charge by-law would relate, of the long term capital and operating costs for capital infrastructure required for the service;
 - (c.2) an asset management plan prepared in accordance with subsection (3);

Asset management plan

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

The requirement to produce an Asset Management Plan (AMP) is part of the *DCA* amendments that came into effect on January 1, 2016. A key function of the AMP is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle.

In addition to the requirements set out in section 10 of the *DCA*, the associated regulation, *Ontario Regulation 82/98 (O.Reg. 82/98)*, identifies additional direction on the contents of the AMP for transit services, to be addressed in a development charges background study. However, it is noted that the regulations are silent with respect to the AMP requirements for any other services.

B. RELEVANT ANALYSIS AND CITY DOCUMENTS

The City utilizes a range of fiscal planning tools and approaches in examining the funding and maintenance of Transit infrastructure. For example, the City has completed a Long-Term Financial Master Plan, a five-year business plan for Brampton Transit (2018 – 2022) and the Corporate Asset Management Plan to ensure the City continues to run efficiently and spend public money wisely. In addition, a Transit Asset Management Plan is currently underway which will help the City manage and invest in the City’s transit infrastructure.

The following are key and interrelated documents central to the City’s fiscal evaluation:

- City of Brampton [Long-Term Financial Master Plan](#)
- City of Brampton [Transportation Master Plan Update](#)
- City of Brampton [2019-2021 Capital Budget](#)
- City of Brampton [2016 Corporate Asset Management Plan](#)
- City of Brampton [2018 State of Local Infrastructure Report](#)
- City of Brampton [Transit Business Plan \(2018 - 2022\)](#)

The key objective of the reports is to ensure financial sustainability for the delivery of Transit services. In particular, the City as part of its annual budget processes implements and manages the year-to-year expenditure needs and revenue requirements of the program.

C. TRANSIT ASSET MANAGEMENT PLAN REQUIREMENTS

The following provides an overview of the relevant documents and analysis that fulfills the AMP and long-term capital and operating cost requirements of the legislation.

The AMP analysis for Transit services has been grouped into the categories identified in the DC Transit capital program (see Appendix C.2).

1. Recovery of Negative Reserve Fund Balance
2. Buildings, Land & Equipment
3. Vehicles

4. Bus Pads and Shelters
5. Higher Order Transit Infrastructure

This following addresses the DC Background Study requirements set out in paragraph 1 of s. 8(3) of *O.Reg. 82/98*.

1. Gross Capital Costs Have Been Used for the Purposes of the AMP Analysis

The analysis contained in this appendix includes the total cost of all Transit infrastructure including development charge eligible and ineligible costs. However, the share of the development charge eligible works related to the 10-year Transit DC planning, 2019-2028, are the focus.

2. State of Local Infrastructure

a. Transit Assets: Inventory

The 2018 State of Local Infrastructure Report provides details on the inventory of capital assets for Transit Services. Figure 1 is from the 2018 State of Local Infrastructure Report (SOLI), Section 3.3.2 Detailed Asset Inventory and Replacement Values. It is important to note that the 2018 State of Local Infrastructure Report is an update to the State of the Local Infrastructure section of the City's 2016 Corporate Asset Management Plan. The 2018 SOLI Report is the foundation for ongoing assessment, reporting, and benchmarking of infrastructure assets. It will also allow the City to communicate publicly on the current state of the City's infrastructure. The focus of the 2018 SOLI was on "major service areas", described generally, as the infrastructure owned and internally managed by the City.

Figure 1: Detailed Asset Inventory and Replacement Values

Service	Asset		Inventory	Unit	Replacement Value (\$000)
Transit 	Facilities	All Transit Facilities	6	Each	\$125,944
	Licensed Vehicles	Heavy Duty Assets	442	Each	\$334,088
		Light Duty Vehicles	26	Each	\$721
	Transit Facilities (On Road)	Shelters – Conventional	666	Each	\$5,222
		Shelters – Züm	106	Each	\$20,579
		Shelters – Bike	23	Each	\$232
		Stops	903	Each	\$461
		Sandalwood Transit Loop	1	Each	\$1,040
	Transit IT Infrastructure	Video Walls	1	Each	\$255
		Mirra 4 Call Recording	1	Each	\$255
	Specialty Equipment	Conveyance Systems	106	Each	\$7,760
		Comm. Control Systems	8,418	Each	\$12,046
		Fare Systems	2,950	Each	\$9,031
		Presto	1,257	Each	\$5,754
		Maintenance/Admin Small	192	Each	\$2,126
Signage		2,577	Each	\$481	
Fueling		189,000	L	\$159	
Stock Room	N/A	N/A	\$1,627		
TOTAL					\$527,780

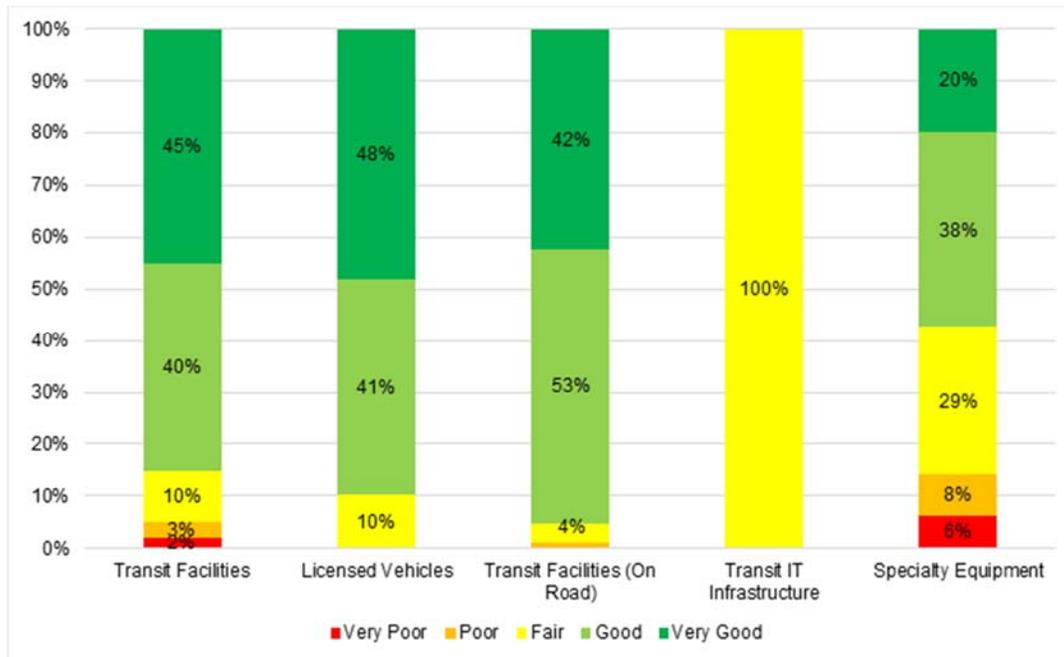
Source: 2018 State of the Local Infrastructure Report

b. Transit Assets: Condition Ratings

Section 8(3) of *O.Reg. 82/98*, deals with the types of assets used to deliver transit services and the state of existing local infrastructure in addition to addressing the principles, policies and approaches used by a municipality in asset management planning.

As discussed in the 2018 State of Local Infrastructure Report (Section 3.3.5), the majority of Transit assets are in a state of “Good” condition. An excerpt from Section 3.3.5 (p. 10) of the 2018 State of Local Infrastructure Report is provided below:

Figure 2: 2018 Brampton Transit AMP (State of Assets)



Source: 2018 State of the Local Infrastructure Report

3. Levels of Service

For purposes of the development charge calculations, the “planned level of service” is considered the 10-year development-related capital forecast (2019-2028) in the 2019 DC Background Study, as informed by the City’s current and proposed capital budgets, long range plans, Transportation Master Plan Update, Transit Business Plan and discussions with City and Brampton Transit staff.

The following is an excerpt from the Service Standards Working Paper prepared as part of the Brampton Transit Business Plan (2018 – 2022) relating to the Transit level of service analysis.

“Service levels define the frequency of service and the span of service for each route classification.

The span of service for each service type will determine the availability, flexibility and convenience of the service for transit customers. Minimum span of service targets are applicable to the Züm BRT, Base Grid and Local Routes. Different frequency targets are identified for different service offerings and during different periods. This communicates to the customer the minimum level of service they can expect when riding Brampton Transit”.

The Business Plan report includes an assessment of minimum service levels and where higher service frequencies are encouraged on Base Grid Routes to support the Züm

BRT network. Brampton Transit continues to monitor the routes and assess their performance on a regular basis.

4. Asset Management Strategy

a. Useful Life Assumptions

A summary of the estimated useful life assumptions for transit capital works considered under this DC Background Study is outlined in Table 1. Although all capital assets considered in this DC Background Study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. Some exceptions include:

- Some projects do not relate to the emplacement of a tangible capital asset—some examples include the acquisition of land or the undertaking of development-related studies. These projects/costs do not necessarily require future replacement or ongoing maintenance. Such projects are identified as “not infrastructure” in the table.

The capital cost estimates prepared for each of the projects identified in this Background Study include grouped costs of various individual elements, which, as a stand-alone item, may have its own useful life (i.e. new buildings include: HVAC, structural elements, roof, etc.). Accordingly, the average useful life assumptions noted below are applicable to all project components.

The expected useful lives of buses are based on assumptions used in the 2016 Corporate Asset Management Plan and those identified in the Brampton Transit Business Plan (2018-2022).

Table 1 – Summary of Assets Considered and Useful Life Assumptions	
Asset Category	Useful Life
Recovery of Negative Reserve Fund Balance	Not Infrastructure
Buses Conventional 40 ft. Hybrid 60 ft. High Capacity 80 ft.	18 years 18 years 18 years
Buildings and Facilities Transit Facility - Land Transit Facility - Design Transit Facility - Construction	Not Infrastructure Not Infrastructure 50 years
Bus Shelters and Pads	20 years
Other Transit Infrastructure Studies / Environmental Assessments Downtown Mobility Hub Bus Rapid Transit on Queen Street Light Rail Transit on Main Street (Surface)	Not Infrastructure 50 years 50 years 50 years

b. Summary of the Transit Capital Program

Table 2 provides a summary of the future transit projects identified in the capital program. The gross capital costs and 2019-2028 development charge recoverable shares are described further in Appendix C.2. As the table indicates, a significant share of the total program is not being recovered from development charges – about 75 per cent of the gross cost of the program is anticipated to be funded from other non-DC sources (namely taxes and grants). A portion of the costs will be considered for recovery in subsequent development charge studies.

Table 2 – Summary of Development-Related Capital Program		
Capital Project Description	Gross Cost	2019-2028 DC Recoverable
Negative Reserve Fund Balance	\$60,209,496	\$60,209,496
Buildings, Land and Equipment	\$162,000,000	\$50,514,286
Vehicles	\$404,495,000	\$106,741,800
Bus Pads and Shelters	\$15,247,000	\$3,695,000
Higher Order Transit Infrastructure	\$968,400,000	\$87,497,167
Total	\$1,610,531,496	\$308,657,748

c. Annual Provision

Table 3 provides a summary of the calculated annual reserve fund contributions based on the identified useful lives of the various assets and projects.

Table 3 - Summary of Calculated Full Life Cycle Annual Contributions at 2029				
	2019 - 2028 Capital Program		Calculated AMP Annual Provision by 2029	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Transit Services				
Recovery of Negative Reserve Fund Balance	\$60,209,496	\$0	\$0	\$0
Buildings, Land & Equipment	\$50,514,286	\$111,485,714	\$699,429	\$2,000,571
Vehicles	\$106,741,800	\$297,753,200	\$5,930,100	\$16,541,844
Bus Pads and Shelters	\$3,695,000	\$11,732,000	\$184,750	\$586,600
Higher Order Transit	\$87,497,167	\$880,902,833	\$430,809	\$6,961,668
Total 2029 Provision	\$308,657,748	\$1,301,873,748	\$7,245,088	\$26,090,684

As shown in Table 3, the life cycle costing provision of \$7.25 million relates to the Transit assets supported under the 2019 DC by-law. A further \$26.09 million is associated with non-DC related assets. It is noted that the annual contributions are based on assumed theoretical lives and that contributions start the year

following the expenditure. It is anticipated that, on average, the actual useful lives of some Transit assets could be longer than the estimates. The 2029 calculated contribution is the maximum cumulative annual contribution, of any year for all assets over the longest useful life of any specific asset. Although the analysis includes the annual life cycle costing provisions for higher order transit systems, it is expected that the City will undertake a more comprehensive business case study prior to any capital investment.

d. Risk Management

It is anticipated that Brampton Transit will maintain the schedule of fleet refurbishments and overhauls consistent with the plan prescribed in the Transit Business Plan (2018 – 2022) and shown in Table 4. Assuming an 18 year useful life for revenue fleet, it is projected that some items, such as the engine or Hybrid Drive ESS, will require two overhauls before the bus is replaced on the eighteenth year while the transmission, for example, will be replaced once throughout the full life cycle of the vehicle. The schedule of activities will ensure overall risk of asset failure is managed and the fleet is operational and functioning throughout the life cycle of the asset.

Table 4 - Schedule of Fleet Overhaul, Refurbishment and Replacement		
Item	First Schedule	Second Schedule (or Replacement)
Engine	6 Years - \$35,000	12 Years - \$35,000
After-Treatment System	6 Years - \$20,000	12 Years - \$20,000
Transmission	9 Years - \$15,000	Vehicle Replacement
Hybrid Drive Unit	9 Years - \$52,000	Vehicle Replacement
Hybrid Drive ESS	6 Years - \$55,000	12 Years - \$55,000
Fleet Refurbishment	9 Years - \$200,000 for a 40' Bus and \$275,000 for a 60' or 80' Bus	Vehicle Replacement

Note: The Hybrid Drive Unit replacement schedule is only applied to Hybrid Buses (not conventional). Schedule based on 2018-2022 Transit Business Plan.

Source: Brampton Transit Business Plan (2018-2022)

In addition to the annual life cycle costing provisions for asset replacement identified in Table 3, by 2029 the calculated annual contribution to maintain the schedule of fleet refurbishments and overhauls amounts to \$8.6 million by 2029. Approximately 26 per cent (or \$2.24 million) of the annual vehicle maintenance provision by 2029 is DC related.

Every municipal service is subject to risks and how the risks are managed are essential to having a long-term sustainable service. In support of delivering the

services, several potential risks and management approaches to minimize the potential impacts are identified:

Table 5 – Asset Management Risks		
Identified Risk	Potential Impacts	Mitigation
Public pressure to improve service levels	<ul style="list-style-type: none"> • Failure to deliver service expectations • Increased pressure on operating and capital budgets 	<ul style="list-style-type: none"> • Future Demand Strategies in place • Long-term financial planning
Failed infrastructure	<ul style="list-style-type: none"> • Failure to deliver planned service • Damage to Brampton Transit fleet • Reduced reliability 	<ul style="list-style-type: none"> • Repair/replace • Regular Inspections • Increase investment
Inadequate Funding	<ul style="list-style-type: none"> • Service reduction • Asset retirements • Increased risk of failure 	<ul style="list-style-type: none"> • Reduce transit service • Request additional funding from other levels of government • Scale back growth plan
Legislation Changes	<ul style="list-style-type: none"> • Disruption to planning efforts • Additional operating costs • Mandatory capital investments 	<ul style="list-style-type: none"> • Lobby against additional costs • Request additional funding from other levels of government • Reduce service levels
Economic Changes	<ul style="list-style-type: none"> • Reduced/increased public demand for Transit services 	<ul style="list-style-type: none"> • Change, increase or stop certain services
Reduction in Federal and Provincial Gas Tax Funding	<ul style="list-style-type: none"> • Service reduction • Increased pressure on operating and capital budgets 	<ul style="list-style-type: none"> • Reduce service levels • Long-term financial planning (increase reserve funds) • Reduce capital program
Climate Change	<ul style="list-style-type: none"> • Additional unplanned costs • Unpredicted future impacts 	<ul style="list-style-type: none"> • Long-term financial planning (increase reserve funds)

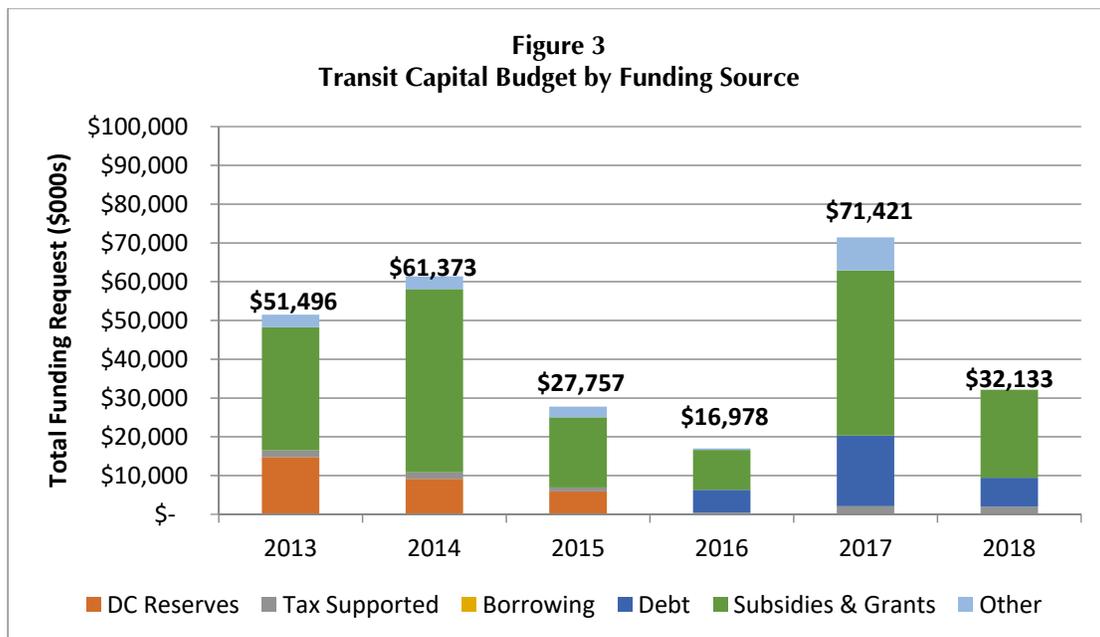
Financial Strategy

The City's Long Term Financial Master Plan and Corporate Asset Management Plan continue to provide guidance to enable financial flexibility, transparency and accountability. The City continues to advocate for additional funding from other levels of government to ensure the community gets its fair share of tax dollars.

The Transit capital program identified in Appendix C.2 identifies the yearly expenditures that are required to achieve the proposed level of service. Figure 3 below

provides a summary from recent budget data that identifies various funding sources for Transit assets including development charges, federal and provincial gas tax, property tax revenues, debt and other sources.

As shown in Figure 3 below, over the past number of years, Provincial and Federal grants and subsidies continually represent the largest share of capital funding sources for Transit services. It should be noted that growth-related projects are generally funded through the City's development charge reserve funds (or development charge supported internal debt financing) as well as funding from upper levels of government (i.e. grants and subsidies).



*Note *: Debt generally represents development charge supported debt financing*

Brampton Transit is different from other City services as federal and provincial funding has historically been more readily available to fund asset repair and replacement activities. Overall, this allocation of funds will be incorporated into the funding plan moving forward.

Tax Supported Reserve Funds: Municipalities use reserves to set aside funds for future spending. This practice can help stabilize any annual fluctuations in funding requirements, plan for any major long-term infrastructure investments, and prevent sudden spikes in property taxes, rates, and debt levels.

The 2 per cent Infrastructure Levy is required to maintain the City's existing assets and reduce the infrastructure backlog, as endorsed through the City's Long Term Financial

Plan and Asset Management Plan. Reserve 4 represents the City's most utilized asset replacement reserve, with net tax contributions of \$63.1 million in 2019 and a further \$72.9 million projected in 2020 derived from the 2 per cent dedicated levy. Funds in Reserve 4 tend to be utilized quickly and as a result, only small committed balances are carried forward from one year to the next. It is important to note that Reserve 4 represents the asset replacement reserve for all City assets and a portion of these funds can be directed to Brampton Transit.

The City has introduced a dedicated 1 per cent Transit Levy (in addition to the 2 per cent dedicated levy) starting with the 2019-2021 Budget to fund capital requirements for transit services. The 2019 contribution to the City's Dedicated Transit Fund is \$4.8 million and will grow to \$14.9 million by 2021. It is important to note that these funds will be solely dedicated to Brampton Transit services.

The Federal and Provincial governments provide grants to municipalities to assist in funding necessary capital infrastructure. Senior grants are generally separated into two categories: ongoing and one-time.

The Federal Gas Tax Fund provides stable funding to municipalities across Canada on an annual basis. It has been a major source of capital funding for the City of Brampton, with \$30 million in these funds anticipated to be received in 2019. In addition, the recent federal budget indicated they are increasing the gas tax funding for 2019 only. For Brampton, this means the city will receive 2 instalments this year, which will provide an additional \$16 million. Unlike Provincial Gas Tax funds, Federal Gas Tax funds may be applied to most services. The City of Brampton has typically used Federal Gas Tax funds for Transit and Transportation projects in recent years. It is anticipated that a share of these funds will continue to be used to fund transit services.

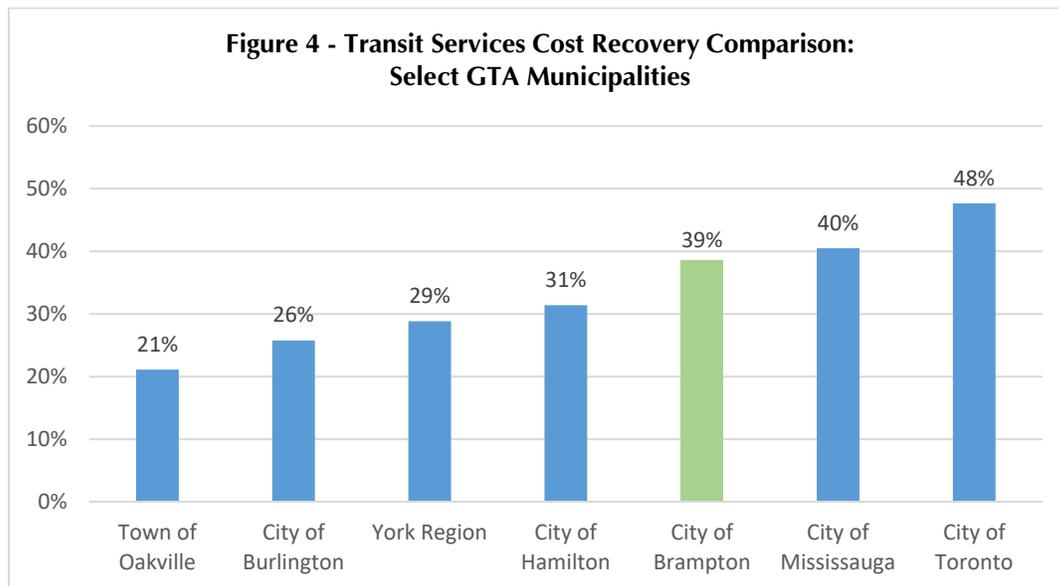
The City will also receive \$15.8 million in transit-focused Provincial Gas Tax funding. The City's practice has been to allocate the funds toward operating costs rather than capital costs, a practice that is anticipated to continue in the future. Provincial Gas Tax funds are distributed to municipalities across Ontario based on a formula of 70 per cent ridership and 30 per cent population.

The City also receives targeted Provincial and Federal funding for specific capital projects. In March 2018, Federal Government and Province of Ontario signed a 10-year \$22 billion Integrated Bilateral Agreement (Public Transit, Green Infrastructure, Community, Culture & Recreation Infrastructure, Rural & Northern Communities Infrastructure). Of the \$22 billion, \$11.8 billion was allocated to Public Transit

through the Public Transit Stream Funding. Brampton's share of the Public Transit Stream Funding is anticipated to be about \$350 million, \$191.6 million is from the Federal Government and \$158 million from the Provincial Government. These funds will be used to carry out the growth-related projects identified in the capital program in Appendix C.2, as well as regular asset repair and replacement activities.

User fees are representative of the principle of economic efficiency, as the consumer of the service has direct control over the extent to which the service is used. In Brampton, user fees related to transit are significant sources of operating budget revenue. The City presently does not embed any capital costs into the user fees for these services.

According to 2017 FIR data, the City of Brampton collected nearly \$70 million in transit user fees, which account for 40 per cent of the total operating expenses associated with providing the service. This cost recovery ratio is higher than the cost recovery average compared to a survey of other GTA municipalities with transit services (Figure 4).



Source: Ministry of Municipal Affairs and Housing 2017 Financial Information Return

Tax and rate supported external debt can be used to fund growth, replacement, and enhancement projects. For equity purposes, debt is best used for projects that provide benefits over a longer timeframe so that the burden of the capital cost is distributed between the current taxpayer and future ratepayers. It should be noted that any potential debt cannot be financed for a period longer than the average useful life of the asset. In accordance with City's debt policy, the term of any particular debenture

may be shorter than the useful life of the capital asset and, in any case, will not exceed the lesser of 30 years or the estimated useful life of the underlying asset. This will ensure the City is not paying for an asset beyond its expected use.

The amount of debt a City can carry is set by provincial regulations to ensure municipalities continue to operate in a fiscally sound environment. The Ministry of Municipal Affairs mandates that a municipality's annual debt repayment must not exceed 25 per cent of annual own-source revenues. The repayment limit has been calculated based on data contained in the 2017 Financial Information Return, as submitted to the Ministry and represents committed debt payments as of December 31st, 2017. The City's total debt charges are estimated at \$8.4 million; a very small number given the City's size. This equates to about 5 per cent of the total allowable annual repayment limit of \$158.5 million as identified by the Ministry. Despite provincial regulation, the City has its own self-imposed limitation in which the total debt repayment limit for all long term debt is set at 12.5 per cent of City own-source revenues.

Overall, the City is considered to be in good fiscal standing with very strong budgetary performance and low debt. As a result, Standard & Poor's has recently reaffirmed a 'AAA' credit rating and is one of a handful of municipalities in Canada to have this rating.

An excerpt from S&P Global Ratings Report:

The rating reflects S&P Global Ratings' assessment of the City's very strong and well-diversified economy, exceptional liquidity, very strong budgetary performance, and strong revenue-side budgetary flexibility. The rating also reflects our view of the very predictable and well-balanced local government framework, our opinion of the positive impact of Brampton's strong financial management on its credit profile, and the city's very low debt and contingent liabilities. We believe that restricted expenditure flexibility mitigates these strengths somewhat.

The City would be able to use its debt capacity for strategic projects that promote economic prosperity and increase service levels or growth-related projects that are ineligible for development charges funding. As noted in the City's Long-Term Financial Plan, the City's debt policies can be revisited if the infrastructure gap persists after other measures have been taken. Transit can be considered as one of the City's services that promote economic prosperity and vital to achieving the City's corporate and strategic planning objectives, therefore, debt financing could be considered more frequently on transit than perhaps other service areas.

D. AMP CHECKLIST

Table 6 provides a checklist of how the AMP analysis for Transit services, as required by the provisions of the *DCA*, has been addressed.

1. O.Reg. 82/98 Public Transit DC Requirements

BACKGROUND STUDY

8.(2) Any background study by the municipality under section 10 of the *Act* that incorporates the cost of transit services shall set out the following:

Table 6 – Transit AMP Checklist	
O.Reg. 82/98 Section	Comments and Relevant Sections of the 2019 DC Background Study
1. The calculations that were used to prepare the estimate for the planned level of service for the transit services, as mentioned in subsection 5.2 (3) of the Act.	Appendix C provides details on this calculation. The City's transit planned level of service relates to the expansion of the existing bus transit system for the residents and businesses of the City of Brampton.
2. An identification of the portion of the total estimated capital cost relating to the transit services that would benefit, i. the anticipated development over the 10-year period immediately following the preparation of the background study, or ii. the anticipated development after the 10-year period immediately following the preparation of the background study.	Appendix A provides details on anticipated development over the 10-year planning period. Appendix C.1 provides details as it relates to transit ridership over the 10-year planning period.
3. An identification of the anticipated excess capacity that would exist at the end of the 10-year period immediately following the preparation of the background study.	Appendix C.1 provides details on the excess capacity calculation and ridership forecast for all modes of transit over the 10-year planning period.
4. An assessment of ridership forecasts for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study, categorized by development types, and whether the forecasted ridership will be from existing or planned development.	
5. An assessment of the ridership capacity for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study. O. Reg. 428/15, s. 4.	Appendix C.1 provides details on the ridership capacity calculation.

ASSET MANAGEMENT PLAN

8. (3) If a council of a municipality proposes to impose a development charge in respect of transit services, the asset management plan referred to in subsection 10 (2) (c.2) of the Act shall include the following in respect of those services:

1. A section that sets out the state of local infrastructure and that sets out,

Table 6 – Transit AMP Checklist	
O.Reg. 82/98 Section	Comments and Relevant Sections of the 2019 Development Charges Background Study
i. the types of assets and their quantity or extent	<p>Appendix C.3 of the DC Background Study provides a discussion of the AMP requirements and how they are met. The overall state of the local infrastructure of transit assets has been informed by details contained within the City's Corporate Asset Management Plan and</p> <p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> • 2016 Corporate Asset Management Plan • 2018 State of Local Infrastructure Report • Transit Business Plan (2018 - 2022)
ii. the financial accounting valuation and replacement cost valuation for all assets,	
iii. the asset age distribution and asset age as a proportion of expected useful life for all assets, and	
iv. the asset condition based on standard engineering practices for all assets	

2. A section that sets out the proposed level of service and that,

Table 6 – Transit AMP Checklist	
O.Reg. 82/98 Section	Comments and Relevant Sections of the 2019 Development Charges Background Study
i. defines the proposed level of service through timeframes and performance measures,	<p>Appendix C.1 and C.2 provide details on the proposed level of service in the City of Brampton and current ridership performance relative to targets.</p> <p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> • Transportation Master Plan Update • Transit Business Plan (2018 - 2022) <p>The City's Transit Business Plan (2018 – 2022) service level requirements and annual budget identifies required investment in transit infrastructure to support transit related strategic priorities and objectives.</p>
ii. discusses any external trends or issues that may affect the proposed level of service or the municipality's ability to meet it, and	
iii. shows current performance relative to the targets set out.	

3. An asset management strategy that,

Table 6 – Transit AMP Checklist	
O.Reg. 82/98 Section	Comments and Relevant Sections of the 2019 Development Charges Background Study
i. sets out planned actions that will enable the assets to provide the proposed level of service in a sustainable way, while managing risk, at the lowest life cycle cost,	Appendix C.3 of the DC Background Study provides details on the actions required to implement a sustainable transit system. Relevant City documents that also address these requirements include: <ul style="list-style-type: none"> • 2016 Corporate Asset Management Plan • 2018 State of Local Infrastructure Report • Transit Business Plan (2018 - 2022)
ii. is based on an assessment of potential options to achieve the proposed level of service, which assessment compares, life cycle costs, all other relevant direct and indirect costs and benefits, and the risks associated with the potential options,	
iii. contains a summary of, in relation to achieving the proposed level of service, non-infrastructure solutions maintenance activities, renewal and rehabilitation activities, replacement activities, disposal activities, and expansion activities,	Appendix C.3 of the DC Background Study provide details on the actions to required implement a sustainable transit system. Relevant City documents that also address these requirements include: <ul style="list-style-type: none"> • Transit Business Plan (2018 - 2022) <p>In particular, disposal activities are addressed through vehicles replacement/management – no (or limited) revenue is generated from vehicles that are disposed of.</p> <p>Appendix C.2 provides details on expansion plans. The Transit Business Plan also provides details on the immediate expansion to the City’s fleet and facility needs while the Transportation Master Plan Update looks at long-term transit needs.</p>
iv. discusses the procurement measures that are intended to achieve the proposed level of service	Relevant City documents that address these requirements include: <ul style="list-style-type: none"> • City’s annual budget • RFP policies and practices • 2016 Corporate Asset Management Plan
v. includes an overview of the risks associated with the strategy and any actions that will be taken in response to those risks	Appendix C.3 of the DC Background Study provides details on potential risks and mitigation strategies.

4. A financial strategy that,

Table 6 – Transit AMP Checklist	
O.Reg. 82/98 Section	Comments and Relevant Sections of the 2019 Development Charges Background Study
i. shows the yearly expenditure forecasts that are proposed to achieve the proposed level of service, categorized by, A. non-infrastructure solutions, B. maintenance activities, C. renewal and rehabilitation activities, D. replacement activities, E. disposal activities, and F. expansion activities,	<p>Appendix C.3 of the DC Background Study provide details on the relevant expenditure forecasts, where applicable.</p> <p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> • 2016 Corporate Asset Management Plan • Transit Business Plan (2018 - 2022) <p>In particular, disposal activities are addressed through the transit and corporate asset management policies and are generally minimal.</p>
ii. provides actual expenditures in respect of the categories set out in sub-subparagraphs i A to F from the previous two years, if available, for comparison purposes,	This information is not available and has not been provided.
iii. gives a breakdown of yearly revenues by source	<p>Appendix C.3 of the DC Background Study provide details on the yearly revenues.</p> <p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> • 2016 Corporate Asset Management Plan • Transit Business Plan (2018 - 2022)
iv. discusses key assumptions and alternative scenarios where appropriate, and	Alternative scenarios have not been examined and is therefore not applicable.
v. identifies any funding shortfall relative to financial requirements that cannot be eliminated by revising service levels, asset management or financing strategies, and discusses the impact of the shortfall and how the impact will be managed.	<p>Appendix C.3 of the DC Background Study provides details on funding sources.</p> <p>The City's annual capital budgeting process is intended to address revenue shortfalls.</p> <p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> • Long-Term Financial Master Plan • 2019-2021 Capital Budget

8 (4) For the purposes of subsection (3), the proposed level of service may relate to a time after the 10-year period immediately following the preparation of the background study. O. Reg. 428/15, s. 4.

E. LONG-TERM CAPITAL AND OPERATING IMPACT

This section provides a brief examination of the long-term operating costs for the capital facilities and infrastructure to be included in the Development Charges by-law for Transit services. This examination is a requirement of the *DCA*.

1. Examination of Net Operating Impacts

Table 7 summarizes the anticipated net operating impacts arising from the capital program over the 10-year planning period of 2019-2028. In total, it is anticipated that the City will incur approximately \$37.99 million in additional operating costs by 2028. It should be noted that the operating cost impacts of both the BRT and LRT projects will need to be reviewed as it is expected that a business case study will be completed prior to any capital investments.

The analysis assumes that these assets are currently open and operational, although it is likely that these costs will actually occur at a later point in the future. The Transportation Master Plan Update prepared by WSP (formerly MMM Group) estimates that “transit demand” will increase to 73,500 (from 31,720 in 2018) should target population and employees be achieved in 2041. The relationship of operating cost and revenue per Peak Transit Demand is established based on the Transportation Master Plan. This approach is deemed reasonable for the purposes of the DC Background Study, and meeting the requirements of the *DCA*. However, it is recognized that the actual cost impacts, including timing, will be determined through Brampton Transit’s annual budgeting process.

Consistent with current practices, the net funding difference is anticipated to be funded from other revenue sources such as property taxes. It is noted that the City also continues to have dialogue with other organizations regarding revenue agreements of fare sharing and discount assumptions. Lastly, Provincial Gas Tax funds have typically been used to fund operating expenses and it is expected that these funds will continue to be used to offset the increased operating costs associated with implementing this capital program.

Table 7 – Estimated Net Operating Impact Analysis			
	2018 Cost	Cost Per Peak Transit Demand	2028 Cost
Total Expenses	\$152,383,000	\$4,804 (A)	\$239,716,600 (A*E)
Total Revenue	\$86,082,000	(\$2,714) (B)	(\$135,428,600) (B*E)
Net Operating Cost	\$66,301,000	\$2,090 (C)	\$104,291,000 (C*E)
<i>Peak Transit Demand</i>	<i>31,720</i>	-	<i>49,900 (E)</i>

Note: 2018 Peak transit demand estimated based on the Transportation Master Plan Update prepared by MMM Group. 2028 Figure is extrapolated using the 2041 demand identified (73,500).

F. AMP SUMMARY

In summary, the asset management plan and long-term capital and operating analysis included in this appendix demonstrates that the City can afford to invest and operate transit infrastructure over the 10-year and long-term planning period. Importantly, the City's ongoing asset management and long-term financial planning practices will ensure that the projects included in the 2019 DC Background Study are financially sustainable over their full life cycle.

APPENDIX D

ROADS & RELATED

APPENDIX D

ROADS & RELATED TECHNICAL APPENDIX

The City of Brampton's Engineering & Construction division is responsible for the design and construction of City-owned roads, bridges, sidewalks and other related infrastructure.

This appendix provides a brief outline of the infrastructure included in the roads development charges. The development-related projects outlined in this appendix are required to service the demands of new development up to year 2041. The background information used to calculate the development charge was provided by the HDR in conjunction with City staff. A separate Transportation Background Study Report completed by HDR provides further analysis on the City's Roads & Related service.

TABLE 1 2009-2018 HISTORICAL SERVICE LEVELS

The Roads & Related inventory of capital assets is extensive at a total replacement cost of \$5.83 billion. This includes the roads themselves as well as road right-of-ways, bridges, culverts, traffic signals, streetlights, grade separations, and other related structures.

Table 1 identifies a 10-year average service level for the provision of roads of \$7,492.38 per capita and employment. Based on this average service level, the maximum allowable is \$2.71 billion (\$7,492.38 per capita and employment x 362,276 increase in net population and employment from 2019 to 2041).

This serviced is not required to be reduced by 10 per cent. As such, the fully calculated maximum allowable funding envelope brought forward to the development charges calculation remains at \$2.71 billion.

TABLE 2 2019 – 2041 DEVELOPMENT-RELATED CAPITAL PROGRAM AND CALCULATION OF THE UNADJUSTED DEVELOPMENT CHARGES

The total cost of the roads & related capital forecast is \$1.93 billion and is comprised of city-wide road projects and those projects directly associated with Bramwest Parkway / North-South Transportation Corridor.

Roads Program Excluding Bramwest Parkway / NSTC

The cost, quantum and timing of the projects included in the roads capital program have been developed by City staff and HDR, consulting engineers. The Transportation Master Plan from 2015, sets out what capital projects are required to service future population and employment growth to 2041. The benefit to existing development shares were also developed by HDR in consultation with City staff.

The net cost of the road component of the capital program is \$1.29 billion and provides for the undertaking of various road widenings and new road segments on the arterial and major collection road system. Grants, subsidies and recoveries from other municipalities have already been removed from this amount.

The second component of the roads capital program, \$481.88 million, consists of standalone infrastructure, this includes:

Traffic Signal & Intersection Work	\$62.21 million
Sidewalks	\$13.80 million
Active Transportation Projects	\$37.04 million
Gateways	\$4.82 million
Noise Wall Retrofit	\$38.12 million
Hwy 410/Countryside Intersection	\$10.70 million
Grade Separations	\$66.72 million
Hwy 410 Overpass	\$18.48 million
Property Acquisition	\$230.00 million

A third component of the roads capital program is the net payable roads DC credits, as at December 31, 2018 that total \$17.62 million.

A portion of the roads capital program, \$91.00 million, will be funded through recoveries. For the upgrades to the arterial and collector roads systems, the recoveries are through developers' shares to be provided through the subdivision process.

The overall net cost of \$1.79 billion includes a portion that is considered to benefit the existing community. In totality, the benefit to existing share amounts to \$113.49 million and will be netted off of the development charges eligible costs. The benefiting to existing development shares are based on guidelines prepared by HDR. A

portion of the program also has been deemed as providing a post-period benefit, totalling \$20.82 million.

Council is made aware that this share will need to be funded using non-development charges revenue sources. The costs related to this service are not required to be reduced by 10 per cent and as such, no reduction is made. Therefore, the DC eligible costs of the roads program excluding Bramwest/NSTC is netted down to \$1.57 billion.

A development charges reserve balance of \$62.05 million exists for non-Bramwest Parkway/NSTC roads. Accordingly, these funds are used to offset the development charges eligible program.

The development-related cost has been allocated 67 per cent (\$1.01 billion) to new residential development and 33 per cent (\$496.97 million) to new non-residential development. The allocation of costs is based on shares of population and employment growth over the planning period to 2041. An unadjusted development charge of \$3,861.71 per capita is derived when the residential costs are divided by the population in new units to 2041 (261,282).

The non-residential share of costs is split between the Industrial (41 per cent), Major Office (28 per cent) and Non-Industrial/Non-Office (31 per cent) sectors based on employment. The Industrial category has the highest floor space per worker value than the population-related category or the major office category; therefore the development charge per square metre is lower.

Roads Program Excluding Bramwest Parkway / NSTC	Employment Growth (#)	Employment Growth (%)	Share of Costs (\$000)*	Floor Space Growth in Square Meters (2019-2041)	Unadjusted Development Charge Per m ²
Industrial	49,294	41%	\$202,976	6,654,737	\$30.50
Major Office	33,674	28%	\$138,659	774,513	\$179.03
Non- Industrial/Non-Office (Population-Related)	37,724	31%	\$155,332	1,886,182	\$82.35
Total Non-Residential	120,692	100%	\$496,968	9,315,431	

*Numbers may not add precisely due to rounding.

As shown in the summary table above the calculated unadjusted Industrial development charge is \$30.50 per square metre, the Major Office development charge is \$179.03 per square metre and the Non- Industrial/Non-Office charge is \$82.35 per square metre.

Roads Program - Bramwest Parkway / NSTC

A separate development charge, reserve fund and by-law was established for the Bramwest Parkway / North-South Transportation Corridor in the City's 2009 development charges study. The dedicated reserve fund could be used by the City for the design and construction of a City facility or be transferred to the Region of Peel should a Regional facility be constructed. The estimated net cost of the Bramwest Parkway / North-South Transportation Corridor project is \$132.80 million. After deducting a post-period benefit of \$17.85 million and available reserves of \$21.80 million, \$93.15 million is carried forward to the development charges calculation.

When the residential share of the Bramwest Parkway / North-South Transportation Corridor project (67 per cent) is divided by population in new units growth to 2041 a charge of \$238.86 per capita is calculated.

Roads Program Excluding Bramwest Parkway / NSTC	Employment Growth (#)	Employment Growth (%)	Share of Costs (\$000)*	Floor Space Growth in Square Meters (2019-2041)	Unadjusted Development Charge Per m ²
Industrial	49,294	41%	\$12,555	6,654,737	\$1.89
Major Office	33,674	28%	\$8,577	774,513	\$11.07
Non- Industrial/Non-Office (Population-Related)	37,724	31%	\$9,608	1,886,182	\$5.09
Total Non-Residential	120,692	100%	\$30,739	9,315,431	

**Numbers may not add precisely due to rounding.*

As shown in the summary table above (and in Table 3) the calculated unadjusted Industrial development charge is \$1.89 per square metre, the Major Office development charge is \$11.07 per square metre and the Non- Industrial/Non-Office charge is \$5.09 per square metre.

TABLE 3 CASH FLOW AND RESERVE FUND ANALYSIS

The long-term cash-flow analysis takes into consideration expenditure timing and revenue projections and the existing positive reserve fund balances. The effect of the analysis for the Roads Service (excluding Bramwest/NSTC) is an increase in the residential development charge rates to \$3,866.21 per capita for residential development; \$30.79 per square metre for industrial uses; \$198.45 per square metre for office uses; and \$85.88 per square metre for non-industrial non-residential uses (as shown in Table 3A).

ROADS & RELATED SUMMARY - EXCLUDING BRAMWEST PARKWAY/NSTC			
10-year Hist. Service Level \$/pop & emp	2019-2041 Development-Related Capital Program		
	Total	Net DC Recoverable	
\$7,492.38	\$1,702,325,058	\$1,505,964,312	
	Unadjusted Development Charge		
Residential \$/capita	Industrial \$/sq.m	Major Office \$/sq.m	Non-Ind/Off \$/sq.m
\$3,861.71	\$30.50	\$179.03	\$82.35
	Adjusted Development Charge		
Residential \$/capita	Industrial \$/sq.m	Major Office \$/sq.m	Non-Ind/Off \$/sq.m
\$3,866.21	\$30.79	\$198.45	\$85.88

The effect of the analysis for the Bramwest Parkway / NSTC Service is a slight decrease in the residential development charge rates to \$213.56 per capita for residential development; \$1.69 per square metre for industrial uses; \$10.35 per square metre for office uses; and \$4.64 per square metre for non-industrial non-residential uses (as shown in Table 3B).

ROADS & RELATED SUMMARY - BRAMWEST PARKWAY			
10-year Hist. Service Level \$/pop & emp	2019-2041 Development-Related Capital Program		
	Total	Net DC Recoverable	
\$7,492.38	\$132,796,084	\$93,148,979	
	Unadjusted Development Charge		
Residential \$/capita	Industrial \$/sq.m	Major Office \$/sq.m	Non-Ind/Off \$/sq.m
\$238.86	\$1.89	\$11.07	\$5.09
	Adjusted Development Charge		
Residential \$/capita	Industrial \$/sq.m	Major Office \$/sq.m	Non-Ind/Off \$/sq.m
\$213.56	\$1.69	\$10.35	\$4.64

APPENDIX D
TABLE 1

CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
ROADS & RELATED

ROAD NETWORK Asset Type	Total Value of Road Infrastructure									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Road Network	\$973,913	\$996,066	\$1,004,429	\$1,021,392	\$1,045,799	\$1,067,281	\$1,085,501	\$1,083,516	\$1,098,323	\$1,107,256
Right-of-Way Property	\$3,510,453	\$3,594,148	\$3,627,841	\$3,688,421	\$3,784,006	\$3,859,875	\$3,925,038	\$3,919,167	\$3,972,899	\$4,004,944
Bridges	\$169,497	\$169,497	\$174,434	\$174,434	\$209,826	\$209,826	\$218,613	\$218,613	\$245,811	\$252,988
Culverts	\$158,709	\$159,499	\$162,719	\$166,803	\$166,803	\$175,910	\$176,113	\$177,390	\$179,722	\$191,791
Traffic Signals	\$42,387	\$47,760	\$52,934	\$56,914	\$59,501	\$61,292	\$65,272	\$67,262	\$69,053	\$70,844
Illumination	\$50,621	\$53,319	\$55,476	\$56,345	\$58,109	\$58,825	\$59,907	\$60,442	\$61,584	\$61,952
Rail Grade Separations	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$125,000	\$125,000	\$125,000
Noise Barriers	\$9,856	\$10,138	\$10,419	\$10,701	\$10,982	\$11,264	\$11,546	\$11,827	\$12,109	\$12,390
Total (\$000)	\$5,015,436.5	\$5,130,426.3	\$5,188,252.9	\$5,275,009.6	\$5,435,026.7	\$5,544,271.8	\$5,641,989.7	\$5,663,218.0	\$5,764,500.8	\$5,827,165.3

**APPENDIX D
TABLE 1**

**CITY OF BRAMPTON
INVENTORY OF CAPITAL ASSETS
ROADS & RELATED
CITY OF BRAMPTON**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	485,808	504,495	523,900	537,275	550,992	565,059	579,485	594,280	607,036	620,067
Historical Employment	<u>155,914</u>	<u>159,165</u>	<u>162,490</u>	<u>165,928</u>	<u>169,444</u>	<u>173,040</u>	<u>176,718</u>	<u>180,480</u>	<u>184,386</u>	<u>188,398</u>
Total Historical Population & Employment	641,723	663,660	686,390	703,203	720,437	738,100	756,204	774,760	791,423	808,464

INVENTORY SUMMARY (\$000)

Total (\$000)	\$5,015,436.5	\$5,130,426.3	\$5,188,252.9	\$5,275,009.6	\$5,435,026.7	\$5,544,271.8	\$5,641,989.7	\$5,663,218.0	\$5,764,500.8	\$5,827,165.3
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SERVICE LEVEL (\$/pop & emp)

Total (\$/pop & emp)	\$7,815.58	\$7,730.50	\$7,558.75	\$7,501.40	\$7,544.07	\$7,511.55	\$7,460.94	\$7,309.64	\$7,283.72	\$7,207.70	Average Service Level \$7,492.38
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**CALCULATION OF MAXIMUM ALLOWABLE
CITY OF BRAMPTON**

2041 Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$7,492.38
Net Population & Employment Growth 2019 - 2041	362,276
Maximum Allowable Funding Envelope	\$2,714,308,745
Discounted Maximum Allowable Funding Envelope	\$2,714,308,745

APPENDIX D
TABLE 2

CITY OF BRAMPTON
2019 DEVELOPMENT CHARGES BACKGROUND STUDY
ROADS & RELATED DEVELOPMENT-RELATED CAPITAL PROGRAM

Project No.	Road Name	Description		Timing	Gross Cost (\$M)	Cost Shares (\$M)						
		From	To			%	Developer	%	DC Eligible 2019 - 2041	%	Non-Growth	DC Eligible Post 2041
ROADS & RELATED PROJECTS - CITY WIDE												
C1	Bramalea Road	Southern Boundary	Queen Street	2025 - 2031	\$ 45.64	0%	\$ -	90%	\$ 41.07	10%	\$ 4.56	\$ -
C2	Bramalea Road	Queen Street	Bovaird Dr	2025 - 2031	\$ 27.44	0%	\$ -	90%	\$ 24.70	10%	\$ 2.74	\$ -
C3	Castlemore Road	Goreway Dr	McVean Dr	2019 - 2019	\$ 15.00	0%	\$ -	90%	\$ 13.50	10%	\$ 1.50	\$ -
C4	Castlemore Road	McVean Dr	The Gore Rd	2022 - 2022	\$ 26.59	0%	\$ -	90%	\$ 23.93	10%	\$ 2.66	\$ -
C5	Castlemore Road	The Gore Rd	Highway 50	2025 - 2031	\$ 24.66	0%	\$ -	90%	\$ 22.19	10%	\$ 2.47	\$ -
C6	Chinguacousy Road	Bovaird Dr	Wanless Dr	2031 - 2041	\$ 33.75	0%	\$ -	90%	\$ 30.37	10%	\$ 3.37	\$ -
C7	Chinguacousy Road	Wanless Dr	Mayfield Rd	2020 - 2020	\$ 11.63	0%	\$ -	95%	\$ 11.04	5%	\$ 0.58	\$ -
C8	Clark Boulevard	Rutherford Rd	Dixie Rd (500m East of Dixie)	2023 - 2023	\$ 24.36	0%	\$ -	90%	\$ 21.92	10%	\$ 2.44	\$ -
C9	Clark Boulevard Extension	Hansen Rd	Rutherford Rd	2025 - 2031	\$ 2.05	0%	\$ -	100%	\$ 2.05	0%	\$ -	\$ -
C10	Clark Boulevard Extension Structure	Hansen Rd	Rutherford Rd	2025 - 2031	\$ 9.80	0%	\$ -	100%	\$ 9.80	0%	\$ -	\$ -
C11	Clarkway Drive	Castlemore Rd	Countryside Dr	2025 - 2031	\$ 20.39	0%	\$ -	95%	\$ 19.37	5%	\$ 1.02	\$ -
C12	Clarkway Drive	Countryside Dr	Mayfield Rd	2031 - 2041	\$ 8.42	0%	\$ -	95%	\$ 8.00	5%	\$ 0.42	\$ -
C13	Conservation Drive	Highway 10 / Hurontario St	Kennedy Rd	2025 - 2031	\$ 12.95	0%	\$ -	95%	\$ 12.31	5%	\$ 0.65	\$ -
C14	Cottrelle Blvd	Humberwest Pkwy	Goreway Dr	2019 - 2019	\$ 8.79	0%	\$ -	100%	\$ 8.79	0%	\$ -	\$ -
C15	Countryside Drive	The Gore Rd	Clarkway Dr	2022 - 2022	\$ 16.83	0%	\$ -	95%	\$ 15.99	5%	\$ 0.84	\$ -
C16	Countryside Drive	Clarkway Dr	Highway 50	2024 - 2024	\$ 14.58	0%	\$ -	95%	\$ 13.85	5%	\$ 0.73	\$ -
C17	Creditview Road	Wanless Dr	Mayfield Rd	2031 - 2041	\$ 8.70	0%	\$ -	95%	\$ 8.26	5%	\$ 0.43	\$ -
C18	Denison Street Extension	Park St	Mill St	2022 - 2022	\$ 1.22	0%	\$ -	100%	\$ 1.22	0%	\$ -	\$ -
C20	Eastern Avenue	Kennedy Rd	Hansen Rd	2036 - 2041	\$ 2.78	0%	\$ -	95%	\$ 2.64	5%	\$ 0.14	\$ -
C21	Ebenezer Road	Queen St	Highway 50	2031 - 2041	\$ 30.01	0%	\$ -	90%	\$ 27.01	10%	\$ 3.00	\$ -
C22	Financial Drive Extension	Highway 407 (Hallstone Road)	Southern Boundary	2025 - 2031	\$ 17.00	0%	\$ -	95%	\$ 16.15	5%	\$ 0.85	\$ -
C23	Goreway Drive	Humberwest Parkway	Castlemore Rd	2020 - 2020	\$ 29.47	0%	\$ -	95%	\$ 27.99	5%	\$ 1.47	\$ -
C24	Goreway Drive	Castlemore Rd	Countryside Dr	2020 - 2020	\$ 30.12	0%	\$ -	95%	\$ 28.61	5%	\$ 1.51	\$ -
C25	Goreway Drive	Countryside Dr	Mayfield Rd	2023 - 2023	\$ 15.74	0%	\$ -	95%	\$ 14.95	5%	\$ 0.79	\$ -
C26	Heritage Road	Steeles Ave	Financial Dr	2025 - 2031	\$ 23.42	0%	\$ -	95%	\$ 22.25	5%	\$ 1.17	\$ -
C27	Heritage Road	Financial Dr	Rivermont Rd	2025 - 2031	\$ 30.39	0%	\$ -	95%	\$ 28.87	5%	\$ 1.52	\$ -
C28	Heritage Road	Rivermont Rd	Bovaird Dr	2025 - 2031	\$ 28.93	0%	\$ -	95%	\$ 27.49	5%	\$ 1.45	\$ -
C29	Heritage Road	Bovaird Dr	Wanless Dr	2025 - 2031	\$ 19.17	0%	\$ -	95%	\$ 18.22	5%	\$ 0.96	\$ -
C30	Heritage Road Grade Separation	Bovaird Dr	Wanless Dr	2025 - 2031	\$ 7.60	0%	\$ -	95%	\$ 7.22	5%	\$ 0.38	\$ -
C31	Heritage Road	Wanless Dr	Mayfield Rd	2036 - 2041	\$ 8.62	0%	\$ -	95%	\$ 8.19	5%	\$ 0.43	\$ -
C32	Highway 10 / Hurontario St	Bovaird Dr	Northern City Boundary	2031 - 2041	\$ 33.57	0%	\$ -	95%	\$ 31.89	5%	\$ 1.68	\$ -
C33	Humberwest Parkway	Airport Rd	Williams Parkway	2019 - 2019	\$ 22.74	0%	\$ -	90%	\$ 20.47	10%	\$ 2.27	\$ -
C34	Humberwest Parkway	Williams Parkway	Goreway Dr	2019 - 2019	\$ 10.10	0%	\$ -	90%	\$ 9.09	10%	\$ 1.01	\$ -
C35	Inspire Boulevard	Russel Creek Dr	Sleighbell Rd	2019 - 2019	\$ 1.17	50%	\$ 0.59	50%	\$ 0.59	0%	\$ -	\$ -
C36	Inspire Boulevard	Bramalea Rd	Sleighbell Rd	2021 - 2021	\$ 1.76	50%	\$ 0.88	50%	\$ 0.88	0%	\$ -	\$ -
C37	Inspire Boulevard Structures	Russel Creek Dr	Countryside Dr	2021 - 2021	\$ 11.07	50%	\$ 5.54	50%	\$ 5.54	0%	\$ -	\$ -
C38	Inspire Boulevard	Bramalea Rd	Countryside Dr	2021 - 2021	\$ 9.07	50%	\$ 4.53	50%	\$ 4.53	0%	\$ -	\$ -
C39	Intermodal Drive	Airport Rd	CNR Bridge	2022 - 2022	\$ 10.00	0%	\$ -	95%	\$ 9.50	5%	\$ 0.50	\$ -
C40	John Street	Truman Street	Centre Street	2019 - 2019	\$ 2.44	0%	\$ -	95%	\$ 2.32	5%	\$ 0.12	\$ -
C41	Ken Whillans Drive	Church St	Nelson St	2031 - 2041	\$ 1.48	0%	\$ -	100%	\$ 1.48	0%	\$ -	\$ -
C42	Lagerfeld Drive (East West Connection)	Creditview Road	Winston Churchill Blvd	2025 - 2031	\$ 14.89	65%	\$ 9.68	35%	\$ 5.21	0%	\$ -	\$ -
C43	Lagerfeld Drive (East West Connection) Structures	Creditview Road	Winston Churchill Blvd	2025 - 2031	\$ 40.00	50%	\$ 20.00	50%	\$ 20.00	0%	\$ -	\$ -
C44	McLaughlin Road	Queen St	Steeles Ave	2025 - 2031	\$ 29.66	0%	\$ -	90%	\$ 26.69	10%	\$ 2.97	\$ -
C45	McLaughlin Road	Wanless Dr	Mayfield Rd	2019 - 2019	\$ 11.63	0%	\$ -	95%	\$ 11.04	5%	\$ 0.58	\$ -
C46	McVean Drive	Castlemore Rd	Countryside Dr	2023 - 2023	\$ 40.79	0%	\$ -	95%	\$ 38.75	5%	\$ 2.04	\$ -
C47	McVean Drive	Countryside Dr	Mayfield Rd	2036 - 2041	\$ 10.29	0%	\$ -	95%	\$ 9.78	5%	\$ 0.51	\$ -
C48	New East/West Road (Major MacKenzie extension)	New North/South Road	The Gore Rd	2021 - 2021	\$ 14.52	65%	\$ 9.44	35%	\$ 5.08	0%	\$ -	\$ -
C49	New North/South Road (Major MacKenzie extension)	Highway 50/Coleraine	Clarkway Dr	2031 - 2041	\$ 31.94	0%	\$ -	100%	\$ 31.94	0%	\$ -	\$ -
C51	Orenda Road	Dixie Rd	Bramalea Rd	Post 2041 - Post 2041	\$ 9.60	0%	\$ -	95%	\$ -	5%	\$ -	\$ 9.60
C52	Remembrance Road	Chinguacousy Road	Abercrombie Cres	2020 - 2020	\$ 6.15	50%	\$ 3.07	50%	\$ 3.07	0%	\$ -	\$ -

APPENDIX D
TABLE 2

CITY OF BRAMPTON
2019 DEVELOPMENT CHARGES BACKGROUND STUDY
ROADS & RELATED DEVELOPMENT-RELATED CAPITAL PROGRAM

Project No.	Road Name	Description		Timing	Gross Cost (\$M)	Cost Shares (\$M)							
		From	To			%	Developer	%	DC Eligible 2019 - 2041	%	Non-Growth	DC Eligible Post 2041	
ROADS & RELATED PROJECTS - CITY WIDE													
C54	Rivermont Road	Lionhead Golf Club Rd	Heritage Rd	2025 - 2031	\$ 6.82	50%	\$ 3.41	50%	\$ 3.41	0%	\$ -	\$ -	
C55	Rivermont Road	South Limit	North Limit (Dalbeattie Dr)	2020 - 2020	\$ 4.12	65%	\$ 2.68	35%	\$ 1.44	0%	\$ -	\$ -	
C56	Rivermont Road Structure	South Limit	North Limit	2020 - 2020	\$ 2.95	50%	\$ 1.48	50%	\$ 1.48	0%	\$ -	\$ -	
C57	Sandalwood Parkway Extension	Mayfield	Heritage Rd	2031 - 2041	\$ 11.58	65%	\$ 7.53	35%	\$ 4.05	0%	\$ -	\$ -	
C58	Sandalwood Parkway Extension	Heritage Rd	Mississauga Rd	2031 - 2041	\$ 6.42	65%	\$ 4.17	35%	\$ 2.25	0%	\$ -	\$ -	
C59	Sandalwood Parkway	McLaughlin Rd	Heart Lake Rd	2025 - 2031	\$ 53.36	0%	\$ -	90%	\$ 48.02	10%	\$ 5.34	\$ -	
C60	Sandalwood Parkway	Dixie Rd	Bramalea Rd	2025 - 2031	\$ 12.36	0%	\$ -	90%	\$ 11.13	10%	\$ 1.24	\$ -	
C61	Sandalwood Parkway	Bramalea Rd	Torbram Rd	2025 - 2031	\$ 13.66	0%	\$ -	90%	\$ 12.29	10%	\$ 1.37	\$ -	
C62	Sandalwood Parkway	Torbram Rd	Airport Rd	2023 - 2023	\$ 17.00	0%	\$ -	90%	\$ 15.30	10%	\$ 1.70	\$ -	
C63	Torbram Road	South City Limit	Queen St	2020 - 2020	\$ 39.60	0%	\$ -	90%	\$ 35.64	10%	\$ 3.96	\$ -	
C64	Torbram Road	Queen St	Bovaird Dr	2025 - 2031	\$ 29.02	0%	\$ -	90%	\$ 26.12	10%	\$ 2.90	\$ -	
C65	Torbram Road	Bovaird Dr	Countryside Dr	2025 - 2031	\$ 35.01	0%	\$ -	90%	\$ 31.50	10%	\$ 3.50	\$ -	
C66	Torbram Road	Countryside Dr	Mayfield Rd	Post 2041	\$ 11.23	0%	\$ -	0%	\$ -	0%	\$ -	\$ 11.23	
C67	Wanless Drive	Winston Churchill Blvd	Mississauga Rd	2025 - 2031	\$ 14.67	0%	\$ -	95%	\$ 13.94	5%	\$ 0.73	\$ -	
C68	Wanless Drive	Winston Churchill Blvd	Mississauga Rd	2031 - 2041	\$ 21.71	0%	\$ -	95%	\$ 20.62	5%	\$ 1.09	\$ -	
C69	Williams Parkway Extension	Mississauga Rd	Heritage Rd	2025 - 2031	\$ 8.05	65%	\$ 5.23	35%	\$ 2.82	0%	\$ -	\$ -	
C70	Williams Parkway Structure	Mississauga Rd	Heritage Rd	2025 - 2031	\$ 7.39	50%	\$ 3.69	50%	\$ 3.69	0%	\$ -	\$ -	
C71	Williams Parkway	McLaughlin Rd	Kennedy Rd	2022 - 2022	\$ 31.29	0%	\$ -	90%	\$ 28.16	10%	\$ 3.13	\$ -	
C72	Williams Parkway	Kennedy Rd	North Park Dr	2020 - 2020	\$ 24.08	0%	\$ -	90%	\$ 21.68	10%	\$ 2.41	\$ -	
C73	Williams Parkway	North Park Dr	Torbram Rd	2025 - 2031	\$ 36.38	0%	\$ -	90%	\$ 32.74	10%	\$ 3.64	\$ -	
C74	Williams Parkway	Torbram Rd	Humberwest Pkwy	2031 - 2041	\$ 24.24	0%	\$ -	90%	\$ 21.82	10%	\$ 2.42	\$ -	
C75	Financial Drive Extension	Heritage Rd	Winston Churchill Blvd	2031 - 2041	\$ 7.16	65%	\$ 4.65	35%	\$ 2.51	0%	\$ -	\$ -	
C76	Rivermont Road	Heritage Rd	Winston Churchill Blvd	2025 - 2031	\$ 6.82	65%	\$ 4.43	35%	\$ 2.39	0%	\$ -	\$ -	
SUBTOTAL ROADS & RELATED PROJECTS - CITY WIDE					\$ 1,293.83		\$ 91.00		\$ 1,098.81		\$ 83.19	\$ 20.82	
ROADS & RELATED PROJECTS - OTHER IMPROVEMENTS													
	Traffic Signals and Intersection Improvements (8 intersections per year)			2019 - 2041	\$ 62.21	0%	\$ -	100%	\$ 62.21	0%	\$ -	\$ -	
	Sidewalks (\$600,000 per year)			2019 - 2041	\$ 13.80	0%	\$ -	100%	\$ 13.80	0%	\$ -	\$ -	
	Active Transportation Projects (ATMP)			2019 - 2041	\$ 37.04	0%	\$ -	31%	\$ 11.48	69%	\$ 25.56	\$ -	
	Gateways (17 in total)			2019 - 2041	\$ 4.82	0%	\$ -	90%	\$ 4.34	10%	\$ 0.48	\$ -	
	Noise Wall Retrofit			2019 - 2041	\$ 38.12	0%	\$ -	100%	\$ 38.12	0%	\$ -	\$ -	
	Completion of Hwy 410/Countryside Intersection			2019 - 2041	\$ 10.70	0%	\$ -	100%	\$ 10.70	0%	\$ -	\$ -	
	Goreway Drive & CN Halton Line Grade Separation Widening (Phase 1)			2019 - 2019	\$ 17.00	0%	\$ -	95%	\$ 16.15	5%	\$ 0.85	\$ -	
	Torbram Road and CN Halton Line Grade Separation			2019 - 2019	\$ 6.20	0%	\$ -	95%	\$ 5.89	5%	\$ 0.31	\$ -	
	Hwy 410 Overpass @ Biscayne Creek/Westcreek.			2031 - 2041	\$ 18.48	0%	\$ -	95%	\$ 17.55	5%	\$ 0.92	\$ -	
	SP47 at Highway 50 Grade Separation			2031 - 2041	\$ 29.91	0%	\$ -	95%	\$ 28.41	5%	\$ 1.50	\$ -	
	Mississauga Road Crossing over CN Railway Grade Separation			2031 - 2041	\$ 13.61	0%	\$ -	95%	\$ 12.93	5%	\$ 0.68	\$ -	
	Property Acquisition			2019 - 2041	\$ 230.00	0%	\$ -	100%	\$ 230.00	0%	\$ -	\$ -	
SUBTOTAL ROADS & RELATED PROJECTS - OTHER IMPROVEMENTS					\$ 481.88		\$ -		\$ 451.58		\$ 30.30	\$ -	
OUTSTANDING ROADS & RELATED DC CREDITS													
	Net Payable Roads DC Credits, as at December 31, 2018			2019 - 2028	\$ 17.62	0%	\$ -	100%	\$ 17.62	0%	\$ -	\$ -	
SUBTOTAL OUTSTANDING ROADS & RELATED DC CREDITS					\$ 17.62		\$ -		\$ 17.62		\$ -	\$ -	
ROADS & RELATED PROJECTS - NSTC													
C90	Bramwest Parkway (NSTC)	Heritage Rd	Highway 407	2031 - 2041	\$ 13.65	0%	\$ -	100%	\$ 13.65	0%	\$ -	\$ -	
C91	Bramwest Parkway (NSTC)	Highway 407	Steeles Ave	2031 - 2041	\$ 23.21	0%	\$ -	100%	\$ 23.21	0%	\$ -	\$ -	
C92	Bramwest Parkway (NSTC)	Steeles Ave	Financial Dr	2031 - 2041	\$ 45.06	0%	\$ -	100%	\$ 45.06	0%	\$ -	\$ -	
C93	Bramwest Parkway (NSTC)	Financial Dr	Rivermont Rd	2025 - 2031	\$ 19.27	0%	\$ -	100%	\$ 19.27	0%	\$ -	\$ -	
C94	Bramwest Parkway (NSTC)	Sandalwood Parkway	Mayfield	2031 - 2041	\$ 13.75	0%	\$ -	100%	\$ 13.75	0%	\$ -	\$ -	
C95	Bramwest Parkway (NSTC)	Sandalwood Parkway	Mayfield	Post 2041 - Post 2041	\$ 17.85	0%	\$ -	0%	\$ -	0%	\$ -	\$ 17.85	
SUBTOTAL ROADS & RELATED PROJECTS - NSTC					\$ 132.80		\$ -		\$ 114.95		\$ -	\$ 17.85	
TOTAL ROADS & RELATED CAPITAL PROGRAM					\$ 1,926.12		\$ 91.00		\$ 1,682.96		\$ 113.49	\$ 38.67	
ROADS & RELATED CAPITAL PRORAM - EXCLUDING BRAMWEST/NSTC					\$ 1,793.33		\$ 91.00		\$ 1,568.02		\$ 113.49	\$ 20.82	
ROADS & RELATED CAPITAL PRORAM - BRAMWEST/NSTC					\$ 132.80		\$ -		\$ 114.95		\$ -	\$ 17.85	
Less: Available DC Reserve Funds - Excluding NSTC Bramwest					\$ -		\$ -		\$ 62.05		\$ -	\$ -	
Less: Available DC Reserve Funds - NSTC Bramwest					\$ -		\$ -		\$ 21.80		\$ -	\$ -	
TOTAL ROADS & RELATED CAPITAL PROGRAM					\$ 1,926.12		\$ 91.00		\$ 1,599.11		\$ 113.49	\$ 38.67	

APPENDIX D
TABLE 3CITY OF BRAMPTON
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
CAPITAL PROGRAM FOR ROADS & RELATED INFRASTRUCTURE: 2019 - 2041

Population in New Units (2019-2041)	261,282
Non-residential Floor Space Growth in Square Meters (2019-2041)	9,315,431
<i>Industrial</i>	6,654,737
<i>Major Office</i>	774,513
<i>Non-Office and Non-Industrial</i>	1,886,182

	Development-Related Capital Program						Residential Share		Non-Residential Share	
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Legislated Service Discount (\$000)	Available DC Reserves (\$000)	Post-2041 Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)	%	\$000	%	\$000
1.0 ROADS & RELATED - EXCLUDING BRAMWEST NSTC	\$ 1,702,325.1	\$ 113,485.0	\$ -	\$ 62,051.7	\$ 20,824.1	\$ 1,505,964	67%	\$ 1,008,996.1	33%	\$ 496,968.2
Unadjusted Development Charge Per Capita								\$3,861.71		
Industrial Unadjusted Development Charge Per Sq. M										\$30.50
Major Office Unadjusted Development Charge Per Sq. M										\$179.03
Non-Industrial/Non-Office Unadjusted Development Charge Per Sq. M										\$82.35
2.0 ROADS & RELATED - BRAMWEST PARKWAY / NSTC	\$ 132,796.1	\$ -	\$ -	\$ 21,796.4	\$ 17,850.7	\$ 93,149	67%	\$ 62,409.8	33%	\$ 30,739.2
Unadjusted Development Charge Per Capita								\$238.86		
Industrial Unadjusted Development Charge Per Sq. M										\$1.89
Major Office Unadjusted Development Charge Per Sq. M										\$11.07
Non-Industrial/Non-Office Unadjusted Development Charge Per Sq. M										\$5.09
Total - City-Wide Roads & Related Services (to 2041)	\$1,835,121.1	\$113,485.0	\$0.0	\$83,848.1	\$38,674.7	\$1,599,113		\$1,071,405.9		\$527,707.4
Unadjusted Development Charge Per Capita (\$)								\$4,100.57		
Industrial Unadjusted Development Charge Per Square Metre										\$32.39
Major Office Unadjusted Development Charge Per Square Metre										\$190.10
Non-Industrial/Office Unadjusted Development Charge Per Square Metre										\$87.45

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED - EXCLUDING BRAMWEST/NSTC
RESIDENTIAL DEVELOPMENT CHARGE

ROADS & RELATED - EXCLUDING BRAMWEST/NSTC	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
OPENING CASH BALANCE (\$000)	\$0.0	\$24,856.4	(\$21,111.2)	\$13,415.7	\$4,979.8	(\$11,660.8)	\$30,063.4	\$32,424.3	\$36,339.2	\$25,512.3	\$15,106.7	\$6,650.9	(\$1,168.8)	(\$28,101.4)	(\$21,171.7)
2019-2041 RESIDENTIAL FUNDING REQUIREMENTS															
- Roads & Related - Excluding Bramwest/NSTC: Non Inflated	\$29,255.8	\$99,717.4	\$22,720.5	\$64,781.5	\$72,899.5	\$21,254.9	\$59,033.7	\$59,033.7	\$59,033.7	\$59,033.7	\$57,853.1	\$57,853.1	\$73,025.2	\$25,969.3	\$25,969.3
- Roads & Related - Excluding Bramwest/NSTC: Inflated	\$29,255.8	\$101,711.8	\$23,638.5	\$68,746.6	\$78,908.8	\$23,467.1	\$66,481.5	\$67,811.2	\$69,167.4	\$70,550.7	\$70,522.6	\$71,933.1	\$92,613.7	\$33,594.1	\$34,265.9
NEW RESIDENTIAL DEVELOPMENT															
- Population Growth in New Units	\$13,885.6	\$14,232.9	\$14,596.4	\$14,643.3	\$14,945.1	\$15,251.8	\$15,564.5	\$15,884.3	\$12,669.7	\$12,889.3	\$13,108.4	\$13,333.5	\$13,555.1	\$8,382.4	\$8,486.2
REVENUE															
- DC Receipts: Inflated	\$53,684.6	\$56,127.8	\$58,712.6	\$60,079.5	\$62,543.9	\$65,104.0	\$67,767.7	\$70,543.4	\$57,392.5	\$59,554.6	\$61,778.5	\$64,096.2	\$66,464.4	\$41,923.5	\$43,291.5
INTEREST															
- Interest on Opening Balance	\$0.0	\$870.0	(\$1,161.1)	\$469.5	\$174.3	(\$641.3)	\$1,052.2	\$1,134.9	\$1,271.9	\$892.9	\$528.7	\$232.8	(\$64.3)	(\$1,545.6)	(\$1,164.4)
- Interest on In-year Transactions	\$427.5	(\$1,253.6)	\$613.8	(\$238.3)	(\$450.0)	\$728.6	\$22.5	\$47.8	(\$323.8)	(\$302.4)	(\$240.5)	(\$215.5)	(\$719.1)	\$145.8	\$157.9
TOTAL REVENUE	\$54,112.1	\$55,744.3	\$58,165.3	\$60,310.7	\$62,268.2	\$65,191.3	\$68,842.5	\$71,726.1	\$58,340.5	\$60,145.1	\$62,066.8	\$64,113.4	\$65,681.0	\$40,523.7	\$42,285.0
CLOSING CASH BALANCE	\$24,856.4	(\$21,111.2)	\$13,415.7	\$4,979.8	(\$11,660.8)	\$30,063.4	\$32,424.3	\$36,339.2	\$25,512.3	\$15,106.7	\$6,650.9	(\$1,168.8)	(\$28,101.4)	(\$21,171.7)	(\$13,152.6)

ROADS & RELATED - EXCLUDING BRAMWEST/NSTC	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE (\$000)	(\$13,152.6)	(\$3,932.8)	\$6,552.7	\$15,045.6	\$11,471.2	\$8,138.0	\$5,101.0	\$2,358.2	
2019-2041 RESIDENTIAL FUNDING REQUIREMENTS									
- Roads & Related - Excluding Bramwest/NSTC: Non Inflated	\$25,969.3	\$25,969.3	\$28,270.5	\$28,270.5	\$28,270.5	\$28,270.5	\$28,270.5	\$28,270.5	\$1,008,996.1
- Roads & Related - Excluding Bramwest/NSTC: Inflated	\$34,951.3	\$35,650.3	\$39,585.5	\$40,377.2	\$41,184.8	\$42,008.5	\$42,848.6	\$43,705.6	\$1,222,980.5
NEW RESIDENTIAL DEVELOPMENT									
- Population Growth in New Units	8,595	8,699	8,812	6,589	6,667	6,749	6,827	6,915	\$261,282.0
REVENUE									
- DC Receipts: Inflated	\$44,723.5	\$46,168.0	\$47,707.0	\$36,386.0	\$37,550.0	\$38,775.6	\$40,005.5	\$41,330.2	\$1,221,710.6
INTEREST									
- Interest on Opening Balance	(\$723.4)	(\$216.3)	\$229.3	\$526.6	\$401.5	\$284.8	\$178.5	\$82.5	\$2,814.1
- Interest on In-year Transactions	\$171.0	\$184.1	\$142.1	(\$109.8)	(\$100.0)	(\$88.9)	(\$78.2)	(\$65.3)	(\$1,544.2)
TOTAL REVENUE	\$44,171.1	\$46,135.7	\$48,078.5	\$36,802.8	\$37,851.6	\$38,971.5	\$40,105.8	\$41,347.4	\$1,222,980.5
CLOSING CASH BALANCE	(\$3,932.8)	\$6,552.7	\$15,045.6	\$11,471.2	\$8,138.0	\$5,101.0	\$2,358.2	\$0.0	

2019 Adjusted Charge Per Capita

\$3,866.21

Allocation of Capital Program

Residential Sector	67.0%
Non-Residential Sector	33.0%

Rates for 2019

Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED - EXCLUDING BRAMWEST/NSTC
INDUSTRIAL DEVELOPMENT CHARGE

ROADS & RELATED - EXCLUDING BRAMWEST/NSTC	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
OPENING CASH BALANCE (\$000)	\$0.0	(\$146.2)	(\$15,073.5)	(\$14,487.4)	(\$14,583.9)	(\$15,987.5)	(\$5,288.2)	(\$1,935.4)	\$2,245.6	\$1,869.8	\$1,800.0	\$2,360.1	\$3,303.8	\$702.2	\$1,553.3
2019-2041 NON-RESIDENTIAL FUNDING REQUIREMENTS															
- Roads & Related - Excluding Bramwest/NSTC: Non Inflated	\$5,885.3	\$20,059.8	\$4,570.6	\$13,031.9	\$14,665.0	\$4,275.8	\$11,875.6	\$11,875.6	\$11,875.6	\$11,875.6	\$11,638.1	\$11,638.1	\$14,690.2	\$5,224.2	\$5,224.2
- Roads & Related - Excluding Bramwest/NSTC: Inflated	\$5,885.3	\$20,461.0	\$4,755.3	\$13,829.5	\$15,873.8	\$4,720.8	\$13,373.9	\$13,641.4	\$13,914.2	\$14,192.5	\$14,186.8	\$14,470.5	\$18,630.8	\$6,758.0	\$6,893.2
NEW NON-RESIDENTIAL DEVELOPMENT															
- Square Meters in New Buildings	186,533	189,183	191,871	444,340	458,755	473,637	489,002	504,866	373,461	382,141	391,024	400,112	409,412	190,078	192,083
REVENUE															
- DC Receipts: Inflated	\$5,743.0	\$5,941.1	\$6,146.0	\$14,517.8	\$15,288.5	\$16,100.2	\$16,954.9	\$17,855.1	\$13,472.0	\$14,060.8	\$14,675.4	\$15,316.8	\$15,986.3	\$7,570.4	\$7,803.2
INTEREST															
- Interest on Opening Balance	\$0.0	(\$8.0)	(\$829.0)	(\$796.8)	(\$802.1)	(\$879.3)	(\$290.9)	(\$106.4)	\$78.6	\$65.4	\$63.0	\$82.6	\$115.6	\$24.6	\$54.4
- Interest on In-year Transactions	(\$3.9)	(\$399.3)	\$24.3	\$12.0	(\$16.1)	\$199.1	\$62.7	\$73.7	(\$12.2)	(\$3.6)	\$8.5	\$14.8	(\$72.7)	\$14.2	\$15.9
TOTAL REVENUE	\$5,739.1	\$5,533.8	\$5,341.3	\$13,733.0	\$14,470.3	\$15,420.0	\$16,726.7	\$17,822.3	\$13,538.4	\$14,122.6	\$14,746.9	\$15,414.2	\$16,029.2	\$7,609.2	\$7,873.5
CLOSING CASH BALANCE	(\$146.2)	(\$15,073.5)	(\$14,487.4)	(\$14,583.9)	(\$15,987.5)	(\$5,288.2)	(\$1,935.4)	\$2,245.6	\$1,869.8	\$1,800.0	\$2,360.1	\$3,303.8	\$702.2	\$1,553.3	\$2,533.7

ROADS & RELATED - EXCLUDING BRAMWEST/NSTC	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE (\$000)	\$2,533.7	\$3,652.3	\$4,918.7	\$5,683.4	\$4,557.2	\$3,423.6	\$2,284.7	\$1,142.7	
2019-2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Roads & Related - Excluding Bramwest/NSTC: Non Inflated	\$5,224.2	\$5,224.2	\$5,687.1	\$5,687.1	\$5,687.1	\$5,687.1	\$5,687.1	\$5,687.1	\$202,976.5
- Roads & Related - Excluding Bramwest/NSTC: Inflated	\$7,031.0	\$7,171.7	\$7,963.3	\$8,122.6	\$8,285.0	\$8,450.7	\$8,619.7	\$8,792.1	\$246,023.0
NEW NON-RESIDENTIAL DEVELOPMENT									
- Square Meters in New Buildings	194,109	196,156	198,224	155,387	156,658	157,940	159,232	160,534	\$6,654,736.6
REVENUE									
- DC Receipts: Inflated	\$8,043.3	\$8,290.6	\$8,545.6	\$6,832.8	\$7,026.5	\$7,225.7	\$7,430.5	\$7,641.1	\$248,467.5
INTEREST									
- Interest on Opening Balance	\$88.7	\$127.8	\$172.2	\$198.9	\$159.5	\$119.8	\$80.0	\$40.0	(\$2,241.5)
- Interest on In-year Transactions	\$17.7	\$19.6	\$10.2	(\$35.5)	(\$34.6)	(\$33.7)	(\$32.7)	(\$31.7)	(\$203.0)
TOTAL REVENUE	\$8,149.6	\$8,438.1	\$8,728.0	\$6,996.3	\$7,151.4	\$7,311.8	\$7,477.7	\$7,649.4	\$246,023.0
CLOSING CASH BALANCE	\$3,652.3	\$4,918.7	\$5,683.4	\$4,557.2	\$3,423.6	\$2,284.7	\$1,142.7	(\$0.0)	

2019 Adjusted Charge Per Square Metre **\$30.79**

Allocation of Capital Program	
Residential Sector	67.0%
Non-Residential Sector	33.0%
Industrial	40.8%
Major Office	27.9%
Non-Industrial and Non-Office	31.3%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED - EXCLUDING BRAMWEST/NSTC
MAJOR OFFICE DEVELOPMENT CHARGE

ROADS & RELATED - EXCLUDING BRAMWEST/NSTC	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
OPENING CASH BALANCE (\$000)	\$0.0	(\$136.7)	(\$10,213.6)	(\$9,512.4)	(\$13,605.7)	(\$18,820.8)	(\$15,947.4)	(\$18,314.5)	(\$20,306.9)	(\$24,861.9)	(\$29,446.0)	(\$33,834.0)	(\$38,189.1)	(\$45,199.2)	(\$43,902.4)
2019-2041 NON-RESIDENTIAL FUNDING REQUIREMENTS															
- Roads & Related - Excluding Bramwest/NSTC: Non Inflated	\$4,020.4	\$13,703.5	\$3,122.3	\$8,902.5	\$10,018.1	\$2,920.9	\$8,112.6	\$8,112.6	\$8,112.6	\$8,112.6	\$7,950.4	\$7,950.4	\$10,035.4	\$3,568.8	\$3,568.8
- Roads & Related - Excluding Bramwest/NSTC: Inflated	\$4,020.4	\$13,977.5	\$3,248.5	\$9,447.4	\$10,843.9	\$3,224.9	\$9,136.1	\$9,318.8	\$9,505.2	\$9,695.3	\$9,691.4	\$9,885.3	\$12,727.3	\$4,616.6	\$4,708.9
NEW NON-RESIDENTIAL DEVELOPMENT															
- Square Meters in New Buildings	19,589	20,639	21,745	28,361	30,244	32,251	34,391	36,673	26,489	27,680	28,924	30,224	31,583	32,465	33,901
REVENUE															
- DC Receipts: Inflated	\$3,887.4	\$4,177.7	\$4,489.7	\$5,972.8	\$6,496.6	\$7,066.3	\$7,686.0	\$8,360.0	\$6,159.1	\$6,564.7	\$6,997.0	\$7,457.8	\$7,948.9	\$8,334.3	\$8,876.9
INTEREST															
- Interest on Opening Balance	\$0.0	(\$7.5)	(\$561.7)	(\$523.2)	(\$748.3)	(\$1,035.1)	(\$877.1)	(\$1,007.3)	(\$1,116.9)	(\$1,367.4)	(\$1,619.5)	(\$1,860.9)	(\$2,100.4)	(\$2,486.0)	(\$2,414.6)
- Interest on In-year Transactions	(\$3.7)	(\$269.5)	\$21.7	(\$95.6)	(\$119.6)	\$67.2	(\$39.9)	(\$26.4)	(\$92.0)	(\$86.1)	(\$74.1)	(\$66.8)	(\$131.4)	\$65.1	\$72.9
TOTAL REVENUE	\$3,883.7	\$3,900.7	\$3,949.7	\$5,354.1	\$5,628.7	\$6,098.4	\$6,769.0	\$7,326.3	\$4,950.2	\$5,111.2	\$5,303.4	\$5,530.2	\$5,717.1	\$5,913.4	\$6,535.2
CLOSING CASH BALANCE	(\$136.7)	(\$10,213.6)	(\$9,512.4)	(\$13,605.7)	(\$18,820.8)	(\$15,947.4)	(\$18,314.5)	(\$20,306.9)	(\$24,861.9)	(\$29,446.0)	(\$33,834.0)	(\$38,189.1)	(\$45,199.2)	(\$43,902.4)	(\$42,076.1)

ROADS & RELATED - EXCLUDING BRAMWEST/NSTC	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE (\$000)	(\$42,076.1)	(\$39,657.1)	(\$36,576.5)	(\$33,209.6)	(\$28,659.8)	(\$23,171.3)	(\$16,641.4)	(\$8,958.3)	
2019-2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Roads & Related - Excluding Bramwest/NSTC: Non Inflated	\$3,568.8	\$3,568.8	\$3,885.0	\$3,885.0	\$3,885.0	\$3,885.0	\$3,885.0	\$3,885.0	\$138,659.4
- Roads & Related - Excluding Bramwest/NSTC: Inflated	\$4,803.1	\$4,899.2	\$5,440.0	\$5,548.8	\$5,659.7	\$5,772.9	\$5,888.4	\$6,006.2	\$168,065.7
NEW NON-RESIDENTIAL DEVELOPMENT									
- Square Meters in New Buildings	35,400	36,965	38,600	41,687	43,593	45,587	47,672	49,852	774,513
REVENUE									
- DC Receipts: Inflated	\$9,454.9	\$10,070.4	\$10,726.0	\$11,815.5	\$12,603.0	\$13,443.0	\$14,338.9	\$15,294.6	\$198,221.7
INTEREST									
- Interest on Opening Balance	(\$2,314.2)	(\$2,181.1)	(\$2,011.7)	(\$1,826.5)	(\$1,576.3)	(\$1,274.4)	(\$915.3)	(\$492.7)	(\$30,318.2)
- Interest on In-year Transactions	\$81.4	\$90.5	\$92.5	\$109.7	\$121.5	\$134.2	\$147.9	\$162.5	\$162.3
TOTAL REVENUE	\$7,222.1	\$7,979.8	\$8,806.8	\$10,098.6	\$11,148.2	\$12,302.8	\$13,571.5	\$14,964.5	\$168,065.7
CLOSING CASH BALANCE	(\$39,657.1)	(\$36,576.5)	(\$33,209.6)	(\$28,659.8)	(\$23,171.3)	(\$16,641.4)	(\$8,958.3)	(\$0.0)	

2019 Adjusted Charge Per Square Metre **\$198.45**

Allocation of Capital Program	
Residential Sector	67.0%
Non-Residential Sector	33.0%
Industrial	40.8%
Major Office	27.9%
Non-Industrial and Non-Office	31.3%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED - EXCLUDING BRAMWEST/NSTC
NON-INDUSTRIAL/NON-OFFICE NON-RESIDENTIAL DEVELOPMENT CHARGE

ROADS & RELATED - EXCLUDING BRAMWEST/NSTC	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
OPENING CASH BALANCE (\$000)	\$0.0	\$3,661.0	(\$3,595.6)	\$1,516.1	(\$1,954.5)	(\$6,900.9)	(\$3,086.9)	(\$5,510.0)	(\$7,948.3)	(\$10,999.7)	(\$14,118.0)	(\$17,071.1)	(\$20,064.9)	(\$26,136.4)	(\$24,203.5)
2019-2041 NON-RESIDENTIAL FUNDING REQUIREMENTS															
- Roads & Related - Excluding Bramwest/NSTC: Non Inflated	\$4,503.9	\$15,351.2	\$3,497.8	\$9,972.9	\$11,222.7	\$3,272.1	\$9,088.1	\$9,088.1	\$9,088.1	\$9,088.1	\$8,906.3	\$8,906.3	\$11,242.1	\$3,997.9	\$3,997.9
- Roads & Related - Excluding Bramwest/NSTC: Inflated	\$4,503.9	\$15,658.3	\$3,639.1	\$10,583.4	\$12,147.8	\$3,612.7	\$10,234.7	\$10,439.4	\$10,648.1	\$10,861.1	\$10,856.8	\$11,073.9	\$14,257.6	\$5,171.7	\$5,275.2
NEW NON-RESIDENTIAL DEVELOPMENT															
- Square Meters in New Buildings	94,342	96,708	99,132	78,500	80,020	81,570	83,150	84,760	80,539	81,993	83,473	84,980	86,515	76,371	77,567
REVENUE															
- DC Receipts: Inflated	\$8,101.9	\$8,471.1	\$8,857.2	\$7,154.0	\$7,438.4	\$7,734.2	\$8,041.6	\$8,361.3	\$8,103.8	\$8,415.1	\$8,738.4	\$9,074.1	\$9,422.6	\$8,484.2	\$8,789.4
INTEREST															
- Interest on Opening Balance	\$0.0	\$128.1	(\$197.8)	\$53.1	(\$107.5)	(\$379.6)	(\$169.8)	(\$303.1)	(\$437.2)	(\$605.0)	(\$776.5)	(\$938.9)	(\$1,103.6)	(\$1,437.5)	(\$1,331.2)
- Interest on In-year Transactions	\$63.0	(\$197.6)	\$91.3	(\$94.3)	(\$129.5)	\$72.1	(\$60.3)	(\$57.1)	(\$70.0)	(\$67.3)	(\$58.3)	(\$55.0)	(\$133.0)	\$58.0	\$61.5
TOTAL REVENUE	\$8,164.9	\$8,401.6	\$8,750.8	\$7,112.8	\$7,201.4	\$7,426.7	\$7,811.5	\$8,001.1	\$7,596.7	\$7,742.9	\$7,903.6	\$8,080.2	\$8,186.1	\$7,104.7	\$7,519.7
CLOSING CASH BALANCE	\$3,661.0	(\$3,595.6)	\$1,516.1	(\$1,954.5)	(\$6,900.9)	(\$3,086.9)	(\$5,510.0)	(\$7,948.3)	(\$10,999.7)	(\$14,118.0)	(\$17,071.1)	(\$20,064.9)	(\$26,136.4)	(\$24,203.5)	(\$21,958.9)

ROADS & RELATED - EXCLUDING BRAMWEST/NSTC	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE (\$000)	(\$21,958.9)	(\$19,376.6)	(\$16,428.5)	(\$13,589.4)	(\$11,521.6)	(\$9,154.1)	(\$6,462.5)	(\$3,420.5)	
2019-2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Roads & Related - Excluding Bramwest/NSTC: Non Inflated	\$3,997.9	\$3,997.9	\$4,352.2	\$4,352.2	\$4,352.2	\$4,352.2	\$4,352.2	\$4,352.2	\$155,332.4
- Roads & Related - Excluding Bramwest/NSTC: Inflated	\$5,380.7	\$5,488.3	\$6,094.1	\$6,216.0	\$6,340.3	\$6,467.1	\$6,596.4	\$6,728.4	\$188,274.8
NEW NON-RESIDENTIAL DEVELOPMENT									
- Square Meters in New Buildings	78,781	80,014	81,267	73,237	74,254	75,286	76,331	77,392	1,886,182
REVENUE									
- DC Receipts: Inflated	\$9,105.5	\$9,433.0	\$9,772.3	\$8,982.9	\$9,289.8	\$9,607.2	\$9,935.5	\$10,274.9	\$201,588.6
INTEREST									
- Interest on Opening Balance	(\$1,207.7)	(\$1,065.7)	(\$903.6)	(\$747.4)	(\$633.7)	(\$503.5)	(\$355.4)	(\$188.1)	(\$13,211.4)
- Interest on In-year Transactions	\$65.2	\$69.0	\$64.4	\$48.4	\$51.6	\$55.0	\$58.4	\$62.1	(\$102.4)
TOTAL REVENUE	\$7,963.0	\$8,436.4	\$8,933.1	\$8,283.9	\$8,707.7	\$9,158.7	\$9,638.5	\$10,148.9	\$188,274.8
CLOSING CASH BALANCE	(\$19,376.6)	(\$16,428.5)	(\$13,589.4)	(\$11,521.6)	(\$9,154.1)	(\$6,462.5)	(\$3,420.5)	\$0.0	

2019 Adjusted Charge Per Square Metre

\$85.88

Allocation of Capital Program

Residential Sector	67.0%
Non-Residential Sector	33.0%
Industrial	40.8%
Major Office	27.9%
Non-Industrial and Non-Office	31.3%

Rates for 2019

Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED - BRAMWEST PARKWAY / NSTC
RESIDENTIAL DEVELOPMENT CHARGE

ROADS & RELATED - BRAMWEST PARKWAY/NSTC	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
OPENING CASH BALANCE (\$000)	\$0.0	\$3,017.3	\$6,277.4	\$9,797.0	\$13,516.6	\$17,504.8	\$21,776.6	\$26,347.6	\$31,234.5	\$35,553.4	\$40,144.9	\$45,022.1	\$50,200.3	\$50,339.8	\$46,735.5
2019-2041 RESIDENTIAL FUNDING REQUIREMENTS															
- Roads & Related - Bramwest Parkway/NSTC: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,136.1	\$5,827.4	\$5,827.4
- Roads & Related - Bramwest Parkway/NSTC: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$5,245.5	\$7,538.3	\$7,689.1
NEW RESIDENTIAL DEVELOPMENT															
- Population Growth in New Units	\$13,885.6	\$14,232.9	\$14,596.4	\$14,643.3	\$14,945.1	\$15,251.8	\$15,564.5	\$15,884.3	\$12,669.7	\$12,889.3	\$13,108.4	\$13,333.5	\$13,555.1	\$8,382.4	\$8,486.2
REVENUE															
- DC Receipts: Inflated	\$2,965.4	\$3,100.3	\$3,243.1	\$3,318.6	\$3,454.7	\$3,596.1	\$3,743.3	\$3,896.6	\$3,170.2	\$3,289.6	\$3,412.4	\$3,540.5	\$3,671.3	\$2,315.7	\$2,391.3
INTEREST															
- Interest on Opening Balance	\$0.0	\$105.6	\$219.7	\$342.9	\$473.1	\$612.7	\$762.2	\$922.2	\$1,093.2	\$1,244.4	\$1,405.1	\$1,575.8	\$1,757.0	\$1,761.9	\$1,635.7
- Interest on In-year Transactions	\$51.9	\$54.3	\$56.8	\$58.1	\$60.5	\$62.9	\$65.5	\$68.2	\$55.5	\$57.6	\$59.7	\$62.0	(\$43.3)	(\$143.6)	(\$145.7)
TOTAL REVENUE	\$3,017.3	\$3,260.2	\$3,519.6	\$3,719.6	\$3,988.3	\$4,271.7	\$4,571.0	\$4,886.9	\$4,318.9	\$4,591.5	\$4,877.2	\$5,178.2	\$5,385.0	\$3,934.0	\$3,881.3
CLOSING CASH BALANCE	\$3,017.3	\$6,277.4	\$9,797.0	\$13,516.6	\$17,504.8	\$21,776.6	\$26,347.6	\$31,234.5	\$35,553.4	\$40,144.9	\$45,022.1	\$50,200.3	\$50,339.8	\$46,735.5	\$42,927.7

ROADS & RELATED - BRAMWEST PARKWAY/NSTC	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE (\$000)	\$42,927.7	\$38,909.9	\$34,672.4	\$30,209.4	\$24,780.1	\$19,055.7	\$13,026.1	\$6,677.3	
2019-2041 RESIDENTIAL FUNDING REQUIREMENTS									
- Roads & Related - Bramwest Parkway/NSTC: Non Inflated	\$5,827.4	\$5,827.4	\$5,827.4	\$5,827.4	\$5,827.4	\$5,827.4	\$5,827.4	\$5,827.4	\$62,409.8
- Roads & Related - Bramwest Parkway/NSTC: Inflated	\$7,842.9	\$7,999.7	\$8,159.7	\$8,322.9	\$8,489.4	\$8,659.2	\$8,832.4	\$9,009.0	\$87,788.2
NEW RESIDENTIAL DEVELOPMENT									
- Population Growth in New Units	\$8,595.0	\$8,698.7	\$8,812.4	\$6,589.4	\$6,666.9	\$6,749.5	\$6,827.0	\$6,914.8	261,282
REVENUE									
- DC Receipts: Inflated	\$2,470.4	\$2,550.2	\$2,635.2	\$2,009.8	\$2,074.1	\$2,141.8	\$2,209.8	\$2,282.9	\$67,483.4
INTEREST									
- Interest on Opening Balance	\$1,502.5	\$1,361.8	\$1,213.5	\$1,057.3	\$867.3	\$666.9	\$455.9	\$233.7	\$21,270.4
- Interest on In-year Transactions	(\$147.7)	(\$149.9)	(\$151.9)	(\$173.6)	(\$176.4)	(\$179.2)	(\$182.1)	(\$185.0)	(\$965.7)
TOTAL REVENUE	\$3,825.1	\$3,762.2	\$3,696.8	\$2,893.6	\$2,765.0	\$2,629.6	\$2,483.6	\$2,331.7	\$87,788.2
CLOSING CASH BALANCE	\$38,909.9	\$34,672.4	\$30,209.4	\$24,780.1	\$19,055.7	\$13,026.1	\$6,677.3	\$0.0	

2019 Adjusted Charge Per Capita	\$213.56
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Allocation of Capital Program	
Residential Sector	67.0%
Non-Residential Sector	33.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED - BRAMWEST PARKWAY / NSTC
INDUSTRIAL DEVELOPMENT CHARGE

ROADS & RELATED - BRAMWEST PARKWAY/NSTC	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
OPENING CASH BALANCE (\$000)	0.0	321.3	665.0	1,032.1	1,880.5	2,801.6	3,800.5	4,882.1	6,051.9	7,017.5	8,049.8	9,152.6	10,329.9	10,510.3	9,747.8
2014-2023 RESIDENTIAL FUNDING REQUIREMENTS															
- Roads & Related - Bramwest Parkway/NSTC: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$832.0	\$1,172.3	\$1,172.3
- Roads & Related - Bramwest Parkway/NSTC: Inflated	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,055.23	\$1,516.46	\$1,546.79
NEW NON-RESIDENTIAL DEVELOPMENT															
- Square Meters in New Buildings	186,533	189,183	191,871	444,340	458,755	473,637	489,002	504,866	373,461	382,141	391,024	400,112	409,412	190,078	192,083
REVENUE															
- DC Receipts: Inflated	315.8	326.7	337.9	798.3	840.7	885.3	932.3	981.8	740.8	773.1	806.9	842.2	879.0	416.3	429.1
INTEREST															
- Interest on Opening Balance	0.0	11.2	23.3	36.1	65.8	98.1	133.0	170.9	211.8	245.6	281.7	320.3	361.5	367.9	341.2
- Interest on In-year Transactions	5.5	5.7	5.9	14.0	14.7	15.5	16.3	17.2	13.0	13.5	14.1	14.7	(4.8)	(30.3)	(30.7)
TOTAL REVENUE	321.3	343.6	367.1	848.4	921.2	998.8	1,081.6	1,169.8	965.6	1,032.3	1,102.8	1,177.3	1,235.7	753.9	739.5
CLOSING CASH BALANCE	321.3	665.0	1,032.1	1,880.5	2,801.6	3,800.5	4,882.1	6,051.9	7,017.5	8,049.8	9,152.6	10,329.9	10,510.3	9,747.8	8,940.5

ROADS & RELATED - BRAMWEST PARKWAY/NSTC	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE (\$000)	8,940.5	8,086.7	7,184.6	6,232.3	5,116.1	3,937.4	2,693.6	1,382.1	
2014-2023 RESIDENTIAL FUNDING REQUIREMENTS									
- Roads & Related - Bramwest Parkway/NSTC: Non Inflated	\$1,172.3	\$1,172.3	\$1,172.3	\$1,172.3	\$1,172.3	\$1,172.3	\$1,172.3	\$1,172.3	\$12,554.8
- Roads & Related - Bramwest Parkway/NSTC: Inflated	\$1,577.73	\$1,609.28	\$1,641.47	\$1,674.30	\$1,707.78	\$1,741.94	\$1,776.78	\$1,812.31	\$17,660.06
NEW NON-RESIDENTIAL DEVELOPMENT									
- Square Meters in New Buildings	194,109	196,156	198,224	155,387	156,658	157,940	159,232	160,534	6,654,737
REVENUE									
- DC Receipts: Inflated	442.3	455.9	469.9	375.7	386.4	397.3	408.6	420.2	13,662.3
INTEREST									
- Interest on Opening Balance	312.9	283.0	251.5	218.1	179.1	137.8	94.3	48.4	4,193.6
- Interest on In-year Transactions	(31.2)	(31.7)	(32.2)	(35.7)	(36.3)	(37.0)	(37.6)	(38.3)	(195.8)
TOTAL REVENUE	724.0	707.2	689.1	558.1	529.1	498.1	465.2	430.2	17,660.1
CLOSING CASH BALANCE	8,086.7	7,184.6	6,232.3	5,116.1	3,937.4	2,693.6	1,382.1	(0.0)	

2019 Adjusted Charge Per Square Metre	\$1.69
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Allocation of Capital Program	
Residential Sector	67.0%
Non-Residential Sector	33.0%
Industrial	41%
Office	28%
Other	31%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

**CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED - BRAMWEST PARKWAY / NSTC
MAJOR OFFICE DEVELOPMENT CHARGE**

ROADS & RELATED - BRAMWEST PARKWAY/NSTC	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
OPENING CASH BALANCE (\$000)	0.0	206.2	435.1	688.5	1,029.5	1,410.2	1,834.5	2,306.4	2,830.7	3,256.5	3,718.8	4,220.2	4,763.6	4,615.5	4,159.1
2014-2023 RESIDENTIAL FUNDING REQUIREMENTS															
- Roads & Related - Bramwest Parkway/NSTC: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$568.4	\$800.8	\$800.8
- Roads & Related - Bramwest Parkway/NSTC: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$720.9	\$1,035.9	\$1,056.7
NEW NON-RESIDENTIAL DEVELOPMENT															
- Square Meters in New Buildings	19,589	20,639	21,745	28,361	30,244	32,251	34,391	36,673	26,489	27,680	28,924	30,224	31,583	32,465	33,901
REVENUE															
- DC Receipts: Inflated	202.7	217.8	234.1	311.4	338.7	368.4	400.8	435.9	321.1	342.3	364.8	388.9	414.5	434.6	462.9
INTEREST															
- Interest on Opening Balance	0.0	7.2	15.2	24.1	36.0	49.4	64.2	80.7	99.1	114.0	130.2	147.7	166.7	161.5	145.6
- Interest on In-year Transactions	3.5	3.8	4.1	5.5	5.9	6.4	7.0	7.6	5.6	6.0	6.4	6.8	(8.4)	(16.5)	(16.3)
TOTAL REVENUE	206.2	228.9	253.4	341.0	380.7	424.3	472.0	524.3	425.8	462.3	501.4	543.4	572.8	579.6	592.1
CLOSING CASH BALANCE	206.2	435.1	688.5	1,029.5	1,410.2	1,834.5	2,306.4	2,830.7	3,256.5	3,718.8	4,220.2	4,763.6	4,615.5	4,159.1	3,694.5

ROADS & RELATED - BRAMWEST PARKWAY/NSTC	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE (\$000)	3,694.5	3,222.9	2,745.7	2,264.3	1,801.3	1,340.9	885.3	437.4	
2014-2023 RESIDENTIAL FUNDING REQUIREMENTS									
- Roads & Related - Bramwest Parkway/NSTC: Non Inflated	\$800.8	\$800.8	\$800.8	\$800.8	\$800.8	\$800.8	\$800.8	\$800.8	\$8,576.5
- Roads & Related - Bramwest Parkway/NSTC: Inflated	\$1,077.79	\$1,099.35	\$1,121.34	\$1,143.76	\$1,166.64	\$1,189.97	\$1,213.77	\$1,238.04	\$12,064.12
NEW NON-RESIDENTIAL DEVELOPMENT									
- Square Meters in New Buildings	35,400	36,965	38,600	41,687	43,593	45,587	47,672	49,852	774,513
REVENUE									
- DC Receipts: Inflated	493.0	525.1	559.3	616.1	657.1	700.9	747.7	797.5	10,335.6
INTEREST									
- Interest on Opening Balance	129.3	112.8	96.1	79.2	63.0	46.9	31.0	15.3	1,815.3
- Interest on In-year Transactions	(16.1)	(15.8)	(15.5)	(14.5)	(14.0)	(13.4)	(12.8)	(12.1)	(86.8)
TOTAL REVENUE	606.2	622.1	639.9	680.8	706.2	734.4	765.8	800.7	12,064.1
CLOSING CASH BALANCE	3,222.9	2,745.7	2,264.3	1,801.3	1,340.9	885.3	437.4	(0.0)	

2019 Adjusted Charge Per Square Metre

\$10.35

Allocation of Capital Program

Residential Sector	67.0%
Non-Residential Sector	33.0%

Industrial	41%
Office	28%
Other	31%

Rates for 2019

Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

**CITY OF BRAMPTON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED - BRAMWEST PARKWAY / NSTC
NON-INDUSTRIAL/NON-OFFICE NON-RESIDENTIAL DEVELOPMENT CHARGE**

ROADS & RELATED - BRAMWEST PARKWAY/NSTC	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
OPENING CASH BALANCE (\$000)	0.0	445.4	926.7	1,446.1	1,890.0	2,365.0	2,873.0	3,415.7	3,994.9	4,580.2	5,203.1	5,865.6	6,569.8	6,493.1	5,998.9
2014-2023 RESIDENTIAL FUNDING REQUIREMENTS															
- Roads & Related - Bramwest Parkway/NSTC: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$636.7	\$897.1	\$897.1
- Roads & Related - Bramwest Parkway/NSTC: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$807.5	\$1,160.5	\$1,183.7
NEW NON-RESIDENTIAL DEVELOPMENT															
- Square Meters in New Buildings	94,342	96,708	99,132	78,500	80,020	81,570	83,150	84,760	80,539	81,993	83,473	84,980	86,515	76,371	77,567
REVENUE															
- DC Receipts: Inflated	437.7	457.7	478.6	386.5	401.9	417.9	434.5	451.8	437.8	454.7	472.1	490.3	509.1	458.4	474.9
INTEREST															
- Interest on Opening Balance	0.0	15.6	32.4	50.6	66.1	82.8	100.6	119.5	139.8	160.3	182.1	205.3	229.9	227.3	210.0
- Interest on In-year Transactions	7.7	8.0	8.4	6.8	7.0	7.3	7.6	7.9	7.7	8.0	8.3	8.6	(8.2)	(19.3)	(19.5)
TOTAL REVENUE	445.4	481.3	519.4	443.9	475.1	508.0	542.6	579.2	585.3	622.9	662.5	704.1	730.8	666.4	665.4
CLOSING CASH BALANCE	445.4	926.7	1,446.1	1,890.0	2,365.0	2,873.0	3,415.7	3,994.9	4,580.2	5,203.1	5,865.6	6,569.8	6,493.1	5,998.9	5,480.6

ROADS & RELATED - BRAMWEST PARKWAY/NSTC	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE (\$000)	5,480.6	4,937.3	4,368.4	3,773.1	3,087.3	2,368.2	1,614.8	825.7	
2014-2023 RESIDENTIAL FUNDING REQUIREMENTS									
- Roads & Related - Bramwest Parkway/NSTC: Non Inflated	\$897.1	\$897.1	\$897.1	\$897.1	\$897.1	\$897.1	\$897.1	\$897.1	\$9,607.8
- Roads & Related - Bramwest Parkway/NSTC: Inflated	\$1,207.39	\$1,231.54	\$1,256.17	\$1,281.29	\$1,306.92	\$1,333.06	\$1,359.72	\$1,386.91	\$13,514.77
NEW NON-RESIDENTIAL DEVELOPMENT									
- Square Meters in New Buildings	78,781	80,014	81,267	73,237	74,254	75,286	76,331	77,392	1,886,182
REVENUE									
- DC Receipts: Inflated	492.0	509.7	528.0	485.3	501.9	519.1	536.8	555.2	10,891.8
INTEREST									
- Interest on Opening Balance	191.8	172.8	152.9	132.1	108.1	82.9	56.5	28.9	2,748.3
- Interest on In-year Transactions	(19.7)	(19.9)	(20.0)	(21.9)	(22.1)	(22.4)	(22.6)	(22.9)	(125.3)
TOTAL REVENUE	664.1	662.6	660.9	595.5	587.8	579.6	570.7	561.2	13,514.8
CLOSING CASH BALANCE	4,937.3	4,368.4	3,773.1	3,087.3	2,368.2	1,614.8	825.7	0.0	

2019 Adjusted Charge Per Square Metre

\$4.64

Allocation of Capital Program

Residential Sector	67.0%
Non-Residential Sector	33.0%

Industrial	41%
Office	28%
Other	31%

Rates for 2019

Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX E

RESERVE FUNDS

APPENDIX E

DEVELOPMENT CHARGES RESERVE FUNDS

The *Development Charges Act* requires that a reserve fund be established for each service for which development charges are collected. Table 1 presents the uncommitted reserve fund balances that are available to help fund the growth-related net capital costs identified in this study. The closing balances of the development charges reserve funds as at December 31, 2018, have been adjusted to account for past transitions, industrial/office discounts, place of worship exemptions, the use of tax funding on growth-related capital projects, and also existing commitments. Below is a summary of the aforementioned adjustments.

Summary of Adjustments: DC Reserve Fund Balance As at December 31st, 2018	
Unadjusted DC Reserve Fund Balance at December 31 st , 2018	\$152,700,932
Transition	\$25,896,349
Places of Worship	\$2,146,060
Industrial/Office Discounts	\$4,884,104
Growth-Related DC Projects Funded by Tax	\$33,411,081
Reserve Fund Commitments	\$56,362,692
Revised DC Reserve Fund Balance at December 31st, 2018	\$95,853,673

After accounting for the above noted adjustments, the revised DC reserve fund balance brought forward into the DC calculation is \$95,853,673, which is shown by service on Table 1. The reserve funds are assigned to projects in the initial years of the capital program for the services in which the reserves are a position balance. This has the effect of reducing and deferring capital costs brought forward to the development charge calculation and the cash flow analysis. Where there is a negative balance, the amount is brought forward to the DC capital forecast for recovery through future development charges.

APPENDIX E

TABLE 1

CITY OF BRAMPTON
DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT
YEAR ENDING DECEMBER 31, 2018

Service Category	Reserve Fund		
	Balance at Dec 31, 2018	Less: DC Reserve Fund Commitments	Available Reserve Fund Balance
General Government	\$ 4,326,270	\$ -	\$ 4,326,270
Library	\$ (10,476,736)	\$ -	\$ (10,476,736)
Fire Protection	\$ (12,965,931)	\$ -	\$ (12,965,931)
Recreation	\$ 138,795,468	\$ 17,623,619	\$ 121,171,849
Transit	\$ (60,209,496)	\$ -	\$ (60,209,496)
Public Works, Buildings and Fleet	\$ (37,229,556)	\$ -	\$ (37,229,556)
Roads	\$ 100,790,733	\$ 38,739,072	\$ 62,051,661
Parking Lots	\$ 7,389,163	\$ -	\$ 7,389,163
Bramwest Pkwy (NSTC)	\$ 21,796,449	\$ -	\$ 21,796,449
Total	\$ 152,216,365	\$ 56,362,692	\$ 95,853,673

APPENDIX F

***COST OF GROWTH ANALYSIS FOR ALL SERVICES
EXCLUDING TRANSIT***

APPENDIX F

COST OF GROWTH ANALYSIS FOR ALL SERVICES EXCLUDING TRANSIT

ASSET MANAGEMENT PLAN

The DCA now requires that municipalities complete an Asset Management Plan before passing a DC by-law. A key function of the Asset Management Plan, as required by the legislation, is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle. This appendix satisfies all asset management plan requirements of the DCA for all services excluding transit, which can be found in Appendix C.

Asset Types

A summary of the future municipal-owned assets and estimated useful life assumptions for eligible DC services considered as part of the study are outlined in Table 1. Although all capital assets considered in the study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. Some projects do not relate to the replacement of a tangible capital asset – some examples include the acquisition of land or the undertaking of development-related studies. The exception and the justification is as follows:

- Some of the works identified may represent one-time expenditures and may be temporary in nature. Therefore, the assets would not be required to be replaced and no ongoing operation and maintenance costs exist. Such assets are identified as “not a long-term asset” in the table.
- Some projects do not relate to the emplacement of a tangible capital asset—some examples include the acquisition of land or the undertaking of development-related studies. These projects/costs do not necessarily require future replacement or ongoing maintenance. Such projects are identified as “not infrastructure” in the table.
- For assets that have been constructed (i.e. recovery of past commitments) it is assumed that the related contribution is already included within the City’s annual provision. As such, these projects are identified as “not applicable” in the table.

It should be noted that the capital cost estimates prepared for each of the projects identified in this section include grouped costs of various individual elements, which, as a stand-alone item, may have its own useful life (ex. New buildings include: HVAC, structural elements, roof, etc.). Accordingly, the average useful life assumptions noted below are applicable to all project components. The useful life estimates contained within this analysis is consistent with those assumptions applied in the City's 2016 Corporate Asset Management Plan and 2018 State of the Local Infrastructure Report.

Table 1 - Summary of Municipal Assets Considered City-wide General Services	
Service and Amenities	Estimated Useful Life
General Government <ul style="list-style-type: none"> • Buildings, Land & Furnishings • Development Related Studies 	<ul style="list-style-type: none"> • 50 years • Not infrastructure
Library Services <ul style="list-style-type: none"> • Recovery of Negative Reserve Fund Balance • Automation Software Upgrades • Furniture and Equipment • Buildings • Material Acquisitions 	<ul style="list-style-type: none"> • Not Applicable • 7 years • 10 years • 50 years • 7 years
Fire Services <ul style="list-style-type: none"> • Recovery of Negative Reserve Fund Balance • Buildings • Land • Vehicles • Equipment 	<ul style="list-style-type: none"> • Not Applicable • 50 years • Not infrastructure • 8 years • 15 years
Recreation <ul style="list-style-type: none"> • Buildings • Land • Furniture, Fixtures & Equipment • Parkland • Fields, Trails & Park Facilities 	<ul style="list-style-type: none"> • 50 years • Not infrastructure • 10 years • 40 years • 30 years
Public Works <ul style="list-style-type: none"> • Recovery of Negative Reserve Fund Balance • Buildings • Equipment 	<ul style="list-style-type: none"> • Not Applicable • 50 years • 10 years
Parking <ul style="list-style-type: none"> • Lease Payments 	<ul style="list-style-type: none"> • Not Applicable

**Table 2 - Summary of Municipal Assets Considered
Roads & Related Services**

Roads & Related	
<ul style="list-style-type: none"> • Paved Roadways • Traffic Signals and Intersection Improvements • Sidewalks • Active Transportation Projects • Gateways • Noisewalls • Property Acquisition 	<ul style="list-style-type: none"> • 40 years • 20 years • 35 years • 15 years • 15 years • 30 years • Not infrastructure

Annual Provision

When assets require rehabilitation or are due for replacement, the source of funds is limited to reserves or contributions from operating. Capital expenditures to carry out the rehabilitation and replacement of aging infrastructure are not growth-related and are therefore not eligible for funding through development charge revenues or other developer contributions.

Based on the information obtained from the City's Corporate Asset Management Plan regarding useful life assumptions and the capital cost of acquiring and/or replacing each asset, a provision for infrastructure replacement has been calculated. Provisions for infrastructure replacement are initially calculated for each asset based on their useful life and the cost of replacement. The aggregate of all individual provisions form the required annual capital provision. In calculating the annual provisions, all costs are expressed in constant \$2019.

Consistent with the requirements of the *Development Charges Act*, assets that are proposed to be funded under the development charges by-law have been included in the analysis. As a result, the total annual calculated provision for development charge related infrastructure has been netted down to consider the replacement of existing infrastructure or benefit-to-existing development. However, for reference, the annual replacement provisions associated with the non-development charge funded costs, including costs related to the 10 per cent statutory discount, benefit-to-existing and post-period benefit have also been calculated.

Table 3 and 4 provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2019-2028 and 2019-2041

DC recoverable portion. The year 2029 and 2042 have been included to calculate the annual contribution for the 2019-2028 and 2019-2041 periods as the expenditures in 2028 and 2041 will not trigger asset management contributions until 2029 and 2042, respectively.

As shown in Table 3, by 2029, the City will need to fund an additional \$12.69 million per year in order to properly fund the full life-cycle costs of the new assets related to all general and protection services under the development charges by-law. Table 4 shows that by 2042, the City will need to fund an additional \$38.47 million per year to properly fund all life-cycle costs of the new Roads & Related assets under the DC by-law.

Table 3 - Calculated Annual Provision by 2029 for General Services				
Service	2019 - 2028 Capital Program		Calculated AMP Annual Provision by 2029	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
General Government	\$16,868,000	\$22,238,000	\$140,000	\$260,000
Library Services	\$24,979,000	\$92,990,000	\$713,000	\$4,531,000
Fire Services	\$36,627,000	\$59,329,000	\$380,000	\$1,357,000
Recreation	\$527,382,000	\$78,145,000	\$11,299,000	\$1,159,000
Public Works	\$45,596,000	\$6,113,000	\$153,000	\$593,000
Parking	\$4,541,000	\$19,009,000	\$0	\$0
Total 2028 Provision	\$655,993,000	\$277,824,000	\$12,685,000	\$7,900,000

Table 4 - Calculated Annual Provision by 2042 for Engineered Services				
Service	2019 - 2041 Capital Program		Calculated AMP Annual Provision by 2042	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Roads & Related	\$1,682,961,000	\$243,161,000	\$38,465,000	\$6,197,000
Total 2028 Provision	\$1,682,961,000	\$243,161,000	\$38,465,000	\$6,197,000

Financial Sustainability of the Program

Future Revenue Growth

The calculated annual funding provisions should be considered within the context of the City's projected growth. Over the next 10 years, the City's population is projected

to increase by approximately 129,400 people. By 2041, the City is expected to grow by 241,600 people. Furthermore, the City will also add 56,700 employees that will result in approximately 4.83 million square metres of additional non-residential building space in the next 10 years. It is anticipated that by 2041 the City will add 120,700 new employees that will result in approximately 9.32 million square metres of additional non-residential building space.

This growth will have the effect of increasing the overall assessment base. This leads to additional user fee and charge revenues to offset the capital asset provisions required to replace the infrastructure proposed to be funded under the development charges by-law. The collection of these funds is intended to be allocated to the City's reserves for future replacement of these assets.

The City currently employs a dedicated 2 per cent Infrastructure Levy to maintain the City's existing assets and reduce the infrastructure backlog, as endorsed through the City's Long Term Financial Plan and Asset Management Plan. Reserve 4 represents the City's most utilized asset replacement reserve, with net tax contributions of \$63.1 million in 2019 and a further \$72.9 million projected in 2020 derived from the 2 per cent dedicated levy. Funds in Reserve 4 tend to be utilized quickly and as a result, only small committed balances are carried forward from one year to the next. It is important to note that Reserve 4 represents the asset replacement reserve for all City assets.

The City has introduced a dedicated 1 per cent Transit Levy (in addition to the 2 per cent dedicated levy) starting with the 2019-2021 Budget to fund capital requirements for transit services. The 2019 contribution to the City's Dedicated Transit Fund is \$4.8 million and will grow to \$14.9 million by 2021. It is important to note that these funds will be solely dedicated to Brampton Transit services and is discussed further in Appendix C.3.

Asset Management Plan

In 2016, the City of Brampton completed a Corporate Asset Management Plan (CAMPlan) which provides a framework to a tactical and strategic plan for managing the City's infrastructure and other assets. All assets have a useful service life and it is vital that these assets are managed carefully in order to maintain the required level of service in the most cost-effective manner.

In order to maintain, protect and manage the City's infrastructure and assets, staff should continue to monitor current levels of service and life cycle trends. These assessments are used to schedule appropriate activities, such as road reconstruction, bridge replacement and equipment and vehicle replacement. Ongoing maintenance and repairs to community facilities will ensure that they continue to meet the needs of a growing population into the future.

Overall, the City will continue to invest, renew and manage infrastructure and assets through its Asset Management Plan and corporate program. This plan is crucial for forecasting capital budgetary needs in both the short and long terms. The AMP process helps to improve financial sustainability to maximize benefits, reduce risk and provide satisfactory levels of service to the community in an environmentally and financially responsible manner.

LONG-TERM CAPITAL AND OPERATING IMPACT ANALYSIS

As shown in Table 5, by 2028, the City's net operating costs are estimated to increase by \$45.72 million for property tax supported services. Increases in net operating costs will be experienced as new facilities such as community centres are opened. Table 6 shows that by 2041, the City's net operating costs for Roads & Related infrastructure will increase by \$23.92 million. Operating and maintenance costs will also as additions to the City's road network are made.

Table 7 summarizes the components of the development-related capital forecast that will require funding from non-DC sources. In total, \$563.31 million will need to be financed from non-DC sources over the 2019-2028 and 2019-2041 planning period. In addition, \$294.88 million in interim DC financing related to post-period shares of projects may be required. However, because DC By-laws must be revisited at least every five years, it is difficult to determine the quantum of interim financing that may be necessary.

The share of the development-related capital forecast requiring funding from non-DC sources consists of two components. The most significant, at \$494.68 million is related to replacement and other benefit to the existing community shares of projects. An additional \$68.63 million is identified as the mandatory 10 per cent discount for certain City-wide general services. Council is made aware of these factors so that they

understand the operating and capital costs that will not be covered by DCs as it adopts the development-related capital forecast set out in the study.

THE PROGRAM IS DEEMED FINANCIALLY SUSTAINABLE

The calculated annual provisions identified in Tables 3 and 4 are considered to be financially sustainable as it is expected that the increased capital asset management requirements can be absorbed by the tax and user base over the long-term.

The City's annual operating budget review will allow staff to continue to monitor and implement mitigating measures should the program become less sustainable.

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APPENDIX F
TABLE 5

CITY OF BRAMPTON
COST OF GROWTH ANALYSIS ALL SERVICES EXCLUDING TRANSIT
ESTIMATED NET OPERATING COST OF THE PROPOSED
2019-2028 DEVELOPMENT-RELATED CAPITAL PROGRAM
(in constant 2019 dollars)

Category	Cost Driver (in 2019 \$)			Additional Operating Costs at 2028		Additional Operating Costs at 2028
	\$	unit measure	Quantity	DC Funded		
				2019-2028	Post 2028 ¹	
General Government				\$96,000	\$0	\$96,000
- Animal Shelter	\$20	per sq. ft.	4,801	\$96,000	\$0	\$96,000
Library Services				\$3,146,400	\$7,728,600	\$10,875,000
- Library Facilities	\$75	per sq. ft.	145,000	\$3,146,400	\$7,728,600	\$10,875,000
Fire Services				\$4,343,400	\$5,509,100	\$9,852,500
- District Chief Vehicle	\$13,250	per vehicle	1	\$5,800	\$7,400	\$13,200
- Fire Prevention Officer Cars	\$8,950	per vehicle	2	\$7,900	\$10,000	\$17,900
- Pumper	\$44,500	per vehicle	1	\$19,600	\$24,900	\$44,500
- Fire Station 214	\$119,000	per station	1	\$52,500	\$66,500	\$119,000
- Fire Stations 215, 216, 217	\$3,061,810	per station	3	\$4,049,300	\$5,136,100	\$9,185,400
- Squad Cars	\$0.15	per \$1 of new vehicle	3,150,000	\$208,300	\$264,200	\$472,500
Recreation				\$20,392,000	\$3,052,500	\$23,444,500
- Howden Recreation Centre	\$2,660,995	per facility	1	\$2,314,500	\$346,500	\$2,661,000
- Chris Gibson Recreation Centre	\$1,575,302	per facility	1	\$1,370,200	\$205,100	\$1,575,300
- Balmoral Recreation Centre	\$1,880,431	per facility	1	\$1,635,600	\$244,800	\$1,880,400
- Embleton Recreation Centre	\$1,024,686	per facility	1	\$891,300	\$133,400	\$1,024,700
- Other Indoor Recreation Facilities	\$20	per sq. ft.	238,400	\$4,147,200	\$620,800	\$4,768,000
- Park and Trail Development	\$0.05	per \$1 of new development	\$230,701,964	\$10,033,200	\$1,501,900	\$11,535,100
Public Works				\$1,276,800	\$171,200	\$1,448,000
- Various Projects	\$0.10	per \$1.00 of new vehicle	14,480,000	\$1,276,800	\$171,200.00	\$1,448,000
Parking				\$0	\$0	\$0
- None	\$0	N/A		\$0	\$0	\$0
TOTAL ESTIMATED OPERATING COSTS				\$29,254,600	\$16,461,400	\$45,716,000

Notes:

1) Post Period operating cost are only shown when a facility is to be fully open and operating by 2028 and a share of the development-related capital has been allocated to growth beyond 2

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 APPENDIX F
 TABLE 6

CITY OF BRAMPTON
 COST OF GROWTH ANALYSIS ALL SERVICES EXCLUDING TRANSIT
 ESTIMATED NET OPERATING COST OF THE PROPOSED
 2019-2041 DEVELOPMENT-RELATED CAPITAL PROGRAM
 (in constant 2019 dollars)

Category	Cost Driver (in 2019 \$)			Additional Operating Costs at 2041		Additional Operating Costs at 2041
	\$	unit measure	Quantity	DC Funded		
				2019-2041	Post 2041	
Roads & Related				\$23,352,844	\$564,791	
- Operating cost of additional infrastructure	\$315	per household	75,929	\$23,352,844	\$564,791	\$23,917,635
TOTAL ESTIMATED OPERATING COSTS				\$23,352,844	\$564,791	\$23,917,635

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APPENDIX F
TABLE 7

CITY OF BRAMPTON
SUMMARY OF THE DEVELOPMENT RELATED CAPITAL FORECAST

General Services		Development-Related Capital Forecast (2019 - 2028)					Total DC Eligible Costs for Recovery (\$000)
		Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Legislated Service Discount (\$000)	Available DC Reserves (\$000)	Post-2028 Benefit (\$000)	
1	GENERAL GOVERNMENT	\$39,105.0	\$22,237.5	\$1,686.8	\$4,326.3	\$0.0	\$10,854.5
2	LIBRARY SERVICES	\$117,968.7	\$28,773.5	\$7,871.8	\$0.0	\$57,794.7	\$23,528.6
3	FIRE SERVICES	\$95,955.9	\$12,873.0	\$0.0	\$0.0	\$46,456.4	\$36,626.5
4	RECREATION	\$605,527.0	\$19,352.0	\$58,617.5	\$121,171.8	\$52,913.8	\$353,471.8
5	PUBLIC WORKS	\$51,709.6	\$0.0	\$0.0	\$0.0	\$6,113.4	\$45,596.2
6	PARKING	\$23,550.2	\$19,009.1	\$454.1	\$4,087.0	\$0.0	\$0.0
7	TRANSIT	\$680,531.3	\$278,947.8	\$0.0	\$0.0	\$92,925.7	\$308,657.7
TOTAL GENERAL SERVICES		\$1,614,347.6	\$381,192.9	\$68,630.2	\$129,585.1	\$256,204.1	\$778,735.3

Roads & Related Services		Development-Related Capital Forecast (2019 - 2041)					Total DC Eligible Costs for Recovery (\$000)
		Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Legislated Service Discount (\$000)	Available DC Reserves (\$000)	Post-2041 Benefit (\$000)	
1	ROADS & RELATED - EXCLUDING BRAMWEST NSTC	\$1,702,325.1	\$113,485.0	\$0.0	\$62,051.7	\$20,824.1	\$1,505,964.3
2	ROADS & RELATED - BRAMWEST PARKWAY / NSTC	\$132,796.1	\$0.0	\$0.0	\$21,796.4	\$17,850.7	\$93,149.0
TOTAL ROADS & RELATED SERVICES		\$1,835,121.1	\$113,485.0	\$0.0	\$83,848.1	\$38,674.7	\$1,599,113.3

TOTAL GENERAL AND ROADS & RELATED SERVICES		\$3,449,468.7	\$494,677.9	\$68,630.2	\$213,433.2	\$294,878.8	\$2,377,848.6
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APPENDIX G

***PROPOSED DRAFT 2019 DC BY-LAWS
(AVAILABLE UNDER SEPARATE COVER)***