

Development Charges Background Study

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List of Acronyms

AMP	Asset Management Plan
BTE	Benefit to Existing
BRT	Bus Rapid Transit
CBC	Community Benefits Charge
COG	Cost of Growth
DCA	Development Charges Act
DC	Development Charges
GFA	Gross Floor Area
LAC	Living Arts Centre
PPB	Post-Period Benefit
PPU	Persons Per Unit
SWM	Stormwater Management
TTS	Transportation Tomorrow Survey

Executive Summary

A. Purpose of 2022 Development Charges (DC) Background Study

i. Legislative Context

This City of Mississauga 2022 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 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 up to September 18, 2020.

ii. Calculation of the Development Charges Rates

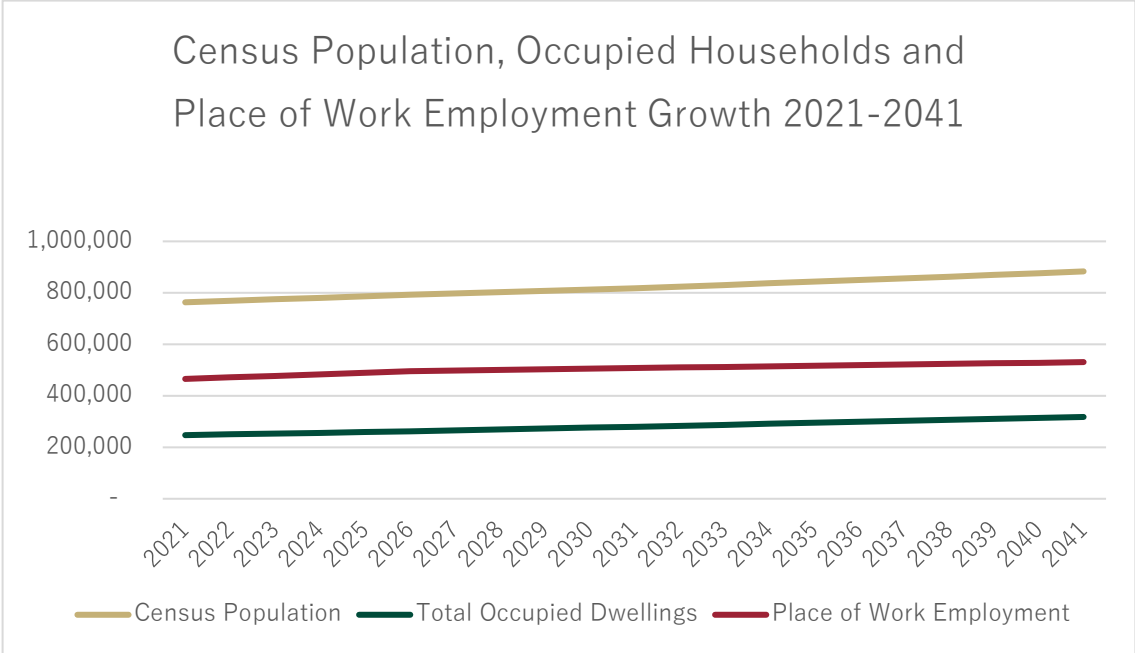
The *DCA* in Ontario is the most prescriptive of all DC legislation in Canada with respect to recovering development-related costs. Several key steps are required to calculate DCs. These include:

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

B. Development Forecast

In Mississauga, over the ten-year planning period of 2022-2031 the City is anticipated to grow by approximately 54,800 persons, 32,670 occupied dwelling units and 42,090 employees. Over the long-term planning period to

2041, the City will grow by 119,990 persons, 70,660 occupied dwelling units and 65,380 employees. The development forecast is further discussed in Appendix A.



The Stormwater Management development charge is calculated per net hectare of chargeable vacant land. The total future net developable area is 1,606 hectares after adjusting for the redevelopment potential of occupied lands. Additional details on the vacant land forecast is provided in Appendix E.

C. Transit Ridership Forecast

For the purposes of the Transit Services development charges calculation, a ridership forecast for the 2016 to 2041 planning period was completed. The ridership forecast represents an increase in AM peak period person trips. The ridership forecast is further discussed in Appendix C.1.

Summary of Transit Ridership Forecast

Year	AM Peak Ridership	% of Allocation
2016-2021	5,730	27%
2022-2031	7,550	36%
2032-2041	7,830	37%
Total	21,110	100%

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

i. Transit Services

The City of Mississauga 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 the 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 ten-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.

ii. All Other Services

The calculated annual provisions identified 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 G summarizes the relevant City documents and asset management requirements for these services.

E. Development Charges Administration & Policy Considerations

i. Consideration of Area Rating

As part of the 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. This requirement was met through recommendation 0021-2021 carried at Budget Committee on June 21, 2021.

ii. Revised Residential Rate Structure

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

Summary of Proposed Residential Rate Structure

Current Residential DC Rate Structure	Proposed Changes for 2022 DC Study
Introduction of a separated Special Care Unit rate	Rate is based on a PPU of 1.00

F. Calculated Development Charges

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

The City's 2022 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 ten-year average historical service level; 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. 2022-2031 for General and Protection Services and 2022-2041 for Engineered Services).

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

Summary of Calculated Residential Charges per Unit

Service	Singles & Semis	Rows & Other Multiples	Apartments Units	Small Units	Special Care Dwelling Units
All Services	\$50,175	\$39,036	\$34,198	\$18,633	\$12,467
TOTAL	\$50,175	\$39,036	\$34,198	\$18,633	\$12,467

Summary of Calculated Non-Residential Charge per m2

Service	Industrial	Non-Industrial
All Services	\$138.26	\$168.09
TOTAL	\$138.26	\$168.09

Summary of Calculated Stormwater Management Charge per Net Developable Hectare

Service	Residential	Non-Residential
Stormwater Management	\$6,252	\$6,252

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

ii. The 2022 DC Background Study is Based upon the Best Available Information

The 2022 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 during this period.

iii. 2022 Draft DC By-law Available Under Separate Cover

The new 2022 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*.

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.

1. Introduction

A. Introduction and Background

This City of Mississauga Development Charges Background Study is presented as part of a process to lead to the approval of a new development charges 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 based on:

- 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 ten-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 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-law would relate.

This study presents the results of the review which determines the development-related net capital costs which are attributable to development that is forecast to occur in the City. These development-related net capital costs are then apportioned among various types of sectors (residential; non-residential) in a manner that reflects the increase in the 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*, Council will review this study, and comments received regarding this study or other information brought to Council's attention about the proposed charges. Council will then pass a new development charges by-law 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, January 1, 2020 and September 18, 2020. Several of these amendments resulted in changes to the calculation methodology used for Transit Services including the removal of the ten per cent statutory deduction and the use of a forward looking "ten-year planned" level of service rather than the "ten-year historical" level of service.

In particular, an asset management plan for all assets whose capital costs are proposed to be funded under the 2022 DC By-law must also be included in the DC Background Study. The asset management plan demonstrates that all such assets mentioned are financially sustainable over their full life cycle. 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 2022 Transportation Background Study to inform the Roads and Related Infrastructure Services and Transit Services DC calculations. The study provides details on the capital infrastructure requirements for Roads and Related Infrastructure Services, including the road infrastructure cost methodology and network service level analysis, as well as a ridership and brief cost of growth analysis (e.g. asset management plan and long-term capital and operating impact analysis) for Transit Services.

The City also retained KSGS Consulting (with Hemson Consulting acting as a sub-consultant) to complete a separate analysis for Stormwater Management. The 2022 Development Charges Background Study: Stormwater Drainage Component, provides details on the calculation methodology, cost assumptions and land area development forecast.

Reference is made to both the 2022 Transportation DC Background Study and 2022 Development Charges Background Study: Stormwater Drainage Component throughout this study.

D. Consultation and Approval Process

The following provides a summary of the consultation and approval process undertaken to complete the 2022 DC Study. 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 2022 DC By-law in May 2022.

Activity	Timeline
Technical Stakeholder Consultation Sessions Prior to Release of DC Background Study	April 29, 2021 July 7, 2021 November 10, 2021 December 6, 2021 January 31, 2022
Public Release of DC Background Study	March 4, 2022
Technical Stakeholder Consultation Sessions Following the Release of the DC Background Study	Ongoing (March and April 2022)
Statutory Public Meeting	April 6, 2022
Passage of 2022 DC By-law	May 4, 2022

2. City-Wide Uniform 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. In this study, therefore, we have tailored our approach to the City of Mississauga'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 these costs. This study utilizes a City-wide uniform approach for all DC eligible services provided by the City.

A. City-Wide Development Charges are 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 the by-laws designate the areas within which the by-laws shall be imposed. The development charges rates may apply to all lands in the municipality or to other designated development areas as specified in the by-law.

i. Services Based on a City-Wide Approach

For all DC eligible 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 and major collector

roads, parks and so on. As new development occurs, new or expanded facilities will need to be added so that service levels in developing areas are provided at levels equivalent to those 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 development charge calculation:

- By-Law Enforcement;
- Development-Related Studies;
- Library;
- Fire;
- Recreation and Park Development;
- Living Arts Centre (debt recovery);
- Transit;
- Services Related to a Highway: Public Works;
- Services Related to a Highway: Roads and Related Infrastructure; and
- Stormwater Management.

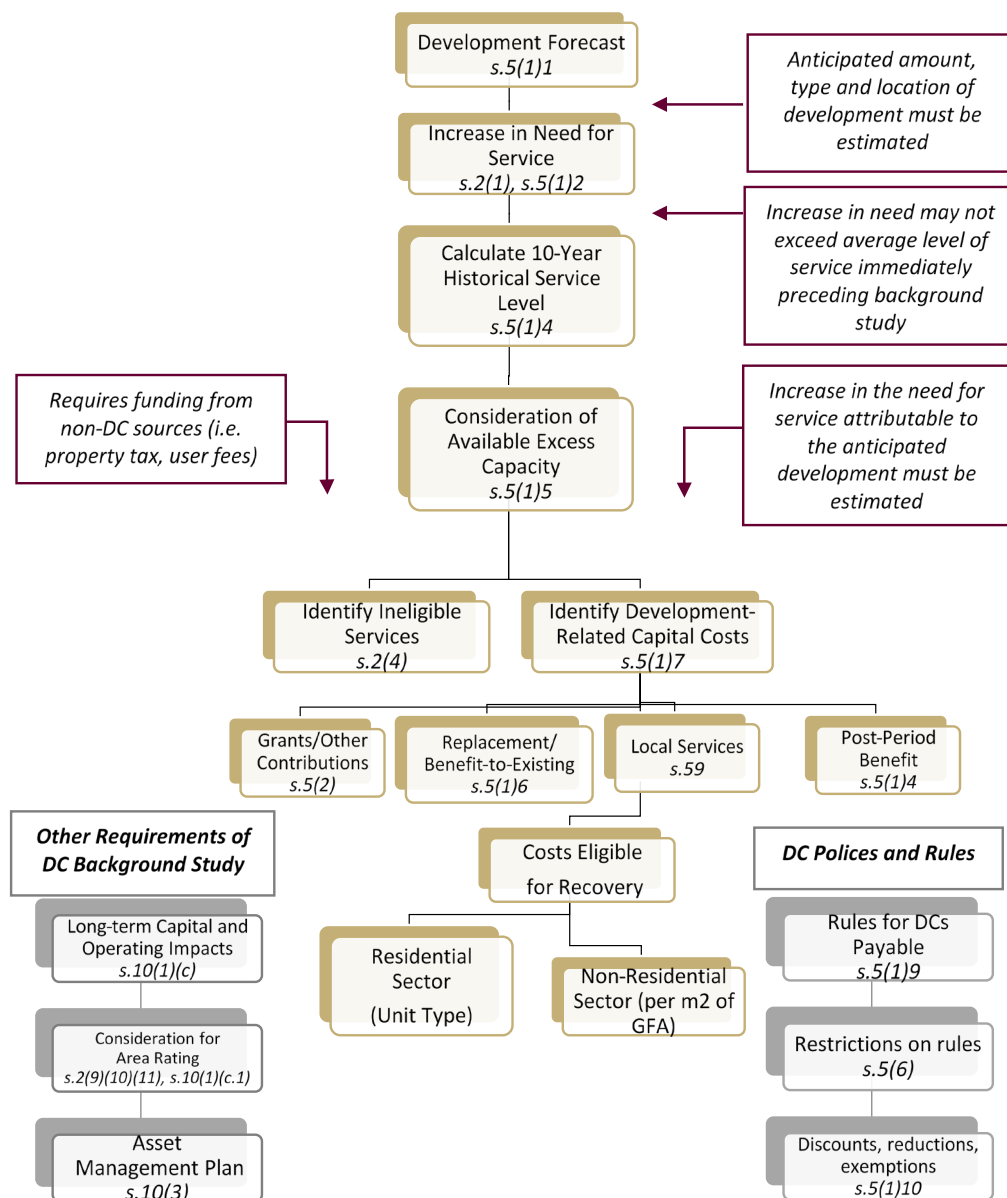
These services form a reasonable basis on which to plan and administer the development charges. It is noted that the analysis of each of these services examines the individual capital facilities and equipment that make them up. For example, Recreation and Park Development includes various indoor facilities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

The resulting development charge for these services is imposed against all development throughout 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 steps are shown in Figure 1.

Figure 1: Development Charge Calculation and Study Process



i. Development Forecast

The first step in the methodology requires a development forecast to be prepared for the ten-year study period, 2022–2031, for all services aside from Roads and Related Infrastructure services is over the study period 2022-2041. The forecast of the future residential and non-residential development used in this study is based on the forecasts adopted by City Council on March 31, 2021. 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 ten-year period and to 2041 (due to reducing household sizes as the community ages). The net population change and growth in household equivalents is used in the calculation of the development charges funding envelopes. In calculating the per capita development charge, however, only 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 ten-year period, 2022–2031 and to 2041. The forecast provides estimates for three employment categories: population-related, employment land, and major office. 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.

ii. Service Categories and Historical Service Levels

Historical ten-year average service levels form the basis for General and Protection Services development charges. The *DCA* 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.)

A detailed review of the City's capital service levels for buildings, land, vehicles, and related infrastructure and facilities has been undertaken, and included in this study. This data and resulting ten-year historical service levels are used as a reference for the calculation to determine what portion of future capital projects can be included in the development charges. The historical service levels used in this study have been calculated based on the period 2012–2021.

Additional detail regarding service level measures is included in Appendix B (for General and Protection Services), Appendix C (for Transit Services) and Appendix D (Services Related to a Highway). Transit Services are based on a ten-year “planned” level of service and are not subject to average historical service levels.

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

The capital forecast provides another cornerstone upon which development charges are based. 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 *DCA* are proposed to be included.

In accordance with s. 5(3), eligible capital 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 (see section 5(3)).
- 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 Act (*DCA*, s. 5. (2)). 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 ten-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 such non-growth shares of projects is also identified as part of the preparation of the development-related capital forecast.

Finally, 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 future servicing requirements. Adjustments are made in the analysis to meet this requirement of the *Act*.

iv. 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 non-residential sectors. This is done by using different apportionments for different services in accordance with the demands which the two sectors are anticipated to place on the various services and the different benefits derived from them.

Some services (e.g. Recreation and Park Development, Library and LAC Debt) 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 population in new units and employment in new space) and consideration of other factors affecting the demand for specific municipal services.

Finally, for all services except Stormwater Management, the residential component of the development charge is calculated based on the population to be generated in new housing units during the respective planning period. The per capita amount for different housing types is based on average occupancy factors. The non-residential component is calculated based on the growth that is forecast in non-residential gross building space in square metres. In some cases, total taxable assessment, or weighted taxable assessment is used to apportion the costs between the residential and non-residential sector.

For Stormwater Management, a uniform charge is calculated for both sectors based on allocating the development-related net capital costs to the net developable residential and non-residential land remaining in the City that has not yet been registered in a plan of subdivision (and for which development charges remain to be paid).

v. 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 thus 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. For simplicity, the section of the DC Study that deals with the operating and capital cost impacts and asset management plan is called the “cost of growth analysis”. Separate cost of growth analyses are prepared for Transit and all other services.

D. Transit Services Specific Requirements

i. 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 and Related Infrastructure 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”.

Planned level of service is not defined in the *Act*. For the purposes of the development charge calculations, the “planned level of service” is considered the ten-year development-related capital forecast (2022-2031) in the 2022 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.

Council will approve the 2022 DC Background Study and the underlying capital forecast to meet the requirements of the *DCA*. This will ensure that the increase in need for Transit Services arising from new development 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).

ii. Asset Management Plan Requirements

In addition to the AMP requirements set out in section 10 of the *DCA*, *O. Reg. 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 an asset and 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.

3. Development Forecast

This section provides the basis for the development forecast used in calculating the development charges and provides a summary of the forecast results. The development forecast in the Development Charges Background Study is based on estimates of growth occurring within approved Official Plan designated urban areas, consistent with the 2022 DC Background Study. The forecast reflects *Growth Plan for the Greater Golden Horseshoe, 2020 (Growth Plan)*, 2016 Census data and recent development activity.

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

A. Residential and Non-Residential Development Forecast

The *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. The forecasts are premised on the City achieving total population and total employment forecasts adopted by City Council on March 31, 2021.¹ A summary of the population and employment forecasts are shown below in Table 1. A description of the forecast methodology and more detailed tables of results are provided in Appendix A.

¹ See Council Resolution [GC-0159-2021](#).

Table 1: Mississauga Growth Forecast

	2041	2051
Total Population	920,000	995,000
Total Employment	565,000	590,000

It is recognized that Census population and employment, which is used for the purposes of the DC Background Study calculations, differs from the population and employment estimates often included in other municipal planning documents such as Official Plans and master plan documents (as shown in Table 1).

The difference between Census population and total population is related to the Census net under-coverage estimate. Total population is often used when planning for municipal infrastructure as these residents will have an associated demand for services, despite not being counted by the Census.

In contrast, the difference between place of work employment and total employment relates to the number of employees that work at home. Similarly, total employment is common in municipal infrastructure plans as the municipality plans for the delivery of services related to total forecast employment irrespective of whether an employee works at home or not.

B. Residential Development Forecast

The residential growth forecast is based on development that is expected in designated urban areas of Mississauga's Official Plan. Table 2 provides a summary of the residential forecast for two planning periods: 2022–2031 and 2022–2041. As noted in Section 2, for development charges calculation purposes, the ten-year planning period is applicable to General and Protection Services. The 2041 development forecast has been utilized in the calculation of the Roads and Related Infrastructure component of development charges.

Table 2 Summary of Residential Development Charges Forecast					
Development Forecast	2021 Estimate	General Services Planning Period 2022 - 2031		Engineered Services Planning Period 2022 - 2041	
		Growth	Total at 2031	Growth	Total at 2041
Residential					
Total Occupied Dwellings	247,180	32,670	279,850	70,660	317,840
- <i>Ground-Related Units</i>		5,842		11,668	
- <i>Apartments</i>		26,828		58,992	
Total Population					
Census	763,300	54,800	818,100	119,990	883,290
<i>Population In New Dwellings</i>		76,646		164,176	

Note, in Table 2 total population estimated in 2021 is 3.57% higher than the census population due to the inclusion of net under-coverage in the total population.

The City's population is expected to increase by approximately 54,800 persons over the next ten years reaching about 818,100 by 2031. The 2041 population is forecast to reach 883,290.

The population figures referred to above reflect the "net" increase in population. This is the increase after taking into account the expected continuation of the decline in occupancy factors in existing housing units. The population residing in new housing units is expected to increase by 76,646 people over the ten-year planning period and 164,176 people to 2041.

Approximately 32,670 housing units are forecast to be developed between 2022–2031. The composition of the new units is forecast to be 18 per cent to ground-related units and 82 per cent apartments.

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 four categories: retail/service commercial, institutional, employment land, and major office. Retail/service includes employment that primarily serves the City's residential population.

This category captures most retail and other commercial activities.

Institutional employment refers to employment accommodated in education, health care, local government, and information and cultural industries. Major office employment is defined as employment in a free-standing office building of 20,000 square feet or greater. Employment land industrial employment refers to employment accommodated primarily in low-rise industrial-type buildings located within the City's business parks and industrial areas.

Table 3 provides a summary of the employment forecast for the 2022–2031 period and to 2041. Over the next ten years, employment is projected to grow by 42,090 employees. To 2041, a further 65,380 employees are forecast to be added.

Table 3 Summary of Non-Residential Development Charges Forecast					
Development Forecast	2021 Estimate	General Services Planning Period 2022 - 2031		Engineered Services Planning Period 2022 - 2041	
		Growth	Total at 2031	Growth	Total at 2041
Non-Residential					
Employment	465,650	42,090	507,740	65,380	531,030
- Population-Related		6,954		13,194	
- Institutional		4,636		8,796	
- Major Office		18,700		31,110	
- Employment Land		11,800		12,280	
Non-Residential GFA in New Space (m2)		1,721,850		3,036,030	
- Population-Related		278,160		527,760	
- Institutional		301,340		571,740	
- Major Office		430,100		715,530	
- Employment Land		712,250		1,221,000	

Note, in Table 3, total employment estimated in 2021 is about 23,800 employees higher as it includes work at home employment which is excluded from the employment forecast used for the purposes of the DC Study.

The table also shows that about 1.72 million square metres of gross floor area (GFA) is forecast to be constructed over the next decade. During the longer-term planning period to 2041, it is forecast that 3.04 million square metres of GFA will be added.

D. Development Forecast of Vacant Land

The Stormwater Management development charge is calculated per net hectare of chargeable vacant land. To determine the amount of chargeable vacant land, Hemson, in collaboration with the City's Environmental Services Section and Open Data sources, prepared an inventory of all vacant residential, non-residential, mixed use lands and lands available for

redevelopment that are eligible to be recovered through development charges.

The resulting total future net developable area is 1,606 hectares after adjusting for the redevelopment potential of occupied lands. Additional details on the vacant land forecast is provided in Appendix E.

4. 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 ridership forecasts are based on the state-of-the-art GTAModel V4.0, an activity and agent based travel demand model developed by the Travel Modelling Group at the University of Toronto. The GTAModel V4.0 is currently being utilized by a number of agencies in the region in order to aid in the forecasting of travel patterns, generating ridership forecasts and testing different transportation policy decisions. This version of the model was calibrated and validated using the most recent available data, including the 2016 Transportation Tomorrow Survey (TTS) and traffic and transit ridership counts.

For the purposes of the DC Background Study analysis, Hemson has utilized the outputs from the City's ridership model data to allocate trips arising from development over the 2016 and 2041 planning period. The interim years from 2016 to 2021 and 2022 to 2031 were attributed based on shares of population and employment growth identified in the DC Background Study development-forecast. Using this assumption, the total ten-year in-period planning trips amount to 7,550 AM peak period trips.

Of the total attributed ridership growth of 21,110 trips from 2016-2041 the additional trips over the 2022-2031 planning period accounts for 36 per cent of total ridership growth. These assumptions and the analysis used to support these allocations are discussed further in Appendix C.1.

Table 4: Transit Ridership Forecast

Year	AM Peak Ridership	% of Allocation
2016-2021	5,730	27%
2022-2031	7,550	36%
2032-2041	7,830	37%
Total	21,110	100%

5. 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 ten-year period immediately preceding the preparation of the background study, on a service-by-service basis.

For General and Protection Services (Fire, Library, Recreation and Park Development etc.) the legislative requirement is met by documenting historical service levels for the preceding ten years, in this case, for the period 2012 to 2021. 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 a similar 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 by City staff based on historical records and their experience with costs to acquire or construct similar facilities, equipment and infrastructure as of 2021.

Table 5 summarizes service levels for all General, Protection and Roads and Related Infrastructure services included in the development charge calculation. Appendix B and Appendix D provides detailed historical inventory data upon which the calculation of service levels is based.

TABLE 5

**CITY OF MISSISSAUGA
SUMMARY OF AVERAGE HISTORIC SERVICE LEVELS 2012 - 2021
FOR GENERAL, PROTECTION AND ROADS SERVICES**

Service	2012 - 2021 Service Level Indicator
1.0 BY-LAW ENFORCEMENT	\$71.57 per pop & emp
2.0 LIBRARY SERVICES	\$550.73 per capita
3.0 FIRE SERVICES	\$437.77 per pop & emp
4.0 RECREATION & PARKS DEVELOPMENT	\$6,119.62 per capita
5.0 PUBLIC WORKS SERVICES	\$242.45 per pop & emp
6.0 ROADS AND RELATED INFRASTRUCTURE	\$8,223.71 per pop & emp
7.0 STORMWATER MANAGEMENT	\$4,363.27 per pop & emp

6. 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 2, *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 3 and detailed in Appendix A, staff of the City departments, in collaboration with the consultants, developed a development-related capital forecast setting out those projects that are required to service anticipated growth. For all General and Protection Services, the capital plan covers the ten-year period from 2022 to 2031. As permitted by the *DCA*, s. 5 (1) 4., the development charge for Roads and Related Infrastructure and Stormwater Management services is based on a longer planning horizon to 2041.

One of the recommendations contained in the 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 General, Protection and Transit Services

A summary of the development-related capital forecast for General and Protection Services is presented in Table 6. The full details of the General and Protection Services capital forecasts are included in Appendix B and Appendix C.2.

The development-related capital forecast for ten-year General, Protection and Transit Services estimates a total gross cost of \$1.20 billion. It is expected that \$118.38 million in subsidies and/or other recoveries will be utilized by the City to fund portions of the Recreation and Park Development capital programs. A further \$50.74 million related to the construction of new fire stations will be funded from property taxes. Lastly, Library services are anticipated to receive \$8.58 million in grants. In total, \$268.69 million is removed from the total gross cost of the forecast, leaving \$928.59 million as the net municipal cost to the City.

This capital forecast incorporates those projects identified to be related to development anticipated in the next ten 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 2022 (for which development charge reserve fund balances exist), or for growth anticipated to occur beyond the 2022–2031 planning period. In addition, some costs may be considered for recovery from other growth funding tools such as CBCs.

Of the \$928.59 million in ten-year net development-related capital costs for General, Protection and Transit Services, \$432.34 million (47 per cent) is related to the provision of Recreation and Park Development facilities. The capital program includes the ongoing recovery of the Hershey Centre Debt as well as a number of other indoor recreation and park development projects.

The development-related capital component for Transit totals \$364.18 million. The capital program provides for the acquisition of 69 buses, bus stations, shelters and pads, transit stations for two BRT corridors, the design and construction of the Meadowvale Transit Facility, other related transit vehicles and equipment and studies.

Library Services \$74.53 million capital program provides for additional library space, increases to the library collection and studies.

The net development-related capital forecast for the Fire Service totals to \$41.37 million. The program includes the recovery of the negative DC reserve fund balance, additional stations, staff equipment, additional vehicles and studies.

Development-Related Studies adds \$11.95 million and By-law Enforcement is included at \$3.54 million. Finally, the Living Arts Centre debt recovery is included at \$669,700.

C. The Development-Related Capital Forecast for Engineered Services

A summary of the development-related capital forecast for Engineered Services is also presented in Table 6. The table provides a summary breakdown of the Services Related to a Highway of: Public Works, Roads and Related Infrastructure and Stormwater Management services. Further details on the capital plans for each individual service category are available

in Appendix D (Services Related to a Highway: Public Works and Roads and Related Infrastructure) and Appendix E (Stormwater Management).

The gross cost of the capital program totals \$2.30 billion. 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 \$300.23 million. The remaining net municipal cost is therefore \$2.00 billion.

The Roads and Related Infrastructure capital program recovers for a wide range of road infrastructure, the largest being the roads themselves which includes both arterial and major collector road systems. Additional related infrastructure included in the Roads and Related Infrastructure DC capital program are grade separations, intersection improvements, cycle facilities, etc.

The Stormwater Management capital program goes on to recover for erosion control works, conveyance, stormwater management, storm sewer oversizing and related studies.

Lastly, Public Works Services capital program provides for additional works yard space, new vehicles and equipment, additional fleet and winter maintenance vehicles.

TABLE 6

CITY OF MISSISSAUGA
SUMMARY OF DEVELOPMENT-RELATED CAPITAL FORECAST
FOR GENERAL, PROTECTION AND TRANSIT SERVICES 2022 - 2031
AND ENGINEERED SERVICES 2022 - 2041
(in \$000)

General, Protection and Transit Services	Gross Cost	Grants/ Subsidies	Municipal Cost
1.0 BY-LAW ENFORCEMENT	\$3,544.7	\$0.0	\$3,544.7
2.0 DEVELOPMENT-RELATED STUDIES	\$11,951.5	\$0.0	\$11,951.5
3.0 LIBRARY SERVICES	\$83,106.9	\$8,575.6	\$74,531.3
4.0 FIRE SERVICES	\$92,110.4	\$50,741.0	\$41,369.4
5.0 RECREATION & PARKS DEVELOPMENT	\$550,718.9	\$118,375.0	\$432,343.9
6.0 LAC DEBT	\$669.7	\$0.0	\$669.7
7.0 TRANSIT SERVICES	\$455,174.8	\$90,999.0	\$364,175.8
TOTAL GENERAL, PROTECTION & TRANSIT SERVICES (2022-2031)	\$1,197,277.1	\$268,690.6	\$928,586.5

Engineered Services	Gross Cost	Grants/ Subsidies	Municipal Cost
1.0 PUBLIC WORKS SERVICES	\$271,985.0	\$0.0	\$271,985.0
2.0 ROADS AND RELATED INFRASTRUCTURE	\$1,873,295.1	\$300,233.7	\$1,573,061.4
3.0 STORMWATER MANAGEMENT	\$428,339.0	\$0.0	\$428,339.0
TOTAL ENGINEERED SERVICES (2022-2041)	\$2,301,634.1	\$300,233.7	\$2,001,400.4

7. 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. Adjustments to these amounts resulting from a cash flow analysis that takes interest earnings and borrowing costs into account are also discussed.

The following identified how charges for General services, Protection services and Services Related to a Highway are calculated and levied. 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 calculated development charges rates are based on a gross floor area (GFA) of building space.

For Stormwater Management services, the development charges rates are calculated and levied on a per net hectare basis.

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 Allocation Residential and Non-Residential

A summary of the allocation of development charge eligible capital costs between the residential and non-residential sectors for General, Protection and Transit Services is presented in Table 7. Further details of the calculation for each individual City service category are available in Appendix B and Appendix C.

i. General, Protection and Transit Services

A summary of the residential and non-residential capital cost allocations for General, Protection and Transit Services is presented in Table 7.

The capital forecast for the General, Protection and Transit Services incorporates those projects identified to be related to growth anticipated in the next ten years. However, not all of the capital costs are to be recovered from new development by way of development charges. Table 7 shows that \$66.78 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, \$286.56 million, is attributable to development beyond the 2031 period and will be considered for recovery under future development charge studies. The costs may also be considered for recovery from other growth funding tools.

A further share of the program has been identified as replacement of existing infrastructure. The portion of the program that is deemed to be the replacement share amounts to \$265.98 million.

After these adjustments, the net development-related capital cost for General, Protection and Transit Services is \$581.24 million. This amount is allocated between the residential and non-residential sectors. Library, Recreation and Park Development and the Living Arts Centre debt are all

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 for details). Approximately \$511.53 million of the General, Protection and Transit Services development charges net discounted capital program is deemed to benefit residential development. In contrast, the non-residential share of the General, Protection and Transit Services capital program totals \$69.71 million.

ii. Roads and Related Infrastructure and Stormwater Management Services

The net municipal cost estimated for Roads and Related Infrastructure services is \$1.57 billion (see Table 7). This infrastructure will be used to service the development of the lands within the City's currently designated urban areas. This development is expected to occur to 2041.

Of the \$1.57 billion gross cost, a share of \$231.18 million has been identified as a non-growth or benefit to existing share; these costs will be recovered from other municipal funding sources. Approximately \$53.28 million is available in the City's existing related development charges reserve accounts and a further \$50.17 million is identified as a post-2041 benefit and will be considered for recovery under subsequent development charge studies. After these adjustments, approximately \$1.24 billion is included in the development charges calculations.

This amount is allocated to the residential and non-residential sectors based on each sector's share of forecast future population in new units and employment growth to 2041. On this basis, the allocation to the residential and non-residential sectors is calculated at 72 per cent (\$890.29 million) and 28 per cent (\$348.14 million), respectively.

For the Stormwater Management development charges calculation, the net municipal cost of \$428.34 million is reduced by the benefit to existing share allocation of \$363.56 million. A further \$54.74 million is removed from the

calculation related to the available Stormwater Management reserve funds.
Therefore, the total DC eligible costs amount to \$10.04 million.

TABLE 7

CITY OF MISSISSAUGA
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
CAPITAL PROGRAM FOR 10-YEAR AND 20-YEAR SERVICES

10-Year Services	Development-Related Capital Program (2022 - 2031)								
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Prior Growth (\$000)	Other Dev. Related* (\$000)	Total DC Eligible Costs for Recovery (\$000)	Residential Share		Non-Residential Share	
						%	(\$000)	%	(\$000)
1.0 BY-LAW ENFORCEMENT	\$3,544.7	\$0.0	\$0.0	\$0.0	\$3,544.7	68%	\$2,395.6	32%	\$1,149.12
2.0 DEVELOPMENT-RELATED STUDIES	\$11,951.5	\$3,900.0	\$0.0	\$0.0	\$8,051.5	68%	\$5,441.4	32%	\$2,610.11
3.0 LIBRARY SERVICES	\$74,531.3	\$32,410.3	\$7,021.1	\$4,919.8	\$30,180.0	100%	\$30,180.0	0%	\$0.00
4.0 FIRE SERVICES	\$41,369.4	\$0.0	\$0.0	\$0.0	\$41,369.4	68%	\$27,958.5	32%	\$13,410.92
5.0 RECREATION & PARKS DEVELOPMENT	\$432,343.9	\$41,792.5	\$48,043.4	\$7,152.9	\$335,355.2	100%	\$335,355.2	0%	\$0.00
6.0 LAC DEBT	\$669.7	\$0.0	\$0.0	\$0.0	\$669.7	100%	\$669.7	0%	\$0.00
7.0 TRANSIT SERVICES	\$364,175.8	\$102,331.1	\$0.0	\$123,263.0	\$138,581.7	68%	\$93,657.0	32%	\$44,924.70
8.0 PUBLIC WORKS SERVICES	\$271,985.0	\$85,550.0	\$11,719.2	\$151,224.8	\$23,491.0	68%	\$15,875.8	32%	\$7,615.19
TOTAL 10-YEAR SERVICES	\$1,200,571.5	\$265,983.9	\$66,783.7	\$286,560.6	\$581,243.3		\$511,533.2		\$69,710.0

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Engineered Services	Development-Related Capital Program (2022 - 2041)								
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Prior Growth (\$000)	Other Dev. Related* (\$000)	Total DC Eligible Costs for Recovery (\$000)	Residential Share		Non-Residential Share	
						%	(\$000)	%	(\$000)
1.0 ROADS AND RELATED INFRASTRUCTURE	\$1,573,061.4	\$231,185.3	\$53,281.2	\$50,166.7	\$1,238,428.2	72%	\$890,287.0	28%	\$348,141.17
TOTAL ROADS AND RELATED INFRASTRUCTURE	\$1,573,061.4	\$231,185.3	\$53,281.2	\$50,166.7	\$1,238,428.2		\$890,287.0		\$348,141.2

Engineered Services	Development-Related Capital Program (2022 - 2041)								
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Prior Growth (\$000)	Other Dev. Related* (\$000)	Total DC Eligible Costs for Recovery (\$000)				
2.0 STORMWATER MANAGEMENT	\$428,339.3	\$363,561.5	\$54,737.3	\$0.0	\$10,040.5				
TOTAL STORMWATER MANAGEMENT	\$428,339.3	\$363,561.5	\$54,737.3	\$0.0	\$10,040.5				

(1) Stormwater Management is calculated as a charge per net developable hectare. As such, the DC eligible costs are not differentiated between residential and non-residential uses.

B. Proposed Residential and Non-Residential Development Charges

Final adjustments to the 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 8 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 range from \$12,444 for special care units, to \$50,082 for single and semi-detached units. The proposed charge for rows and other multiples is \$38,963, the charge for apartments is \$34,135 and lastly the charge for small units (700 square feet or less) is \$18,598.

Table 9 summarizes the results of the adjusted industrial and non-industrial charges. As shown on Table 9, the adjusted charge for industrial development amounts to \$137.88 per square metre of non-residential GFA. In contrast, the adjusted charge for non-industrial development amounts to \$167.60 per square metre. The General, Protection and Transit Services rates are calculated on a uniform City-wide basis, whereas the Roads and Related Infrastructure charge differs between industrial and non-industrial development, consistent with the City's historical practices.

C. Comparison of Current and Calculated Development Charges

Table 10 presents a comparison of calculated residential development charges with the City's current charges (indexed February 1, 2022). The City

is proposing to change its current residential rate structure to add a special care unit rate.

Table 10 shows that the calculated charge per apartment unit of \$34,135 will produce an increase of \$4,850 over the present development charge of \$29,285. The increase for all units from the current residential rate is approximately 17 per cent.

Tables 11 and 12 show the calculated industrial and non-industrial charges, by service, as compared to the existing charges currently in force. The calculated non-industrial rate amounts to \$167.60 per square metre, which represents a 43 per cent increase over the current rate of \$117.57 per square metre. In contrast, the calculated industrial rate of \$137.88 represents a 45 per cent increase over the current rate of \$94.88 per square metre.

TABLE 8

**CITY OF MISSISSAUGA
CITY-WIDE DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE**

Service	Residential Charge By Unit Type (1)				
	Singles & Semis	Rows & Other Multiples	Apartments Units	Small Units	Special Care Unit
By-Law Enforcement	\$148	\$115	\$101	\$55	\$37
Development-Related Studies	\$290	\$225	\$197	\$108	\$72
Library Services	\$1,596	\$1,242	\$1,088	\$593	\$397
Fire Services	\$1,518	\$1,181	\$1,034	\$564	\$377
Recreation & Parks Development	\$17,784	\$13,836	\$12,122	\$6,604	\$4,419
Transit Services	\$4,944	\$3,846	\$3,370	\$1,836	\$1,228
Public Works Services	\$866	\$674	\$590	\$322	\$215
LAC Debt	\$87	\$68	\$59	\$32	\$22
Sub-total General Services	\$27,233	\$21,187	\$18,561	\$10,114	\$6,767
Roads And Related Infrastructure	\$22,849	\$17,776	\$15,574	\$8,484	\$5,677
TOTAL CHARGE PER UNIT	\$50,082	\$38,963	\$34,135	\$18,598	\$12,444
(1) Based on Persons Per Unit Of:	4.02	3.13	2.74	1.49	1.00

TABLE 9

**CITY OF MISSISSAUGA
CITY-WIDE DEVELOPMENT CHARGES
NON-RESIDENTIAL DEVELOPMENT CHARGES**

Service	Non-Residential Charge	
	Industrial	Non-Industrial
By-Law Enforcement	\$0.77	\$0.77
Development-Related Studies	\$1.52	\$1.52
Library Services	\$0.00	\$0.00
Fire Services	\$7.92	\$7.92
Recreation & Parks Development	\$0.00	\$0.00
Transit	\$25.88	\$25.88
Public Works	\$4.51	\$4.51
LAC Debt	\$0.00	\$0.00
Sub-total General Services	\$40.60	\$40.60
Roads And Related Infrastructure	\$97.28	\$127.00
TOTAL CHARGE PER SQUARE METRE	\$137.88	\$167.60

TABLE 10

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

Service	Current Apartment Charge (1)	Calculated Apartment Charge	Difference in Charge	
By-Law Enforcement	\$108	\$101	(\$7)	-6%
Development-Related Studies	\$352	\$197	(\$155)	-44%
Library Services	\$1,253	\$1,088	(\$165)	-13%
Fire Services	\$925	\$1,034	\$109	12%
Recreation & Parks Development	\$12,579	\$12,122	(\$457)	-4%
Transit Services	\$884	\$3,370	\$2,486	281%
Public Works Services	\$662	\$590	(\$72)	-11%
Parking Services (1)	\$310	\$0	(\$310)	-100%
LAC Debt	\$97	\$59	(\$38)	-39%
Sub-total General Services	\$17,170	\$18,561	\$1,391	8%
Roads And Related Infrastructure	\$12,115	\$15,574	\$3,459	29%
TOTAL CHARGE PER UNIT	\$29,285	\$34,135	\$4,850	17%

(1) Rates as of February 1, 2022 to be levied as permitted under DCA.

TABLE 11

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

Service	Current Non-Industrial Charge (\$/m2)	Calculated Non-Industrial Charge (\$/m2)	Difference in Charge	
By-Law Enforcement	\$0.67	\$0.77	\$0.10	15%
Development-Related Studies	\$2.21	\$1.52	(\$0.69)	-31%
Library Services	\$0.00	\$0.00	\$0.00	0%
Fire Services	\$5.84	\$7.92	\$2.08	36%
Recreation & Parks Development	\$0.00	\$0.00	\$0.00	0%
Transit	\$5.71	\$25.88	\$20.17	353%
Public Works	\$4.19	\$4.51	\$0.32	8%
Parking Services (1)	\$1.96	\$0.00	(\$1.96)	-100%
LAC Debt	\$0.00	\$0.00	\$0.00	0%
Sub-total General Services	\$20.58	\$40.60	\$20.02	97%
Roads And Related Infrastructure	\$96.99	\$127.00	\$30.01	31%
TOTAL CHARGE PER M2	\$117.57	\$167.60	\$50.03	43%

(1) Rates as of February 1, 2022 to be levied as permitted under DCA.

TABLE 12

**CITY OF MISSISSAUGA
COMPARISON OF CURRENT AND CALCULATED
INDUSTRIAL DEVELOPMENT CHARGES**

Service	Current Industrial Charge (\$/m2)	Calculated Industrial Charge (\$/m2)	Difference in Charge	
By-Law Enforcement	\$0.67	\$0.77	\$0.10	15%
Development-Related Studies	\$2.21	\$1.52	(\$0.69)	-31%
Library Services	\$0.00	\$0.00	\$0.00	0%
Fire Services	\$5.84	\$7.92	\$2.08	36%
Recreation & Parks Development	\$0.00	\$0.00	\$0.00	0%
Transit	\$5.71	\$25.88	\$20.17	353%
Public Works	\$4.18	\$4.51	\$0.33	8%
Parking Services (1)	\$1.97	\$0.00	(\$1.97)	-100%
LAC Debt	\$0.00	\$0.00	\$0.00	0%
Sub-total General Services	\$20.58	\$40.60	\$20.02	97%
Roads And Related Infrastructure	\$74.30	\$97.28	\$22.98	31%
TOTAL CHARGE PER M2	\$94.88	\$137.88	\$43.00	45%

(1) Rates as of February 1, 2022 to be levied as permitted under DCA.

8. 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 G.

A. Asset Management Plan

i. 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-Range Financial Plan and three-year business plan for MiWay assets to ensure the City continues to run efficiently and spend public money wisely.

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

- City of Mississauga [Long Range Financial Plan](#)
- City of Mississauga [2022-2025 Business Plan and 2022 Budget](#)
- City of Mississauga [2016 MiWay Asset Management Plan](#)

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.

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

1. Buses
2. Vehicles (Non-Bus) & Equipment
3. Buildings and Facilities
4. Bus Stations, Shelters and Pads
5. Studies

Table 13 provides a summary of the calculated annual asset management contributions based on the identified useful lives of the various assets and projects.

Table 13 – Summary of Calculated Full Life Cycle Annual Contributions at 2032

	2022 - 2031		Calculated AMP Annual	
Transit Services	Capital Program		Provision by 2032	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Buses	\$54,455,000	\$1,800,000	\$4,316,000	\$154,000
Vehicles (Non-Bus) and Equipment	\$660,000	\$0	\$69,000	\$0
Buildings and Facilities	\$54,053,000	\$189,947,000	\$1,521,000	\$5,350,000
Bus Stations, Shelters and Pads	\$29,068,000	\$124,342,000	\$1,440,000	\$3,578,000
Studies	\$346,000	\$504,000	\$0	\$0
Total	\$138,582,000	\$316,593,000	\$7,346,000	\$9,082,000

Note: May not add due to rounding.

A detailed analysis of the asset management and financial strategies for the various asset groups is described in detail in Appendix C.1. Several staff reports and documents are referenced that identify the City's commitment

to fund capital expenditures and address long-term capital and operating impacts.

ii. All Other Services

Table 14 and 15 provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2022-2031 and 2022-2041 DC recoverable portion. The year 2032 and 2042 have been included to calculate the annual contribution for the 2022-2031 and 2022-2041 periods as the expenditures in 2031 and 2041 will not trigger asset management contributions until 2032 and 2042, respectively. As shown in Table 14, by 2032, the City should fund an additional \$21.29 million per annum to fund the full life cycle costs of the new assets related to the General and Protection Services supported under the development charges by-law.

Table 15 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 14, the annual provision in 2042 amounts to \$33.99 million.

Table 14: Calculated Annual Provision by 2032 for General and Protection Services

	2022 - 2031		Calculated AMP Annual	
General Services	Capital Program		Provision by 2032	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
By-Law Enforcement	\$3,545,000	\$0	\$0	\$0
Development-Related Studies	\$8,052,000	\$3,900,000	\$0	\$0
Library Services	\$37,201,000	\$45,906,000	\$980,000	\$1,078,000
Fire Services	\$41,369,000	\$50,741,000	\$1,092,000	\$1,572,000

Recreation & Parks Development	\$383,399,000	\$167,320,000	\$18,067,000	\$4,625,000
LAC Debt	\$670,000	\$0	\$0	\$0
Serv. Rel. to a Hwy: Public Works Services	\$35,210,000	\$236,775,000	\$1,148,000	\$7,062,000
Total	\$509,446,000	\$504,642,000	\$21,287,000	\$14,337,000

Table 15: Calculated Annual Provision by 2042 for Engineered Services

	2022 - 2041		Calculated AMP Annual	
Engineering Services	Capital Program		Provision by 2042	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Serv. Rel. to a Hwy: Roads And Related Infrastructure	\$1,291,709,000	\$555,147,000	\$33,095,000	\$13,426,000
Stormwater Management	\$10,040,000	\$363,561,000	\$895,000	\$5,996,000
Total	\$1,301,749,000	\$918,708,000	\$33,990,000	\$19,422,000

B. Long-term Capital and Operating Costs

i. 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 \$7.97 million in additional operating costs by 2031.

In accordance with the 2016 MiWay Asset Management Plan, revenue from fares, fees and services accounted for 48 per cent of the operating budget. Additionally, 41 per cent of the budget was funded through property taxes, ten per cent from operating reserves and the remaining one per cent was funded from other revenue sources. Consistent with current practices, the

net funding difference is anticipated to be funded from other revenue sources such as property taxes.

ii. All Other Services

Appendix G 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 average costs derived from the 2022-2025 Business Plan and 2022 Budget.

By 2031, the City's net operating costs are estimated to increase by \$23.46 million for property tax-supported services. Increases in net operating costs will be experienced as new facilities such as community centres are opened. By 2041, the City's net operating costs for Roads and Related Infrastructure and Public Works will increase by \$10.80 million. Operating and maintenance costs will also increase as additions to the City's road network are made.

Appendix G also summarizes the components of the development-related capital forecast that will require funding from non-DC sources. In total, \$860.73 million will need to be financed from non-DC sources over the 2022-2031 and 2022-2041 planning period. In addition, \$336.73 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.

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 G (all services excluding Transit) demonstrates that the City can afford to invest and operate the identified general and engineered services infrastructure over the ten-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.

9. 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 DC Background Study. As part of the City's 2022 DC Background Study, the appropriateness of implementing area-specific development charges for the various City services was examined. This requirement was met through recommendation 0021-2021 carried at Budget Committee on June 21, 2021.

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 2022 DC Background Study, subject to annual review through the City’s normal capital budget process.
- That Council confirms its intention to fund 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 give 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.
- That Council has 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. 2022 Draft DC By-Law Available Under Separate Cover

The new 2022 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*.

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

Development Forecast

This appendix provides details of the development forecast used to prepare the 2022 Development Charges Background Study for the City of Mississauga. The forecast method and key assumptions are discussed. The forecast results are presented in the following tables:

Historical Development

- Table A-1 Population, Occupied Dwellings & Employment Summary
- Table A-2 Housing Completions
- Table A-3 Housing by Unit Type
- Table A-4 Housing by Period of Construction Showing Household Size
- Table A-5 Place of Work Employment

Forecast Development

- Table A-6 Population, Household, and Employment Forecast Summary
- Table A-7 Housing by Unit Type
- Table A-8 Housing Growth by Unit Type
- Table A-9 Population in New Housing by Unit Type
- Table A-10 Place of Work Employment
- Table A-11 Employment in New Space

A. Forecast Approach, Key Assumptions and Definitions

i. Identified Forecast Targets

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 ten-year development forecast, from 2022 to 2031, has been used for the General Services as well as Public Works and Transit services. For the Roads and Related Infrastructure service, a long-term forecast from 2022 to 2041 has been used.

A separate land development forecast has been prepared for Stormwater Management as the charge for that service is calculated on a land area basis. Additional details are provided in Appendix E.

The forecasts are premised on the City achieving population and employment forecasts adopted by City Council on March 31, 2021. By way of background:

- The Provincial *Growth Plan for the Greater Golden Horseshoe, 2020 (Growth Plan)*, establishes a population forecast of 2.28 million and an employment forecast of 1.07 million jobs for the Region of Peel to 2051. The Region has allocated a portion of this growth to Mississauga through its Municipal Comprehensive Review (MCR).
- On March 31, 2021, City Council endorsed the following updated population and employment forecasts for use in the 2022 Development Charges By-law Review, for infrastructure and service planning, and as input into the Region's exercise to allocate the Provincial forecasts to area municipalities. These forecasts are consistent with the Region's population and employment allocations to Mississauga.

Mississauga Growth Forecasts (2021)

	2041	2051
Population	920,000	995,000
Employment	565,000	590,000

Development charge calculations in this study are based on master servicing plans and other capital development plans that are themselves based on the development forecasts set out below. All development charges are based on forecasts of development occurring within areas approved for development in the City's Official Plan.

ii. Total Population and Employment vs. Census Population and Employment

Population figures used in the forecasts represent the population recorded in the Census ("Census population"). This definition excludes the Census net under-coverage (approximately 3.26 per cent of the Census population), which represents those who were missed or double-counted by the Census and which is included in the definition of population used in the Regional Official Plan and 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 the dwellings are anticipated to be occupied.

"Total Census Employment" figures presented 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 retail/service commercial, institutional, major office, and employment land industrial:

- Retail/service commercial employment is employment that primarily serves the City's resident population. This category captures most retail and other commercial activities.
- Institutional employment refers to employment accommodated in education, health care, local government, and cultural industries.
- Major office employment refers to office type employment contained within free standing buildings more than 20,000 net square feet (1,858 m²).

- Employment land industrial employment refers to employment accommodated primarily in low-rise industrial-type buildings located within business parks and industrial areas.

The employment 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.

iii. Differences between the DC Study and Municipal Master Plans

The Census population and employment, which is used for the DC Background Study calculations, differs from the population and employment estimates often included in other municipal planning documents such as the Official Plan and master servicing plans. The table below summarizes these differences. For the purposes of explaining the differences in the context of the City of Mississauga, the Census years of 2016, 2041 and 2051 have been used.

As discussed above, the difference between Census population and Total population is related to the Census net under-coverage estimate. Total population is often used when planning for municipal infrastructure as the residents represented by the net undercoverage place a demand on services despite not being counted by the Census.

In contrast, the difference between place of work employment figures and total employment reflects the number of employees that work at home. Similarly, total employment is more commonly used in infrastructure plans as the City plans its service capacity irrespective of whether an employee works at home or not.

Differences in Municipal Growth Forecasts - Residential

	2016	2041	2051
Total Population	748,000	920,000	995,000
Census Population for DC Study	721,600	883,300	955,260

Differences in Municipal Growth Forecasts – Non-Residential

	2016	2041	2051
Total Employment	477,000	565,000	590,100
Place of Work Employment for DC Study	454,310	531,030	556,310

Development charge studies use Census population for the purposes of the rate calculations as there is a direct relationship between that population and the Census occupied dwelling counts. This correlation is used to establish person per unit (PPU) assumptions which are critical in the DC rate calculation. However, it is noted that the “total population” and “Census population” at the Census horizon years (inclusive of 2016, 2041 and 2051) reflect a consistent land use development forecast.

B. Historical Development in the City

The City has experienced rapid and sustained population, household, and employment growth over the last decade. This reflects the City’s role as a large urban area in a metropolitan region that has a strong local economy and continues to experience high levels of net in-migration. Rapid growth has continued despite the City entering a post-greenfield planning era in which development is increasingly occurring as intensification.

Historical population and household figures presented in Table A-1 are based on Census data. For development charges purposes, a ten-year historical period of 2012 to 2021 is used for calculating historical average service levels. Since 2016 was the year of the last Census, figures for 2017 to 2021 are estimates.

Table A-1 shows that between 2012 and 2021 the City's population increased from 715,067 to 763,300. The growth rate increased significantly between 2017 and 2021. The number of households in the City grew slightly faster than the population over the same period. As of 2021, there are an estimated 247,180 households in the City. The difference between the rates of population and household growth is the result of a decline in the average number of persons residing in occupied dwellings (i.e. decline in the number of persons per unit).

Historical employment figures are shown in Table A-1. Overall, employment has grown steadily in recent years, rising from 438,045 jobs in 2012 to an estimated 465,650 jobs in 2021. The City's activity rate (the ratio of employment to population) decreased from 61.3 per cent to 61.0 per cent over the same period.

Details on historical housing unit growth in the City are provided in Tables A-2 and A-3. This information is sourced from CHMC housing market data and building permit data maintained by Statistics Canada. Overall, the dominant type of new housing in Mississauga constructed since 2012 has been apartments which represent 74 per cent of all housing completions from 2012 to 2021. Over the same period, single and semi-detached, and row units represented 16 per cent and 10 per cent of housing completions respectively.

As shown in Table A-3, the overall market share of single and semi-detached dwelling units has fallen from 52 per cent to 49 per cent over the 2012 to 2021 period, while the share of apartments has risen from 34 per cent to 37 per cent. The share of row housing has remained steady at 14 per cent of the total housing stock.

Table A-4 provides details on historical occupancy patterns in the City. The overall average occupancy level in Mississauga for single and semi-detached units is 3.37 persons per housing unit (PPU). Occupancy levels for

recently constructed units, between 2006 and 2016, are higher than the overall average and are used in the development charges calculation since they better reflect the number of people that are likely to reside in new development. The average PPU of single and semi-detached units built in the City between 2006 to 2016 is 4.02. Average PPUs for recently constructed row housing and apartments (including duplexes) are 3.13 and 2.42 respectively.

Table A-5 summarizes the growth in historical employment by employment category in the City since 2006. While overall growth has been strong there have been significant shifts within categories. Employment in industrial uses on employment land saw sharp declines prior to 2011 before returning to modest growth in the last few years. By contrast, non-industrial employment growth, which in the case of commercial and institutional activities is largely influenced by population growth, has slowed somewhat since 2012.

C. Forecast Method and Results

This section describes the method used to establish the development forecast for the periods of 2022 to 2031 and 2022 to 2041.

Development charges are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of both the *population growth*¹ as well as the *population in new units* is required.

- The *population growth* determines the need for additional facilities and provides the foundation for the development-related capital program.
- When calculating the development charge, however, the development-related net capital costs are spread over the total additional population

¹ Commonly referred to as “net population growth” in the context of development charges.

that occupies new dwelling units. This *population in new units* represents the population from which development charges will be collected.

Development charges are levied on non-residential development as a charge per unit of gross floor area (GFA). The non-residential forecast includes both a projection of *employment growth* as well as a projection of the *employment growth associated with new floorspace* in the City.

i. Residential Forecast

The population and housing forecasts prepared by Hemson in 2021, and endorsed by City Council for this study in 2021, were prepared in a metropolitan context (the Greater Toronto Area and Hamilton area). The forces that affect demographic and economic change in the Greater Toronto Area and Hamilton (GTAH) also affect the City of Mississauga, so the nature and timing of future development in the City is closely tied to the development outlook for the entire GTAH. Accordingly, the forecasts for Mississauga were prepared in the context of the growth outlook for the GTAH as a whole. The forecast used a well-established methodology and is consistent with Hemson's approach for forecasts prepared as background work for the Growth Plan Schedule 3 and the Region's municipal comprehensive review.

The forecast approach employed a “top-down” model in which the Mississauga forecasts are considered within the larger context of trends influencing growth and change across the broader region. A number of “bottom-up” factors, however, were also incorporated in the forecasts, the most important of which is the shift in the types of residential and employment growth accommodated on greenfield lands to those types more typically developed through intensification and redevelopment. The 2021 forecast has been updated to include the following:

- Available 2016 Census data for the GTAH and Mississauga;

- City of Mississauga housing and employment data to current;
- Most current CMHC housing data; and
- Updated information for office space construction and employment land development.

The population forecast for the City of Mississauga begins with the preparation of a housing forecast. Future housing growth is determined by applying market shares to the overall GTAH housing growth; and a forecast of average household size is then applied to the housing forecast to determine the overall population.

The population forecast is determined by applying a projected average household size to the housing forecast. Like all communities in the GTAH, average household size is anticipated to decline gradually over time as a result of a number of factors, most notably the aging of the population.

As shown in Table A-6, the City's Census population is forecast to grow from approximately 763,300 in 2021 to 818,100 in 2031 and 883,290 in 2041². These numbers are generally in line with the 2051 targets based on Region of Peel Growth Plan Schedule 3 allocations to the City. The number of occupied dwellings is forecast to increase from 247,180 in 2021 to 279,850 in 2031 and 317,840 in 2041. This reflects an increasing rate of development to 2031 and even more so between 2031 and 2041.

A breakdown of forecast housing in the City by unit type is shown in Tables A-7 and A-8. Conclusions arising from the forecast include:

² Equivalent to the 852,100 Total population in 2031, 920,000 population in 2041, and 995,000 population in 2051 endorsed by Council after factoring in Census net under-coverage.

- The market shares of single and semi-detached units will continue to decline over the forecast period, as new development is provided primarily through infill and redevelopment.
- The current share of housing unit growth comprised of row housing is anticipated to remain steady over the period, consistent with the recent trends; and
- The City will continue to have a large market share of the GTAH higher density housing market, resulting in apartments continuing to increase their share of the City's housing market.

Population growth in the new units is estimated by applying the following PPUs to the housing unit forecast: 4.02 for single and semi-detached units; 3.13 for rows; 2.74 for apartments; and 1.49 for small units (2.12 for overall apartment PPU). The PPUs are consistent with those observed for recently constructed units set out in Table A-4. The unit types are defined as follows:

- Singles/semis – includes all units defined by the Census as a single detached house, semi-detached house, other detached house, mobile home, and other movable dwelling.
- Rows – includes all units defined by the Census as a row house, including “back to back” row house units.
- Apartments – includes all units defined by the Census as an apartment (regardless of the number of storeys), including stacked townhouses.
- Small units – includes all units 700 square feet or less, regardless of built form. The vast majority of these units will be apartments. They comprise 50 per cent of the units in the apartment forecast.

The forecast population growth in new units is set out in Table A-9. Over the ten year planning horizon the population in new units is forecasted to be

76,646 and over the longer planning horizon 164,176 based on the unit growth and occupancy assumptions described above.

ii. Employment Forecast

The 2021 forecast anticipates continued employment growth for the GTAH and that the City of Mississauga will remain a major employment centre within the GTAH regional economy. The long-term economic outlook for both the GTAH and Mississauga remains very positive.

Similar to growth in population, the nature of employment growth in Mississauga is also affected strongly by land supply and employment growth in the City. While continuing to be robust in the short-term, employment growth will be slower in the future than in the past as the City's role in the market changes. Because the City's supply of employment land is nearly fully developed, new employment growth will increasingly be accommodated through major office development. Mississauga is the second largest office market in the GTAH after the City of Toronto, a position it is anticipated to maintain over the forecast period, though both Toronto and Mississauga will lose some shares as new office markets are established in other growing communities in the GTAH.

The employment forecast used in this background study is based on new employment accommodated in new non-residential floor space. The rate of retail/commercial service employment will slow in concert with slower rates of population growth resulting from the build-out of ground-related units on greenfields. New retail/service commercial development is also shifting from the provision of space to serve local population to regional development, consistent with the evolving "central place" functions of the City.

Conclusions arising from the forecast include:

- About 48 per cent of Mississauga's long-term net employment growth is anticipated to be in major office development. Major office growth is higher in the short-term and drops off somewhat post-2026 as other

evolving urban municipalities within the GTAH take up greater shares of the market for major offices.

- Retail/service commercial employment is generally forecast to grow in step with population growth as it is primarily providing services to a resident population as well as some additional growth in metropolitan-wide retail/service commercial employment, consistent with the evolving central place functions of the City.
- A similar pattern is anticipated for institutional employment, which comprises about 40 per cent of the total retail/service commercial employment forecast for the City under the 2021 forecasts.
- Generally, employment land employment growth is limited by the availability of new greenfield land for development, the supply of which is largely exhausted in the City. In addition, some growth will occur within existing employment areas during the current period, as the economic recovery leads to higher occupancy of existing space. Employment land employment growth from 2022 to 2026 is higher as Pearson Airport and surrounding businesses affected by the COVID-19 pandemic are re-occupied. In the post-2026 period forecast growth in this category is much slower, constrained by limited land supply.

The following floor space per worker (FSW) assumptions have been used to determine the additional non-residential gross floor area in the City over the 2022-2031 and 2022-2041 planning periods:

Retail/Service Commercial	40 m ² per employee
Institutional	65 m ² per employee
Major Office	23 m ² per employee
Employment Land Employment	110 m ² per employee

APPENDIX A - TABLE A-1
CITY OF MISSISSAUGA
HISTORICAL POPULATION, OCCUPIED DWELLINGS & EMPLOYMENT SUMMARY

Mid-Year	Census Population	Annual Growth	Occupied Households	Annual Growth	Av. Household Size (PPU)	Place of Work Employment	Annual Growth	Activity Rate
2006	668,549		214,885		3.11	409,860		61.3%
2007	677,296	8,747	218,688	3,803	3.10	414,001	4,141	61.1%
2008	686,157	8,861	222,558	3,870	3.08	418,524	4,523	61.0%
2009	695,134	8,977	226,497	3,939	3.07	423,449	4,925	60.9%
2010	704,229	9,095	230,505	4,008	3.06	428,797	5,348	60.9%
2011	713,443	9,214	234,585	4,080	3.04	434,585	5,788	60.9%
2012	715,067	1,624	235,838	1,253	3.03	438,045	3,460	61.3%
2013	716,694	1,627	237,097	1,259	3.02	441,752	3,707	61.6%
2014	718,325	1,631	238,363	1,266	3.01	445,702	3,950	62.0%
2015	719,960	1,635	239,636	1,273	3.00	449,890	4,188	62.5%
2016	721,599	1,639	240,915	1,279	3.00	454,310	4,420	63.0%
2017	729,753	8,154	242,155	1,240	3.01	456,553	2,243	62.6%
2018	737,999	8,246	243,402	1,247	3.03	458,807	2,254	62.2%
2019	746,338	8,339	244,655	1,253	3.05	461,075	2,268	61.8%
2020	754,771	8,433	245,914	1,259	3.07	463,357	2,282	61.4%
2021	763,300	8,529	247,180	1,266	3.09	465,650	2,293	61.0%
Growth 2012-2021		49,857		12,595			31,065	

Source: Statistics Canada, Census of Canada

APPENDIX A - TABLE A-2
CITY OF MISSISSAUGA
HISTORICAL ANNUAL HOUSING COMPLETIONS (CMHC)

Year	CMHC Annual Housing Completions				Shares by Unit Type			
	Singles/Semis	Rows	Apts.	Total	Singles/Semis	Rows	Apts.	Total
2012	304	304	963	1,571	19%	19%	61%	100%
2013	358	127	1,480	1,965	18%	6%	75%	100%
2014	428	198	805	1,431	30%	14%	56%	100%
2015	195	285	946	1,426	14%	20%	66%	100%
2016	226	245	266	737	31%	33%	36%	100%
2017	188	140	2,643	2,971	6%	5%	89%	100%
2018	230	30	234	494	47%	6%	47%	100%
2019	213	0	1,312	1,525	14%	0%	86%	100%
2020	187	0	54	241	78%	0%	22%	100%
2021*	160	258	2,950	3,368	5%	8%	88%	100%
Growth 2012 - 2021	2,489	1,587	11,653	15,729	16%	10%	74%	100%

Source: CMHC Housing Completions

**APPENDIX A - TABLE A-3
CITY OF MISSISSAUGA
HISTORICAL OCCUPIED HOUSEHOLDS BY UNIT TYPE**

Mid-Year	Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2012	122,150	33,301	80,367	235,818	52%	14%	34%	100%
2013	122,087	33,503	81,477	237,067	51%	14%	34%	100%
2014	122,025	33,706	82,602	238,333	51%	14%	35%	100%
2015	121,963	33,910	83,743	239,616	51%	14%	35%	100%
2016	121,900	34,115	84,900	240,915	51%	14%	35%	100%
2017	122,088	34,255	87,543	243,886	50%	14%	36%	100%
2018	122,318	34,285	87,777	244,380	50%	14%	36%	100%
2019	122,531	34,285	89,089	245,905	50%	14%	36%	100%
2020	122,718	34,285	89,143	246,146	50%	14%	36%	100%
2021	122,878	34,543	92,093	249,514	49%	14%	37%	100%

Source: Statistics Canada

APPENDIX A - TABLE A-4
CITY OF MISSISSAUGA
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
<i>Singles and Semis</i>													
Household Population	4,853	26,498	40,965	62,763	90,868	43,263	53,185	56,430	24,118	8,223	378,823	32,340	411,163
Households	1,838	9,445	13,983	20,638	27,525	11,783	14,420	14,308	5,900	2,135	113,938	8,035	121,973
Household Size	2.64	2.81	2.93	3.04	3.30	3.67	3.69	3.94	4.09	3.85	3.32	4.02	3.37
<i>Rows</i>													
Household Population	510	2,000	5,575	23,605	15,935	10,965	15,600	17,505	9,905	3,920	91,695	13,825	105,520
Households	175	590	1,825	8,240	5,325	3,400	5,030	5,290	3,060	1,355	29,875	4,415	34,290
Household Size	2.91	3.39	3.05	2.86	2.99	3.23	3.10	3.31	3.24	2.89	3.07	3.13	3.08
<i>Apartments (incl. Duplexes): Bachelor or 1BR</i>													
Household Population	1,000	2,305	5,750	7,735	5,945	3,325	2,260	3,605	4,640	4,535	31,925	9,175	41,100
Households	605	1,625	3,925	5,165	4,040	2,225	1,500	2,350	3,085	2,980	21,435	6,065	27,500
Household Size	1.65	1.42	1.46	1.50	1.47	1.49	1.51	1.53	1.50	1.52	1.49	1.51	1.49
<i>Apartments (incl. Duplexes): 2BR or more</i>													
Household Population	2,738	8,413	21,880	42,168	32,198	15,193	9,720	8,810	9,553	6,163	141,118	15,715	156,833
Households	928	3,080	7,693	14,998	11,755	5,338	3,395	3,483	3,985	2,515	50,668	6,500	57,168
Household Size	2.95	2.73	2.84	2.81	2.74	2.85	2.86	2.53	2.40	2.45	2.79	2.42	2.74
<i>Apartments (incl. Duplexes) - Total</i>													
Household Population	3,738	10,718	27,630	49,903	38,143	18,518	11,980	12,415	14,193	10,698	173,043	24,890	197,933
Households	1,533	4,705	11,618	20,163	15,795	7,563	4,895	5,833	7,070	5,495	72,103	12,565	84,668
Household Size	2.44	2.28	2.38	2.48	2.41	2.45	2.45	2.13	2.01	1.95	2.40	1.98	2.34
<i>All Units</i>													
Household Population	9,100	39,215	74,170	136,270	144,945	72,745	80,765	86,350	48,215	22,840	643,560	71,055	714,615
Households	3,545	14,740	27,425	49,040	48,645	22,745	24,345	25,430	16,030	8,985	215,915	25,015	240,930
Household Size	2.57	2.66	2.70	2.78	2.98	3.20	3.32	3.40	3.01	2.54	2.98	2.84	2.97

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

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
<i>Duplexes Bachelor or 1BR</i>													
Household Population	30	90	180	245	300	210	230	240	135	45	1,525	180	1,705
Households	25	65	135	175	185	95	165	125	50	20	970	70	1,040
Household Size	1.20	1.38	1.33	1.40	1.62	2.21	1.39	1.92	2.70	2.25	1.57	2.57	1.64
<i>Duplexes 2BR or more</i>													
Household Population	305	1,245	2,210	3,420	7,665	3,375	2,480	1,380	430	180	22,080	610	22,690
Households	110	475	680	1,010	2,205	890	735	370	130	60	6,475	190	6,665
Household Size	2.77	2.62	3.25	3.39	3.48	3.79	3.37	3.73	3.31	3.00	3.41	3.21	3.40
<i>Duplexes - Total</i>													
Household Population	335	1,335	2,390	3,665	7,965	3,585	2,710	1,620	565	225	23,605	790	24,395
Households	135	540	815	1,185	2,390	985	900	495	180	80	7,445	260	7,705
Household Size	2.48	2.47	2.93	3.09	3.33	3.64	3.01	3.27	3.14	2.81	3.17	3.04	3.17

(1) Duplexes are split 50%/50% between apartments and single and semi-detached

**APPENDIX A - TABLE A-5
CITY OF MISSISSAUGA
HISTORICAL PLACE OF WORK EMPLOYMENT**

Mid-Year	Non-Industrial						Industrial		Total For DC Study	Annual Growth	Work at Home	Annual Growth	Total w/ Work At Home	Annual Growth
	Retail/Service Commercial	Annual Growth	Institutional	Annual Growth	Major Office Employment	Annual Growth	Emp. Land (Industrial)	Annual Growth						
2006	41,870		41,780		88,440		237,770		409,860		20,800		430,660	
2007	44,766	2,896	43,711	1,931	90,687	2,247	234,837	(2,933)	414,001	4,141	20,649	(151)	434,650	3,990
2008	47,862	3,096	45,731	2,020	92,991	2,304	231,940	(2,897)	418,524	4,523	20,499	(150)	439,023	4,373
2009	51,173	3,311	47,844	2,113	95,354	2,363	229,078	(2,862)	423,449	4,925	20,350	(149)	443,799	4,776
2010	54,713	3,540	50,055	2,211	97,777	2,423	226,252	(2,826)	428,797	5,348	20,202	(148)	448,999	5,200
2011	58,497	3,784	52,368	2,313	100,260	2,483	223,460	(2,792)	434,585	5,788	20,055	(147)	454,640	5,641
2012	58,833	336	49,654	(2,714)	102,025	1,765	227,533	4,073	438,045	3,460	20,542	487	458,587	3,947
2013	59,171	338	47,080	(2,574)	103,821	1,796	231,680	4,147	441,752	3,707	21,041	499	462,793	4,206
2014	59,511	340	44,640	(2,440)	105,648	1,827	235,903	4,223	445,702	3,950	21,552	511	467,254	4,461
2015	59,853	342	42,326	(2,314)	107,508	1,860	240,203	4,300	449,890	4,188	22,075	523	471,965	4,711
2016	60,198	345	40,132	(2,194)	109,400	1,892	244,580	4,377	454,310	4,420	22,610	535	476,920	4,955
2017	60,676	478	40,451	319	110,031	631	245,395	815	456,553	2,243	22,847	237	479,400	2,480
2018	61,158	482	40,772	321	110,665	634	246,212	817	458,807	2,254	23,086	239	481,893	2,493
2019	61,644	486	41,096	324	111,303	638	247,032	820	461,075	2,268	23,328	242	484,403	2,510
2020	62,134	490	41,423	327	111,945	642	247,855	823	463,357	2,282	23,573	245	486,930	2,527
2021	62,628	494	41,752	329	112,590	645	248,680	825	465,650	2,293	23,820	247	489,470	2,540
Growth 2012-2021		4,131		(10,616)		12,330		25,220		31,065		3,765		34,830

Note: Employment Values Include No Fixed Place of Work Employment

Source: Statistics Canada, Census of Canada

APPENDIX A - TABLE A-6
CITY OF MISSISSAUGA
FORECAST POPULATION, HOUSEHOLD & EMPLOYMENT GROWTH SUMMARY

Mid-Year	Census Population	Annual Growth	Total Occupied Dwellings	Annual Growth	Av. Household Size (PPU)	Place of Work Employment	Annual Growth	Activity Rate
2016	721,599		240,915		3.00	454,310		63.0%
2017	729,753	8,154	242,155	1,240	3.01	456,553	2,243	62.6%
2018	737,999	8,246	243,402	1,247	3.03	458,807	2,254	62.2%
2019	746,338	8,339	244,655	1,253	3.05	461,075	2,268	61.8%
2020	754,771	8,433	245,914	1,259	3.07	463,357	2,282	61.4%
2021	763,300	8,529	247,180	1,266	3.09	465,650	2,293	61.0%
2022	769,022	5,722	250,161	2,981	3.07	471,575	5,925	61.3%
2023	774,786	5,764	253,178	3,017	3.06	477,589	6,014	61.6%
2024	780,594	5,808	256,232	3,054	3.05	483,693	6,104	62.0%
2025	786,445	5,851	259,322	3,090	3.03	489,889	6,196	62.3%
2026	792,340	5,895	262,450	3,128	3.02	496,180	6,291	62.6%
2027	797,426	5,086	265,841	3,391	3.00	498,453	2,273	62.5%
2028	802,545	5,119	269,276	3,435	2.98	500,745	2,292	62.4%
2029	807,697	5,152	272,755	3,479	2.96	503,057	2,312	62.3%
2030	812,882	5,185	276,279	3,524	2.94	505,388	2,331	62.2%
2031	818,100	5,218	279,850	3,571	2.92	507,740	2,352	62.1%
2032	824,321	6,221	283,568	3,718	2.91	509,936	2,196	61.9%
2033	830,589	6,268	287,335	3,767	2.89	512,151	2,215	61.7%
2034	836,905	6,316	291,152	3,817	2.87	514,385	2,234	61.5%
2035	843,269	6,364	295,020	3,868	2.86	516,638	2,253	61.3%
2036	849,680	6,411	298,940	3,920	2.84	518,910	2,272	61.1%
2037	856,298	6,618	302,628	3,688	2.83	521,291	2,381	60.9%
2038	862,968	6,670	306,361	3,733	2.82	523,693	2,402	60.7%
2039	869,690	6,722	310,140	3,779	2.80	526,117	2,424	60.5%
2040	876,464	6,774	313,966	3,826	2.79	528,563	2,446	60.3%
2041	883,290	6,826	317,840	3,874	2.78	531,030	2,467	60.1%
2051*	955,260		346,710		2.76	556,310		58.2%
Growth 2022-2031		54,800		32,670			42,090	
Growth 2022-2041		119,990		70,660			65,380	

Source: City of Mississauga and Hemson Consulting, 2022

*2051 is shown for information purposes. Based on Region of Peel Growth Plan Schedule 3 allocations for local municipalities

APPENDIX A - TABLE A-7
CITY OF MISSISSAUGA
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
2022	122,194	35,632	92,335	250,161	49%	14%	37%	100%
2023	122,322	36,053	94,803	253,178	48%	14%	37%	100%
2024	122,452	36,479	97,301	256,232	48%	14%	38%	100%
2025	122,584	36,910	99,828	259,322	47%	14%	38%	100%
2026	122,778	37,285	102,387	262,450	47%	14%	39%	100%
2027	122,988	37,692	105,161	265,841	46%	14%	40%	100%
2028	123,202	38,104	107,970	269,276	46%	14%	40%	100%
2029	123,417	38,522	110,816	272,755	45%	14%	41%	100%
2030	123,636	38,945	113,698	276,279	45%	14%	41%	100%
2031	123,752	39,373	116,725	279,850	44%	14%	42%	100%
2032	123,873	39,819	119,876	283,568	44%	14%	42%	100%
2033	123,995	40,271	123,069	287,335	43%	14%	43%	100%
2034	124,119	40,729	126,304	291,152	43%	14%	43%	100%
2035	124,244	41,194	129,582	295,020	42%	14%	44%	100%
2036	124,377	41,664	132,899	298,940	42%	14%	44%	100%
2037	124,502	42,106	136,019	302,628	41%	14%	45%	100%
2038	124,629	42,554	139,177	306,361	41%	14%	45%	100%
2039	124,758	43,008	142,374	310,140	40%	14%	46%	100%
2040	124,888	43,467	145,611	313,966	40%	14%	46%	100%
2041	125,019	43,932	148,889	317,840	39%	14%	47%	100%

APPENDIX A - TABLE A-8
CITY OF MISSISSAUGA
GROWTH IN HOUSEHOLDS BY UNIT TYPE

Mid-Year	Annual Growth in Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows & Other Multiples	Apartments	Total	Singles/Semis	Rows & Other Multiples	Apartments	Total
2022	127	416	2,438	2,981	4%	14%	82%	100%
2023	128	421	2,468	3,017	4%	14%	82%	100%
2024	130	426	2,498	3,054	4%	14%	82%	100%
2025	132	431	2,527	3,090	4%	14%	82%	100%
2026	194	375	2,559	3,128	6%	12%	82%	100%
2027	210	407	2,774	3,391	6%	12%	82%	100%
2028	213	412	2,810	3,435	6%	12%	82%	100%
2029	216	417	2,846	3,479	6%	12%	82%	100%
2030	219	423	2,882	3,524	6%	12%	82%	100%
2031	116	429	3,027	3,571	3%	12%	85%	100%
2032	121	446	3,151	3,718	3%	12%	85%	100%
2033	122	452	3,193	3,767	3%	12%	85%	100%
2034	124	458	3,235	3,817	3%	12%	85%	100%
2035	125	464	3,278	3,868	3%	12%	85%	100%
2036	133	470	3,316	3,920	3%	12%	85%	100%
2037	125	443	3,120	3,688	3%	12%	85%	100%
2038	127	448	3,158	3,733	3%	12%	85%	100%
2039	128	453	3,197	3,779	3%	12%	85%	100%
2040	130	459	3,237	3,826	3%	12%	85%	100%
2041	132	465	3,278	3,874	3%	12%	85%	100%
Growth 2022-2031	1,685	4,157	26,828	32,670	5%	13%	82%	100%
Growth 2022-2041	2,952	8,716	58,992	70,660	4%	12%	83%	100%

Source: Hemson Consulting, 2021

APPENDIX A - TABLE A-9
CITY OF MISSISSAUGA
FORECAST POPULATION IN NEW HOUSEHOLD BY UNIT TYPE

Mid-Year	Singles/Semis	Rows & Other Multiples	Apartments	Total	Singles/Semis	Rows & Other Multiples	Apartments	Population in New Dwellings
2022	4.02	3.13	2.12	2.34	511	1,302	5,167	6,980
2023	4.02	3.13	2.12	2.34	517	1,318	5,229	7,064
2024	4.02	3.13	2.12	2.34	523	1,334	5,293	7,150
2025	4.02	3.13	2.12	2.34	529	1,350	5,356	7,235
2026	4.02	3.13	2.12	2.36	781	1,175	5,421	7,377
2027	4.02	3.13	2.12	2.36	847	1,274	5,877	7,998
2028	4.02	3.13	2.12	2.36	858	1,291	5,954	8,103
2029	4.02	3.13	2.12	2.36	869	1,307	6,030	8,206
2030	4.02	3.13	2.12	2.36	880	1,324	6,108	8,312
2031	4.02	3.13	2.12	2.30	466	1,342	6,413	8,221
2032	4.02	3.13	2.12	2.30	485	1,397	6,677	8,559
2033	4.02	3.13	2.12	2.30	492	1,416	6,765	8,673
2034	4.02	3.13	2.12	2.30	498	1,434	6,855	8,787
2035	4.02	3.13	2.12	2.30	505	1,453	6,947	8,905
2036	4.02	3.13	2.12	2.31	536	1,473	7,027	9,036
2037	4.02	3.13	2.12	2.31	504	1,386	6,612	8,502
2038	4.02	3.13	2.12	2.31	510	1,403	6,692	8,605
2039	4.02	3.13	2.12	2.31	517	1,420	6,775	8,712
2040	4.02	3.13	2.12	2.31	523	1,438	6,859	8,820
2041	4.02	3.13	2.12	2.31	530	1,456	6,945	8,931
Growth 2022-2031	4.02	3.13	2.12	2.35	6,781	13,017	56,848	76,646
Growth 2022-2041	4.02	3.13	2.12	2.32	11,881	27,293	125,002	164,176

Source: Hemson Consulting, 2021

APPENDIX A - TABLE A-10
CITY OF MISSISSAUGA
FORECAST PLACE OF WORK EMPLOYMENT
PLACE OF WORK EMPLOYMENT

Mid-Year	Non-Industrial						Industrial		Total for DC Study	Annual Growth	Work at Home Total Emp	Annual Growth	Total with Work at Home	Annual Growth
	Retail/Service Commercial	Annual Growth	Institutional	Annual Growth	Major Office	Annual Growth	Total	Annual Growth	Emp. Land Industrial	Annual Growth				
2016	60,198		40,132		109,400		209,730		244,580		454,310		476,920	
2017	60,676	478	40,451	319	110,031	631	211,158	1,428	245,395	815	456,553	2,243	479,400	2,480
2018	61,158	482	40,772	321	110,665	634	212,595	1,437	246,212	817	458,807	2,254	481,893	2,493
2019	61,644	486	41,096	324	111,303	638	214,043	1,448	247,032	820	461,075	2,268	484,403	2,510
2020	62,134	490	41,423	327	111,945	642	215,502	1,459	247,855	823	463,357	2,282	486,930	2,527
2021	62,628	494	41,752	329	112,590	645	216,970	1,468	248,680	825	465,650	2,293	489,470	2,540
2022	63,393	765	42,262	510	115,059	2,469	220,714	3,744	250,861	2,181	471,575	5,925	495,605	6,135
2023	64,167	774	42,778	516	117,582	2,523	224,527	3,813	253,062	2,201	477,589	6,014	501,831	6,226
2024	64,950	783	43,300	522	120,161	2,579	228,411	3,884	255,282	2,220	483,693	6,104	508,149	6,318
2025	65,743	793	43,829	529	122,796	2,635	232,368	3,957	257,521	2,239	489,889	6,196	514,561	6,412
2026	66,546	803	44,364	535	125,490	2,694	236,400	4,032	259,780	2,259	496,180	6,291	521,070	6,509
2027	67,142	596	44,762	398	126,629	1,139	238,533	2,133	259,920	140	498,453	2,273	523,515	2,445
2028	67,744	602	45,163	401	127,778	1,149	240,685	2,152	260,060	140	500,745	2,292	525,980	2,465
2029	68,351	607	45,568	405	128,938	1,160	242,857	2,172	260,200	140	503,057	2,312	528,466	2,486
2030	68,964	613	45,976	408	130,108	1,170	245,048	2,191	260,340	140	505,388	2,331	530,972	2,506
2031	69,582	618	46,388	412	131,290	1,182	247,260	2,212	260,480	140	507,740	2,352	533,500	2,528
2032	70,203	621	46,802	414	132,405	1,115	249,410	2,150	260,526	46	509,936	2,196	535,905	2,405
2033	70,830	627	47,220	418	133,529	1,124	251,579	2,169	260,572	46	512,151	2,215	538,330	2,425
2034	71,462	632	47,642	422	134,663	1,134	253,767	2,188	260,618	46	514,385	2,234	540,776	2,446
2035	72,100	638	48,067	425	135,807	1,144	255,974	2,207	260,664	46	516,638	2,253	543,243	2,467
2036	72,744	644	48,496	429	136,960	1,153	258,200	2,226	260,710	46	518,910	2,272	545,730	2,487
2037	73,349	605	48,900	404	138,282	1,322	260,531	2,331	260,760	50	521,291	2,381	548,327	2,597
2038	73,959	610	49,307	407	139,617	1,335	262,883	2,352	260,810	50	523,693	2,402	550,947	2,620
2039	74,575	616	49,717	410	140,965	1,348	265,257	2,374	260,860	50	526,117	2,424	553,591	2,644
2040	75,196	621	50,131	414	142,326	1,361	267,653	2,396	260,910	50	528,563	2,446	556,259	2,668
2041	75,822	626	50,548	417	143,700	1,374	270,070	2,417	260,960	50	531,030	2,467	558,950	2,691
Growth 2022-2031		6,954		4,636		18,700		30,290		11,800		42,090		44,030
Growth 2022-2041		13,194		8,796		31,110		53,100		12,280		65,380		69,480

APPENDIX A - TABLE A-11
CITY OF MISSISSAUGA
FORECAST NON-RESIDENTIAL SPACE (SQUARE METRES OF GROSS FLOOR AREA)
EMPLOYMENT IN NEW SPACE

Employment Density	
Retail/Service Commercial	40.0 m ² per employee
Institutional	65.0 m ² per employee
Employment Land Employment	110.0 m ² per employee
Major Office	23.0 m ² per employee

Mid-Year	Non-Industrial								Industrial		Total for DC Study	
	Retail/Service Commercial		Institutional		Major Office		Total		Emp. Growth in New Space	New Space (m2)	Emp. Growth in New Space	New Space (m2)
	Emp. Growth in New Space	New Space (m2)	Emp. Growth in New Space	New Space (m2)	Emp. Growth in New Space	New Space (m2)	Emp. Growth in New Space	New Space (m2)				
2021	494	19,760	329	21,385	645	14,835	1,468	55,980	925	101,750	2,393	157,730
2022	765	30,600	510	33,150	2,469	56,787	3,744	120,537	740	81,400	4,484	201,937
2023	774	30,960	516	33,540	2,523	58,029	3,813	122,529	740	81,400	4,553	203,929
2024	783	31,320	522	33,930	2,579	59,317	3,884	124,567	740	81,400	4,624	205,967
2025	793	31,720	529	34,385	2,635	60,605	3,957	126,710	740	81,400	4,697	208,110
2026	803	32,120	535	34,775	2,694	61,962	4,032	128,857	740	81,400	4,772	210,257
2027	596	23,840	398	25,870	1,139	26,197	2,133	75,907	555	61,050	2,688	136,957
2028	602	24,080	401	26,065	1,149	26,427	2,152	76,572	555	61,050	2,707	137,622
2029	607	24,280	405	26,325	1,160	26,680	2,172	77,285	555	61,050	2,727	138,335
2030	613	24,520	408	26,520	1,170	26,910	2,191	77,950	555	61,050	2,746	139,000
2031	618	24,720	412	26,780	1,182	27,186	2,212	78,686	555	61,050	2,767	139,736
2032	621	24,840	414	26,910	1,115	25,645	2,150	77,395	555	61,050	2,705	138,445
2033	627	25,080	418	27,170	1,124	25,852	2,169	78,102	555	61,050	2,724	139,152
2034	632	25,280	422	27,430	1,134	26,082	2,188	78,792	555	61,050	2,743	139,842
2035	638	25,520	425	27,625	1,144	26,312	2,207	79,457	555	61,050	2,762	140,507
2036	644	25,760	429	27,885	1,153	26,519	2,226	80,164	555	61,050	2,781	141,214
2037	605	24,200	404	26,260	1,322	30,406	2,331	80,866	370	40,700	2,701	121,566
2038	610	24,400	407	26,455	1,335	30,705	2,352	81,560	370	40,700	2,722	122,260
2039	616	24,640	410	26,650	1,348	31,004	2,374	82,294	370	40,700	2,744	122,994
2040	621	24,840	414	26,910	1,361	31,303	2,396	83,053	370	40,700	2,766	123,753
2041	626	25,040	417	27,105	1,374	31,602	2,417	83,747	370	40,700	2,787	124,447
Growth 2022-2031	6,954	278,160	4,636	301,340	18,700	430,100	30,290	1,009,600	6,475	712,250	36,765	1,721,850
Growth 2022-2041	13,194	527,760	8,796	571,740	31,110	715,530	53,100	1,815,030	11,100	1,221,000	64,200	3,036,030

Appendix B

General Services Technical Appendix

Introduction and Overview

This appendix provides the detailed analysis undertaken to establish the development charge rates for each of the general services in the City of Mississauga except Transit. The analysis for the Transit service is set out in Appendix C.

The appendix is divided into six sub-sections, with one section for each of the general services:

Appendix B.1	By-Law Enforcement Services
Appendix B.2	Development-Related Studies
Appendix B.3	Library Services
Appendix B.4	Fire Services
Appendix B.5	Recreation and Park Development
Appendix B.6	Living Arts Centre Debt

Every sub-section, with the exception of Development-Related Studies and the Living Arts Centre Debt, 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 in each of the General Services appendices presents the data used to determine the ten-year historical service level. The *DCA* and *O. Reg. 82/98* require that development charges be set at a level no higher than the average service level provided in the City over the ten-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 has been defined as 2012 to 2021.

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 as a cost per square foot to replace or construct a facility of the same quality in accordance with current building code and/or other standards. 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 City 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. This information is generally based on historical records and experience with costs to acquire or construct similar facilities and equipment.

The final page of Table 1 for each service indicates the calculation of the “maximum allowable funding envelope”, net of uncommitted excess capacity. The maximum allowable funding envelope is defined as the ten-year historical service level (expressed as either a \$/capita or \$/capita and employment) multiplied by the forecast increase in net population or net population and net employment over the planning period (2022-2031). The resulting figure is the value of capital infrastructure that must be constructed for that particular service so that the ten-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 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 excess capacity from new development, it is considered “committed excess capacity” under the *DCA*, and the associated capital cost is eligible for recovery in future DC studies. Should uncommitted excess capacity exist, it will be determined whether or not this capacity is available to service new development and, if so, appropriate adjustments will be made to the calculations.

**Table 2 2022 – 2031 Development-Related Capital Program
& Calculation of the Unadjusted Development
Charge**

The *DCA* requires that Council express its intent to provide future capital facilities to support future development. Based on the development forecasts presented in Appendix A, City staff, in collaboration with the consultants, have developed a development-related capital program which sets out the projects required to service anticipated development for the ten-year period from 2022–2031. The capital program included within the 2022 DC Background Study has been informed based on discussions with staff and inputs from the City’s budget. It is anticipated that adjustments will be made to the budget as projects are funded to align with the funding identified in the DC Background Study. The development-related capital program for each service is shown as Table 2 of each sub-section. The gross cost of projects shown in the capital programs are based on costs set out in the City’s capital forecast. All costs are shown in current (2022) dollars.

To determine the share of the program that is eligible for recovery through development charges, the gross project costs are reduced by any anticipated grants or subsidies and “replacement” or “benefit to existing” shares.

A benefit to existing represents that portion of a capital project that will benefit the existing community. It could, for example, represent a portion of a new facility that, at least in part, replaces a facility that is demolished, repurposed or will otherwise not be available to serve its former function (a “replacement” share). The benefit to existing 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 benefit to existing shares will require funding from non-development charge sources, typically property taxes or user fees.

The capital program, less any benefit to existing shares, 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 2022–2031. For some services, a portion of the capital program will service development beyond 2031. This portion of the capital program is either deemed “pre-built” service capacity to be considered as committed excess capacity to be recovered from future development, or represents a future service level increase that may be ineligible for development charge recovery.

Reserve fund balances that are available to fund development-related capital works as of December 31, 2021 are also shown in Table 2 for each service. Where a reserve fund is in a deficit, the amount of the deficit is included as a project eligible for development charge funding in the capital program. In contrast, if a reserve is in a positive position, available funding is applied to projects occurring in the initial years of the planning period and are reduced from the total DC eligible costs. A summary of the reserve fund balances is set out in Appendix E.

The remaining portion of the net capital program represents the development-related cost that can be included in the development charge. In all cases, as required, this amount is equal to or less than the maximum allowable funding envelope calculated on the final page of Table 1 for each

service. The result is the development-related net capital cost that is eligible for recovery against development over the period from 2022–2031.

Calculation of the Unadjusted Development Charge 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 for each service.

The first step when determining the unadjusted development charge rate is to allocate the development-related net capital cost between the residential and non-residential sectors. For all general services except the Library, Recreation & Parks Development, and LAC Debt, the development-related costs have been allocated 68 per cent residential and 32 per cent non-residential. This ratio is based on forecast changes in population in new housing units and employment in new non-residential floorspace over the planning period.

The development-related costs associated with the Library, Recreation & Parks Development, and Living Arts Centre Debt have been allocated 100 per cent to residential development because the need for these services is primarily driven by the residential sector. This is generally consistent with the approach used by municipalities across Ontario.

The residential share of the 2022-2031 development charge 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 new non-residential gross floor area (GFA). This yields a charge per square metre of new non-residential GFA.

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 are, therefore, accounted for in the calculation as allowed under the *DCA*. Based on the development forecast, the analysis calculates the development charges rate that is 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 charges 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 2.0 per cent is used for the funding requirements, and interest rates of 5.5 per cent (negative balance) and 3.5 per cent (positive balance) are used for borrowing/earnings on the funds. This yields effective real discount rates of 3.5 per cent and 1.5 per cent, respectively.

Table 3 for each service displays the results of the cash flow analysis and provides the adjusted per capita residential and per square metre (of GFA) non-residential development charges to be used in calculating the DC rates.

Appendix B.1

By-Law Enforcement Service

By-Law Enforcement Service

The By-Law Enforcement service consists of animal services, courthouse, central stores, and enforcement services. Section 2 (4) 18 of the *DCA* permits the City to levy DCs on capital costs related to by-law enforcement services and municipally administered court services. The benefits of the services are considered to be City-wide for the purposes of calculating the development charge.

Table 1 2012-2021 Historical Service Levels

Table 1 displays the By-Law Enforcement Service ten-year historical inventory for buildings, land, and fleet. The service is provided in three City-owned buildings (e.g. Animal Services Centre, Courthouse and the Central Stores Mavis North facility). The current building area totals approximately 87,210 square feet and has a current replacement value of \$62.19 million¹. The land associated with the buildings total 4.02 hectares and is valued at \$24.83 million. Vehicles add \$1.24 million to the value of the inventory.

The total replacement value of the inventory of capital assets for By-law Enforcement is \$88.26 million and the ten-year historical average service level is \$71.57 per capita and employment. The historical service level, multiplied by the ten-year forecast City net population growth, results in a ten-year maximum allowable funding envelope of \$6.93 million. Table 1 provides a summary of the level of service and the calculation of the ten-year historical service level. The calculation of the maximum allowable funding envelope is summarized as follows:

¹ The current building area of 87,210 square feet is net of the excess capacity related to the negative reserve fund balance associated with the Courthouse facility of \$3.54 million.

Ten-Year Funding Envelope Calculation	
Ten-Year Average Service Level (2012 – 2021)	\$71.57
Net Pop. and Emp. Growth (2022 – 2031)	96,890
Maximum Allowable Funding Envelope	\$6,934,417

The existing facilities have been examined and consideration has been given to whether or not “excess capacity” exists within the City’s infrastructure that may be available to partially meet the future servicing requirements. It has been determined that no “uncommitted excess capacity” exists within the City’s By-Law Enforcement infrastructure, and as such, no adjustments have been made to the service level calculations.

Table 2 2022 – 2031 Development-Related Capital Program and Calculation of the Unadjusted Development Charges

The development-related capital program for By-Law Enforcement Services totals \$3.54 million. It relates to a recovery of that portion of the negative balance in the existing By-Law Enforcement Services reserve fund, as at December 31, 2021, arising from previous capital expenditures for animal services, courthouse, central stores, and enforcement services (i.e. unrelated to development-related studies). The negative balance is largely related to the construction of the Provincial Offences Courthouse on Burnhamthorpe Road.

The entire \$3.54 million is eligible for recovery through development charge funding in the ten-year planning period. This amount is allocated 68 per cent to residential development, or \$2.39 million, and 32 per cent to non-residential development, or \$1.15 million. The allocation is based on the ratio of forecast changes in population in new housing units and employment over the ten-year planning period. The resulting unadjusted development charge rates are \$31.26 per capita for new residential

development and \$0.67 per square metre for new non-residential development.

Table 3 Cash Flow Analysis

The cash flow analysis is set out in Table 3. After cash flow, the residential charge increases to \$36.76 per capita and the non-residential charge increases to \$0.77 per square metre.

The following table summarizes the calculation of the By-Law Enforcement development charge.

BY-LAW ENFORCEMENT SUMMARY						
10-year Hist.	2022 - 2031		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/emp	\$/capita	\$/emp
\$71.57	\$3,544,749	\$3,544,749	\$31.26	\$0.67	\$36.76	\$0.77

APPENDIX B.1
TABLE B.1-1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
BY-LAW ENFORCEMENT

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Animal Services Centre - 735 Central Parkway West	13,812	13,812	13,812	13,812	13,812	13,812	13,812	13,810	13,810	13,810	\$720
Courthouse - 950 Burnhamthorpe	43,355	43,355	43,355	43,355	43,355	43,355	43,355	43,355	43,355	43,355	\$720
<i>Courthouse - 950 Burnhamthorpe (Excess Capacity)</i>	<i>(82)</i>	<i>(82)</i>	<i>(82)</i>	<i>(82)</i>	<i>(82)</i>	<i>(82)</i>	<i>(82)</i>	<i>(82)</i>	<i>(82)</i>	<i>(82)</i>	<i>\$720</i>
Mavis North: Central Stores & Enforcement- 3235 Mavis Road	30,128	30,128	30,128	30,128	30,128	30,128	-	30,128	30,128	30,128	\$700
Total (sq.ft.)	87,213	87,213	87,213	87,213	87,213	87,213	57,085	87,211	87,211	87,211	
Total (\$000)	\$62,191.0	\$62,191.0	\$62,191.0	\$62,191.0	\$62,191.0	\$62,191.0	\$41,101.4	\$62,189.5	\$62,189.5	\$62,189.5	

LAND Branch Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Animal Control Centre - Central Parkway W 735	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.62	0.62	0.62	\$6,177,500
Courthouse - 950 Burnhamthorpe Rd	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	\$6,177,500
Mavis North:Central Stores & Enforcement - 3235 Mavis Road	1.94	1.94	1.94	1.94	1.94	1.94	-	1.94	1.94	1.94	\$6,177,500
Total (ha)	4.01	4.01	4.01	4.01	4.01	4.01	2.07	4.02	4.02	4.02	
Total (\$000)	\$24,771.8	\$24,771.8	\$24,771.8	\$24,771.8	\$24,771.8	\$24,771.8	\$12,787.4	\$24,833.6	\$24,833.6	\$24,833.6	

FLEET Description - Animal Control, Parking	# of Fleet										UNIT COST (\$/vehicle)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Animal Control (Mid Sized Car)	18	15	16	16	16	17	17	13	18	18	\$42,000
Parking Control (Mid Sized Car)	25	13	14	14	14	13	13	13	13	16	\$30,000
Total (#)	43	28	30	30	30	30	30	26	31	34	
Total (\$000)	\$1,506.0	\$1,020.0	\$1,092.0	\$1,092.0	\$1,092.0	\$1,104.0	\$1,104.0	\$936.0	\$1,146.0	\$1,236.0	

**APPENDIX B.1
TABLE B.1-1**

**CITY OF MISSISSAUGA
CALCULATION OF SERVICE LEVELS
BY-LAW ENFORCEMENT**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historic Population	715,067	716,694	718,325	719,960	721,599	729,753	737,999	746,338	754,771	763,300
Historic Employment	438,045	441,752	445,702	449,890	454,310	456,553	458,807	461,075	463,357	465,650
Total Population & Employment	1,153,112	1,158,446	1,164,027	1,169,850	1,175,909	1,186,306	1,196,806	1,207,413	1,218,128	1,228,950

INVENTORY SUMMARY (\$000)

Buildings	\$62,191.0	\$62,191.0	\$62,191.0	\$62,191.0	\$62,191.0	\$62,191.0	\$41,101.4	\$62,189.5	\$62,189.5	\$62,189.5
Land	\$24,771.8	\$24,771.8	\$24,771.8	\$24,771.8	\$24,771.8	\$24,771.8	\$12,787.4	\$24,833.6	\$24,833.6	\$24,833.6
Fleet	\$1,506.0	\$1,020.0	\$1,092.0	\$1,092.0	\$1,092.0	\$1,104.0	\$1,104.0	\$936.0	\$1,146.0	\$1,236.0
Total (\$000)	\$88,468.7	\$87,982.7	\$88,054.7	\$88,054.7	\$88,054.7	\$88,066.7	\$54,992.8	\$87,959.1	\$88,169.1	\$88,259.1

SERVICE LEVEL (\$/pop & emp)

											Average Service Level
Buildings	\$53.93	\$53.68	\$53.43	\$53.16	\$52.89	\$52.42	\$34.34	\$51.51	\$51.05	\$50.60	\$50.70
Land	\$21.48	\$21.38	\$21.28	\$21.18	\$21.07	\$20.88	\$10.68	\$20.57	\$20.39	\$20.21	\$19.91
Fleet	\$1.31	\$0.88	\$0.94	\$0.93	\$0.93	\$0.93	\$0.92	\$0.78	\$0.94	\$1.01	\$0.96
Total (\$/pop & emp)	\$76.72	\$75.95	\$75.65	\$75.27	\$74.88	\$74.24	\$45.95	\$72.85	\$72.38	\$71.82	\$71.57

**CITY OF MISSISSAUGA
CALCULATION OF MAXIMUM ALLOWABLE
BY-LAW ENFORCEMENT**

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2012 - 2021	\$71.57
Net Population and Employment Growth 2022 - 2031	96,890
Maximum Allowable Funding Envelope	\$6,934,417

APPENDIX B.1

TABLE B.1-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
BY-LAW ENFORCEMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022- 2031	Other Dev. Related*
1.0 BY-LAW ENFORCEMENT										
1.1 Recovery of Negative Reserve Fund Balance										
1.1.1 Reserve Fund Balance as at December 31, 2021	2022	\$ 3,544,749	\$ -	\$ 3,544,749	0%	\$ -	\$ 3,544,749	\$ -	\$ 3,544,749	\$ -
Subtotal Recovery of Negative Reserve Fund Balance		\$ 3,544,749	\$ -	\$ 3,544,749		\$ -	\$ 3,544,749	\$ -	\$ 3,544,749	\$ -
TOTAL BY-LAW ENFORCEMENT		\$ 3,544,749	\$ -	\$ 3,544,749		\$ -	\$ 3,544,749	\$ -	\$ 3,544,749	\$ -

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	67.6%	\$2,395,631
10-Year Growth in Population in New Units		76,646
Unadjusted Development Charge Per Capita		\$31.26
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	32.4%	\$1,149,119
10-Year Non-Res GFA Growth in New Space		1,721,850
Unadjusted Development Charge Per Employee		\$0.67

2022 - 2031 Net Funding Envelope	\$6,934,417
Reserve Fund Balance	(\$3,544,749)

APPENDIX B.1

TABLE B.1-3

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
BY-LAW ENFORCEMENT
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

BY-LAW ENFORCEMENT	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$0.00	(\$2,197.87)	(\$2,049.25)	(\$1,883.72)	(\$1,700.15)	(\$1,494.99)	(\$1,246.93)	(\$974.19)	(\$675.20)	(\$348.08)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- By-Law Enforcement: Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- By-Law Enforcement: Non Inflated	\$2,395.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,395.6
- By-Law Enforcement: Inflated	\$2,395.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,395.6
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	6,980	7,064	7,150	7,235	7,377	7,998	8,103	8,206	8,312	8,221	76,646
REVENUE											
- DC Receipts: Inflated	\$256.6	\$264.9	\$273.5	\$282.2	\$293.5	\$324.6	\$335.4	\$346.5	\$358.0	\$361.2	\$3,096.4
INTEREST											
- Interest on Opening Balance	\$0.0	(\$120.9)	(\$112.7)	(\$103.6)	(\$93.5)	(\$82.2)	(\$68.6)	(\$53.6)	(\$37.1)	(\$19.1)	(\$691.4)
- Interest on In-year Transactions	(\$58.8)	\$4.6	\$4.8	\$4.9	\$5.1	\$5.7	\$5.9	\$6.1	\$6.3	\$6.3	(\$9.1)
TOTAL REVENUE	\$197.8	\$148.6	\$165.5	\$183.6	\$205.2	\$248.1	\$272.7	\$299.0	\$327.1	\$348.3	\$2,395.9
CLOSING CASH BALANCE	(\$2,197.9)	(\$2,049.3)	(\$1,883.7)	(\$1,700.2)	(\$1,495.0)	(\$1,246.9)	(\$974.2)	(\$675.2)	(\$348.1)	\$0.3	

2022 Adjusted Charge Per Capita

\$36.76

Allocation of Capital Program

Residential Sector	67.6%
Non-Residential Sector	32.4%

Rates for 2022

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

APPENDIX B.1

TABLE B.1-3

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
BY-LAW ENFORCEMENT
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

BY-LAW ENFORCEMENT	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$0.00	(\$1,020.95)	(\$914.14)	(\$796.52)	(\$667.30)	(\$525.70)	(\$436.14)	(\$338.70)	(\$232.83)	(\$118.04)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- By-Law Enforcement: Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- By-Law Enforcement: Non Inflated	\$1,149.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,149.1
- By-Law Enforcement: Inflated	\$1,149.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,149.1
NEW NON-RESIDENTIAL DEVELOPMENT											
- Non-Residential GFA	201,937	203,929	205,967	208,110	210,257	136,957	137,622	138,335	139,000	139,736	1,721,850
REVENUE											
- DC Receipts: Inflated	\$155.5	\$160.2	\$165.0	\$170.1	\$175.2	\$116.4	\$119.3	\$122.4	\$125.4	\$128.6	\$1,438.1
INTEREST											
- Interest on Opening Balance	\$0.0	(\$56.2)	(\$50.3)	(\$43.8)	(\$36.7)	(\$28.9)	(\$24.0)	(\$18.6)	(\$12.8)	(\$6.5)	(\$277.8)
- Interest on In-year Transactions	(\$27.3)	\$2.8	\$2.9	\$3.0	\$3.1	\$2.0	\$2.1	\$2.1	\$2.2	\$2.3	(\$4.9)
TOTAL REVENUE	\$128.2	\$106.8	\$117.6	\$129.2	\$141.6	\$89.6	\$97.4	\$105.9	\$114.8	\$124.3	\$1,155.4
CLOSING CASH BALANCE	(\$1,021.0)	(\$914.1)	(\$796.5)	(\$667.3)	(\$525.7)	(\$436.1)	(\$338.7)	(\$232.8)	(\$118.0)	\$6.3	

2022 Adjusted Charge Per Sq.M.

\$0.77

Allocation of Capital Program

Residential Sector	67.6%
Non-Residential Sector	32.4%

Rates for 2022

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

Appendix B.2

Development-Related Studies

Development-Related Studies

When calculating development charges, the *DCA* Section 7 (3) allows for the inclusion of the costs of undertaking studies related to the provision of development-related infrastructure, including development charges background studies. The benefits of the development related studies are deemed to be City-wide for the purpose of calculating the development charges.

Table 1 2022 – 2031 Development-Related Capital Program and Calculation of the Unadjusted Development Charges

Table 1 provides a list of development related studies the City anticipates undertaking during the 2022–2031 period. As required by the *DCA*, development charges studies must be undertaken every five years, thus two are included in the capital program. Provisions have been made for Strategic Waterfront Initiatives, Growth Management Studies, Special Planning Studies, and Major Transit Station Area (MTSA) Studies. The total estimated cost of all studies is \$11.95 million. No grants or subsidies have been identified.

A benefit to existing share totalling \$3.90 million has been identified for many of the studies. Below is a description of the benefit to existing share methodology used in development-related studies:

- **Development Related Studies (DCs)** –entirely related to growth and have 0% BTE.
- **Strategic Waterfront Implementation** – 25% to account for partly benefitting existing users.

- **Municipal Growth Management and MTSA Studies** – 25% to account for partly benefitting existing users.
- **Special Planning Studies** – 50% to account for partially benefitting existing users.

The remaining \$8.05 million is eligible for development charge funding in the ten-year planning period. This amount is allocated 68 per cent to residential development, or \$5.44 million, and 32 per cent to non-residential development, or \$2.61 million. The allocation is based on the ratio of forecast changes in population in new housing units and employment over the ten-year planning period. The resulting unadjusted development charge rates are \$70.99 per capita for new residential development and \$1.52 per square metre for new non-residential development.

Table 2 Cash Flow Analysis

After cash flow analysis, the residential charge increases to \$71.95 per capita and the non-residential charge remains the same at \$1.52 per square metre.

The following table summarizes the calculation of the Development-Related Studies development charge.

DEVELOPMENT-RELATED STUDIES SUMMARY					
2022 - 2031		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/emp	\$/capita	\$/emp
\$11,951,537	\$8,051,537	\$70.99	\$1.52	\$71.95	\$1.52

APPENDIX B.2

TABLE B.2-1

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
DEVELOPMENT-RELATED STUDIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
2.0 DEVELOPMENT-RELATED STUDIES										
2.1 Recovery of Negative Reserve Fund Balance										
2.1.1 Reserve Fund Balance as at December 31, 2021	2022	\$ 101,537	\$ -	\$ 101,537	0%	\$ -	\$ 101,537	\$ -	\$ 101,537	\$ -
Subtotal Recovery of Negative Reserve Fund Balance		\$ 101,537	\$ -	\$ 101,537		\$ -	\$ 101,537	\$ -	\$ 101,537	\$ -
2.2 Development-Related Studies (DCs)										
2.2.1 DC Background Study 2022	2022	\$ 200,000	\$ -	\$ 200,000	0%	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
2.2.2 DC Background Study 2026	2026	\$ 200,000	\$ -	\$ 200,000	0%	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
2.2.3 DC Background Study 2026	2027	\$ 200,000	\$ -	\$ 200,000	0%	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
2.2.4 DC Background Study 2030	2030	\$ 200,000	\$ -	\$ 200,000	0%	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
2.2.5 DC Background Study 2030	2031	\$ 200,000	\$ -	\$ 200,000	0%	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
Subtotal Development-Related Studies (DCs)		\$ 1,000,000	\$ -	\$ 1,000,000		\$ -	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -
2.3 Strategic Waterfront Implementation										
2.3.1 Strategic Waterfront Implementation	2022	\$ 200,000	\$ -	\$ 200,000	25%	\$ 50,000	\$ 150,000	\$ -	\$ 150,000	\$ -
2.3.2 Strategic Waterfront Implementation	2023	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.3.3 Strategic Waterfront Implementation	2024	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.3.4 Strategic Waterfront Implementation	2025	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.3.5 Strategic Waterfront Implementation	2026	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.3.6 Strategic Waterfront Implementation	2027	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.3.7 Strategic Waterfront Implementation	2028	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.3.8 Strategic Waterfront Implementation	2029	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.3.9 Strategic Waterfront Implementation	2030	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
Subtotal Strategic Waterfront Implementation		\$ 2,600,000	\$ -	\$ 2,600,000		\$ 650,000	\$ 1,950,000	\$ -	\$ 1,950,000	\$ -

APPENDIX B.2

TABLE B.2-1

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
DEVELOPMENT-RELATED STUDIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
2.4 Municipal Growth Management										
2.4.1 Municipal Growth Management	2022	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.4.2 Municipal Growth Management	2023	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.4.3 Municipal Growth Management	2024	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.4.4 Municipal Growth Management	2025	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.4.5 Municipal Growth Management	2026	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.4.6 Municipal Growth Management	2027	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.4.7 Municipal Growth Management	2028	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.4.8 Municipal Growth Management	2029	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.4.9 Municipal Growth Management	2030	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
2.4.10 Municipal Growth Management	2031	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 225,000	\$ -
Subtotal Municipal Growth Management		\$ 3,000,000	\$ -	\$ 3,000,000		\$ 750,000	\$ 2,250,000	\$ -	\$ 2,250,000	\$ -
2.5 Special Planning Studies										
2.5.1 Special Planning Studies	2022	\$ 250,000	\$ -	\$ 250,000	50%	\$ 125,000	\$ 125,000	\$ -	\$ 125,000	\$ -
2.5.2 Special Planning Studies	2023	\$ 500,000	\$ -	\$ 500,000	50%	\$ 250,000	\$ 250,000	\$ -	\$ 250,000	\$ -
2.5.3 Special Planning Studies	2024	\$ 500,000	\$ -	\$ 500,000	50%	\$ 250,000	\$ 250,000	\$ -	\$ 250,000	\$ -
2.5.4 Special Planning Studies	2025	\$ 500,000	\$ -	\$ 500,000	50%	\$ 250,000	\$ 250,000	\$ -	\$ 250,000	\$ -
2.5.5 Special Planning Studies	2026	\$ 500,000	\$ -	\$ 500,000	50%	\$ 250,000	\$ 250,000	\$ -	\$ 250,000	\$ -
2.5.6 Special Planning Studies	2027	\$ 500,000	\$ -	\$ 500,000	50%	\$ 250,000	\$ 250,000	\$ -	\$ 250,000	\$ -
2.5.7 Special Planning Studies	2028	\$ 500,000	\$ -	\$ 500,000	50%	\$ 250,000	\$ 250,000	\$ -	\$ 250,000	\$ -
2.5.8 Special Planning Studies	2029	\$ 500,000	\$ -	\$ 500,000	50%	\$ 250,000	\$ 250,000	\$ -	\$ 250,000	\$ -
2.5.9 Special Planning Studies	2030	\$ 500,000	\$ -	\$ 500,000	50%	\$ 250,000	\$ 250,000	\$ -	\$ 250,000	\$ -
2.5.10 Special Planning Studies	2031	\$ 500,000	\$ -	\$ 500,000	50%	\$ 250,000	\$ 250,000	\$ -	\$ 250,000	\$ -
Subtotal Special Planning Studies		\$ 4,750,000	\$ -	\$ 4,750,000		\$ 2,375,000	\$ 2,375,000	\$ -	\$ 2,375,000	\$ -

APPENDIX B.2

TABLE B.2-1

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
DEVELOPMENT-RELATED STUDIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
2.6 Major Transit Station Area (MTSA) Studies										
2.6.1 MTSA Studies	2022	\$ 250,000	\$ -	\$ 250,000	25%	\$ 62,500	\$ 187,500	\$ -	\$ 187,500	\$ -
2.6.2 MTSA Studies	2023	\$ 250,000	\$ -	\$ 250,000	25%	\$ 62,500	\$ 187,500	\$ -	\$ 187,500	\$ -
Subtotal Major Transit Station Area (MTSA) Studies		\$ 500,000	\$ -	\$ 500,000		\$ 125,000	\$ 375,000	\$ -	\$ 375,000	\$ -
TOTAL DEVELOPMENT-RELATED STUDIES		\$ 11,951,537	\$ -	\$ 11,951,537		\$ 3,900,000	\$ 8,051,537	\$ -	\$ 8,051,537	\$ -

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	67.6%	\$5,441,431
10-Year Growth in Population in New Units		76,646
Unadjusted Development Charge Per Capita		\$70.99
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	32.4%	\$2,610,106
10-Year Non-Res GFA Growth in New Space		1,721,850
Unadjusted Development Charge Per Employee		\$1.52

Reserve Fund Balance	(\$101,537)
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APPENDIX B.2

TABLE B.2-2

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
DEVELOPMENT-RELATED STUDIES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

DEVELOPMENT-RELATED STUDIES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	(\$68.62)	(\$172.66)	(\$278.10)	(\$249.60)	(\$212.06)	(\$309.89)	(\$364.12)	(\$258.18)	(\$135.23)	(\$154.94)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Development-Related Studies: Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Development-Related Studies: Non Inflated	\$599.8	\$599.8	\$473.1	\$473.1	\$608.2	\$608.2	\$473.1	\$473.1	\$608.2	\$456.2	\$5,372.8
- Development-Related Studies: Inflated	\$599.8	\$611.8	\$492.2	\$502.0	\$658.4	\$671.5	\$532.8	\$543.4	\$712.7	\$545.2	\$5,869.8
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	6,980	7,064	7,150	7,235	7,377	7,998	8,103	8,206	8,312	8,221	76,646
REVENUE											
- DC Receipts: Inflated	\$502.2	\$518.4	\$535.2	\$552.4	\$574.5	\$635.4	\$656.6	\$678.2	\$700.7	\$706.9	\$6,060.5
INTEREST											
- Interest on Opening Balance	(\$3.8)	(\$9.5)	(\$15.3)	(\$13.7)	(\$11.7)	(\$17.0)	(\$20.0)	(\$14.2)	(\$7.4)	(\$8.5)	(\$121.2)
- Interest on In-year Transactions	(\$2.7)	(\$2.6)	\$0.8	\$0.9	(\$2.3)	(\$1.0)	\$2.2	\$2.4	(\$0.3)	\$2.8	\$0.1
TOTAL REVENUE	\$495.8	\$506.4	\$520.7	\$539.6	\$560.6	\$617.3	\$638.7	\$666.4	\$692.9	\$701.2	\$5,939.5
CLOSING CASH BALANCE	(\$172.7)	(\$278.1)	(\$249.6)	(\$212.1)	(\$309.9)	(\$364.1)	(\$258.2)	(\$135.2)	(\$154.9)	\$1.1	

2022 Adjusted Charge Per Capita

\$71.95

Allocation of Capital Program

Residential Sector	67.6%
Non-Residential Sector	32.4%

Rates for 2022

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

APPENDIX B.2

TABLE B.2-2

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
DEVELOPMENT-RELATED STUDIES
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

DEVELOPMENT-RELATED STUDIES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	(\$32.92)	(\$15.15)	\$7.13	\$98.57	\$198.56	\$236.16	\$149.61	\$134.32	\$119.37	\$26.66	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Development-Related Studies: Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Development-Related Studies: Non Inflated	\$287.7	\$287.7	\$226.9	\$226.9	\$291.8	\$291.8	\$226.9	\$226.9	\$291.8	\$218.8	\$2,577.2
- Development-Related Studies: Inflated	\$287.7	\$293.5	\$236.1	\$240.8	\$315.8	\$322.1	\$255.6	\$260.7	\$341.8	\$261.5	\$2,815.6
NEW NON-RESIDENTIAL DEVELOPMENT											
- Non-Residential GFA	201,937	203,929	205,967	208,110	210,257	136,957	137,622	138,335	139,000	139,736	1,721,850
REVENUE											
- DC Receipts: Inflated	\$306.9	\$316.2	\$325.7	\$335.7	\$345.9	\$229.8	\$235.6	\$241.5	\$247.5	\$253.8	\$2,838.8
INTEREST											
- Interest on Opening Balance	(\$1.8)	(\$0.8)	\$0.2	\$3.5	\$6.9	\$8.3	\$5.2	\$4.7	\$4.2	\$0.9	\$31.3
- Interest on In-year Transactions	\$0.3	\$0.4	\$1.6	\$1.7	\$0.5	(\$2.5)	(\$0.5)	(\$0.5)	(\$2.6)	(\$0.2)	(\$1.9)
TOTAL REVENUE	\$305.5	\$315.7	\$327.5	\$340.8	\$353.4	\$235.6	\$240.3	\$245.7	\$249.1	\$254.6	\$2,868.2
CLOSING CASH BALANCE	(\$15.2)	\$7.1	\$98.6	\$198.6	\$236.2	\$149.6	\$134.3	\$119.4	\$26.7	\$19.7	

2022 Adjusted Charge Per Sq.M.

\$1.52

Allocation of Capital Program

Residential Sector	67.6%
Non-Residential Sector	32.4%

Rates for 2022

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

Appendix B.3

Library Services

Library Services

The Mississauga Public Library offers a wide array of adult and children’s services, library programs and room rentals. Each branch has a variety of collection materials available for the community’s use. The benefits of Library Services are deemed to be City-wide for the purposes of calculating the development charge.

Table 1 2012-2021 Historical Service Levels

Table 1 displays the Library Services ten-year historical inventory for buildings, land, and materials. The current building space amounts to approximately 342,000 square feet and has a replacement value of \$280.48 million. Included in this replacement value are the costs associated with fixtures, furnishings, and equipment (excluding computer equipment) in each library branch. The land associated with the buildings totals 8.26 hectares and is valued at \$94.27 million. The land value for all the City’s library facilities, with the exception of the Central Library, have a replacement cost of \$8.65 million per hectare. The Central Library has a higher replacement value of \$43.24 million, recognizing that the value of land in the central urban area is more expensive. Finally, the collection materials are valued at \$32.01 million and three vehicles are valued at \$192,000.

The 2021 full replacement value of the inventory of capital assets for the Library is \$406.95 million and the ten-year historical average service level is \$550.73 per capita. The historical service level, multiplied by the ten-year forecast City net population growth, results in a ten-year maximum allowable funding envelope of \$30.18 million.

Table 1 provides a summary of the level of service and the calculation of the ten-year historical service level. The calculation of the maximum allowable funding envelope is summarized as follows:

Ten-Year Funding Envelope Calculation	
Ten-Year Average Service Level (2012 – 2021)	\$550.73
Net Population Growth (2022 – 2031)	54,800
Maximum Allowable Funding Envelope	\$30,180,004

The existing facilities have been examined and consideration has been given to whether or not “excess capacity” exists within the City’s infrastructure that may be available to partially meet the future servicing requirements. It has been determined that no “uncommitted excess capacity” exists within the City’s Library Services infrastructure, and as such, no adjustments have been made to the service level calculations.

Table 2 2022 – 2031 Development-Related Capital Program & Calculation of the Unadjusted Development Charge

The development-related capital program for Library Services amounts to \$83.11 million. Of that amount, \$8.56 million relates to grants, subsidies, or other external funding sources that have been identified to fund the South Common Library renovation. The program includes \$74.53 million in net municipal costs for new library branches, branch expansions, and provisions for new express libraries and kiosk libraries.

There are various projects that are entirely growth related and have a 0% BTE. These are the Express Libraries, Laptop Lending Kiosk Expansions, Library Collection Increases and a Library Future Directions Master Plan. Other capital projects have varied BTE shares as described below:

- **Central Library Redevelopment (4th floor only)** – 63% related to replacement of existing floor space and actual spent DC funds.
- **South Common Library Renovation – Design and Construction** – 78% related to replacement or renovation of existing space vs total space.
- **Port Credit Library and Land** – 50% as the current Port Credit Library is approximately 8,100 square feet and would be replaced with a facility roughly double in size.
- **Construction of Sheridan Library** – 35% as the current Sheridan Library is approximately 5,600 square feet and would be replaced with a facility more than double in size.
- **Lakeview Library** – 47% based on replacing existing facility with a library approximately double in size.
- **Design and Construction of Cooksville Library** – 31% based on replacement vs new space of the future total size of the branch.

The result is a substantial portion related to the projects above, \$32.41 million, is removed from development charge consideration as a benefit to existing share.

The City is also anticipating adding \$1.00 million worth of collection materials and will be undertaking a master plan in 2022 at an estimated cost of \$130,000.

Of the Library Services development-related capital costs approximately \$7.02 million, can be funded from existing development charge reserve funds. An additional share of \$4.92 million is attributed to recovery from other growth related funding sources, such as Community Benefits Charges as the DC eligible program exceeds the calculated maximum permitted funding envelope. The remaining \$30.18 million is eligible for development

charge funding and is allocated entirely against future residential development in the City. This results in an unadjusted development charge of \$393.76 per capita.

Table 3 Cash Flow Analysis

The cash flow analysis is set out in Table 3. It considers the timing of the projects as well as the timing of the development charge revenues to adjust the calculated rates. After cash flow, the residential calculated charge is increased to \$396.60 per capita. The increase reflects the fact that the majority of the expenditures are in the first five years of the program.

The following table summarizes the calculation of the Library Services development charge:

LIBRARY SERVICES SUMMARY						
10-year Hist.	2022 - 2031		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/emp	\$/capita	\$/emp
\$550.73	\$83,106,914	\$30,180,004	\$393.76	\$0.00	\$396.60	\$0.00

APPENDIX B.3
TABLE B.3-1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
LIBRARY SERVICES

BUILDINGS Branch Name	# of Square Feet										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/sq. ft.)
Burnhamthorpe - 3650 Dixie Rd	42,164	42,164	28,687	28,687	28,687	28,687	28,687	28,687	28,687	28,687	\$820
Central Library - 301 Burnhamthorpe W.	120,183	120,183	120,183	120,183	120,183	126,083	126,083	126,083	126,083	126,083	\$820
Churchill Meadows - 3801 Thomas Street	14,510	14,510	14,510	14,510	14,510	14,510	14,510	14,510	14,510	14,510	\$820
Clarkson - 2475 Truscott Dr	5,066	5,066	5,066	5,066	5,066	5,066	5,066	5,066	5,066	5,066	\$820
Cooksville - 3024 Hurontario St.	5,005	5,005	5,005	5,005	5,005	5,005	5,005	5,005	5,005	5,005	\$820
Courtneypark - 730 Courtneypark Drive West	26,738	26,738	26,738	26,738	26,738	26,738	26,738	26,738	26,738	26,738	\$820
Erin Meadows - 2800 Erin Centre Blvd	20,127	20,127	20,127	20,127	20,127	20,127	20,127	20,127	20,127	20,127	\$820
Frank McKechnie - 310 Bristol Rd East	14,500	14,500	14,500	14,500	14,500	14,500	14,500	14,500	14,500	14,500	\$820
Lakeview - 1110 Atwater Avenue	7,589	7,589	7,589	7,589	7,589	7,589	7,589	7,589	7,589	7,589	\$820
Lorne Park - 1474 Truscott Drive	11,926	11,926	11,926	11,926	11,926	11,926	11,926	11,926	11,926	11,926	\$820
Malton - 3540 Morningstar Drive	14,137	14,137	14,137	14,137	14,137	14,137	14,137	14,137	14,137	14,137	\$820
Meadowvale Library - 6655 Glen Erin Dr	-	-	-	-	15,855	15,855	15,855	15,855	15,855	15,855	\$820
Mississauga Valley CC - 1275 Miss. Valley	8,839	8,839	8,839	8,839	8,839	8,839	8,839	8,839	8,839	8,839	\$820
Port Credit - 20 Lakeshore Rd E.	8,116	8,116	8,116	8,116	8,116	8,116	8,116	8,116	8,116	8,116	\$820
Sheridan - 2225 Erin Mills Pkwy	5,651	5,651	5,651	5,651	5,651	5,651	5,651	5,651	5,651	5,651	\$820
South Common - 2233 South Millway Dr	12,498	12,498	12,498	12,498	12,498	12,498	12,498	12,498	12,498	12,498	\$820
Streetsville - 112 Queen Street South	9,332	9,332	9,332	9,332	9,332	9,332	9,332	9,332	9,332	9,332	\$820
Woodlands - 1030 McBride Avenue	5,500	5,500	-	-	-	-	-	-	-	-	\$820
Woodlands - 3255 Erindale Station Rd	-	-	7,384	7,384	7,384	7,384	7,384	7,384	7,384	7,384	\$820
Total (sq.ft.)	331,881	331,881	320,288	320,288	336,143	342,043	342,043	342,043	342,043	342,043	
Total (\$000)	\$272,142.4	\$272,142.4	\$262,636.2	\$262,636.2	\$275,637.3	\$280,475.3	\$280,475.3	\$280,475.3	\$280,475.3	\$280,475.3	

**APPENDIX B.3
TABLE B.3-1**

**CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
LIBRARY SERVICES**

LAND Branch Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Burnhamthorpe - 3650 Dixie Rd	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	\$8,648,500
Central Library - 301 Burnhamthorpe W.	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	\$43,242,500
Churchill Meadows - 3801 Thomas Street	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	\$8,648,500
Clarkson - 2475 Truscott Dr	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	\$8,648,500
Cooksville - 3024 Hurontario St.	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$8,648,500
Courtneypark - 730 Courtneypark Drive West	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	\$8,648,500
Erin Meadows - 2800 Erin Centre Blvd	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	\$8,648,500
Frank McKechnie - 310 Bristol Rd East	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	\$8,648,500
Lakeview - 1110 Atwater Avenue	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	\$8,648,500
Lorne Park - 1474 Truscott Drive	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	\$8,648,500
Malton - 3540 Morningstar Drive	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	\$8,648,500
Meadowvale Library - 6655 Glen Erin Dr	-	-	-	-	0.41	0.41	0.41	0.41	0.41	0.41	\$8,648,500
Mississauga Valley CC - 1275 Miss. Valley	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	\$8,648,500
Port Credit - 20 Lakeshore Rd E.	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	\$8,648,500
Sheridan - 2225 Erin Mills Pkwy	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$8,648,500
South Common - 2233 South Millway Dr	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	\$8,648,500
Streetsville - 112 Queen Street South	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	\$8,648,500
Woodlands - 1030 McBride Avenue	0.14	0.14	-	-	-	-	-	-	-	-	\$8,648,500
Woodlands - 3255 Erindale Station Rd	-	-	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	\$8,648,500
Total (ha)	7.55	7.55	7.85	7.85	8.26	8.26	8.26	8.26	8.26	8.26	
Total (\$000)	\$88,128.2	\$88,128.2	\$90,722.8	\$90,722.8	\$94,268.7	\$94,268.7	\$94,268.7	\$94,268.7	\$94,268.7	\$94,268.7	

APPENDIX B.3

TABLE B.3-1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
LIBRARY SERVICES

MATERIALS Collection	# of Collection Materials										UNIT COST (\$/item)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Material Inventory	1,325,554	1,307,289	1,187,469	1,105,983	959,346	1,042,144	1,141,165	1,088,052	1,085,319	965,093	\$31.00
Digital Collections	\$934,609	\$936,735	\$938,867	\$667,817	\$883,173	\$1,225,959	\$1,229,559	\$1,340,559	\$1,994,474	\$2,094,474	
Total (#)	1,325,554	1,307,289	1,187,469	1,105,983	959,346	1,042,144	1,141,165	1,088,052	1,085,319	965,093	
Total (\$000)	\$42,026.8	\$41,462.69	\$37,750.41	\$34,953.29	\$30,622.90	\$33,532.42	\$36,605.68	\$35,070.17	\$35,639.36	\$32,012.36	

FLEET Collection	# of Assets										UNIT COST (\$/item)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Cube Vans (2 Ton)	3	3	3	3	3	4	4	2	3	3	\$64,000
Total (#)	3	3	3	3	3	4	4	2	3	3	
Total (\$000)	\$192.0	\$192.00	\$192.00	\$192.00	\$192.00	\$256.00	\$256.00	\$128.00	\$192.00	\$192.00	

**APPENDIX B.3
TABLE B.3-1**

**CITY OF MISSISSAUGA
CALCULATION OF SERVICE LEVELS
LIBRARY SERVICES**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historic Population	715,067	716,694	718,325	719,960	721,599	729,753	737,999	746,338	754,771	763,300

INVENTORY SUMMARY (\$000)

Buildings	\$272,142.4	\$272,142.4	\$262,636.2	\$262,636.2	\$275,637.3	\$280,475.3	\$280,475.3	\$280,475.3	\$280,475.3	\$280,475.3
Land	\$88,128.2	\$88,128.2	\$90,722.8	\$90,722.8	\$94,268.7	\$94,268.7	\$94,268.7	\$94,268.7	\$94,268.7	\$94,268.7
Materials	\$42,026.8	\$41,462.7	\$37,750.4	\$34,953.3	\$30,622.9	\$33,532.4	\$36,605.7	\$35,070.2	\$35,639.4	\$32,012.4
Fleet	\$192.0	\$192.0	\$192.0	\$192.0	\$192.0	\$256.0	\$256.0	\$128.0	\$192.0	\$192.0
Total (\$000)	\$402,489.4	\$401,925.3	\$391,301.3	\$388,504.2	\$400,720.8	\$408,532.3	\$411,605.6	\$409,942.1	\$410,575.3	\$406,948.3

SERVICE LEVEL (\$/capita)

**Average
Service
Level**

Buildings	\$380.58	\$379.72	\$365.62	\$364.79	\$381.98	\$384.34	\$380.05	\$375.80	\$371.60	\$367.45	\$375.19
Land	\$123.24	\$122.96	\$126.30	\$126.01	\$130.64	\$129.18	\$127.74	\$126.31	\$124.90	\$123.50	\$126.08
Materials	\$58.77	\$57.85	\$52.55	\$48.55	\$42.44	\$45.95	\$49.60	\$46.99	\$47.22	\$41.94	\$49.19
Fleet	\$0.27	\$0.27	\$0.27	\$0.27	\$0.27	\$0.35	\$0.35	\$0.17	\$0.25	\$0.25	\$0.27
Total (\$/capita)	\$562.87	\$560.80	\$544.74	\$539.62	\$555.32	\$559.82	\$557.73	\$549.27	\$543.97	\$533.14	\$550.73

**CITY OF MISSISSAUGA
CALCULATION OF MAXIMUM ALLOWABLE
LIBRARY SERVICES**

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2012 - 2021	\$550.73
Net Population Growth 2022 - 2031	54,800
Maximum Allowable Funding Envelope	\$30,180,004

APPENDIX B.3

TABLE B.3-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
LIBRARY SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
3.0 LIBRARY SERVICES										
3.1 Buildings										
3.1.1 Central Library Redevelopment (4th Floor only)	2022	\$ 5,239,758	\$ -	\$ 5,239,758	63%	\$ 3,312,258	\$ 1,927,500	\$ 1,927,500	\$ -	\$ -
3.1.2 South Common Library renovation - design & construction	2022	\$ 332,690	\$ 219,417	\$ 113,273	78%	\$ 88,353	\$ 24,920	\$ 24,920	\$ -	\$ -
3.1.3 Port Credit Library Land	2023	\$ 5,000,000	\$ -	\$ 5,000,000	50%	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ -	\$ -
3.1.4 South Common Library renovation - design & construction	2023	\$ 568,560	\$ 374,980	\$ 193,580	78%	\$ 150,992	\$ 42,588	\$ 42,588	\$ -	\$ -
3.1.5 Express Libraries	2023	\$ 415,000	\$ -	\$ 415,000	0%	\$ -	\$ 415,000	\$ 415,000	\$ -	\$ -
3.1.6 Laptop Lending Kiosk Expansion (20)	2023	\$ 448,440	\$ -	\$ 448,440	0%	\$ -	\$ 448,440	\$ 448,440	\$ -	\$ -
3.1.7 South Common Library renovation - design & construction	2024	\$ 6,058,460	\$ 3,995,706	\$ 2,062,754	78%	\$ 1,608,948	\$ 453,806	\$ 453,806	\$ -	\$ -
3.1.8 Laptop Lending Kiosk Expansion (20)	2024	\$ 331,940	\$ -	\$ 331,940	0%	\$ -	\$ 331,940	\$ 208,879	\$ 123,061	\$ -
3.1.9 Express Libraries (LRT and Erin Mills Transit Terminal)	2024	\$ 622,500	\$ -	\$ 622,500	0%	\$ -	\$ 622,500	\$ -	\$ 622,500	\$ -
3.1.10 South Common Library renovation - design & construction	2025	\$ 6,043,010	\$ 3,985,517	\$ 2,057,493	78%	\$ 1,604,845	\$ 452,648	\$ -	\$ 452,648	\$ -
3.1.11 Port Credit Library	2025	\$ 5,333,300	\$ -	\$ 5,333,300	50%	\$ 2,666,650	\$ 2,666,650	\$ -	\$ 2,666,650	\$ -
3.1.12 Laptop Lending Kiosk Expansion (20)	2025	\$ 339,140	\$ -	\$ 339,140	50%	\$ 169,570	\$ 169,570	\$ -	\$ 169,570	\$ -
3.1.13 Laptop Lending Kiosk Expansion (20)	2026	\$ 266,316	\$ -	\$ 266,316	50%	\$ 133,158	\$ 133,158	\$ -	\$ 133,158	\$ -
3.1.14 Port Credit Library	2026	\$ 5,333,400	\$ -	\$ 5,333,400	50%	\$ 2,666,700	\$ 2,666,700	\$ -	\$ 2,666,700	\$ -
3.1.15 Construction of Sheridan Library	2026	\$ 15,000,000	\$ -	\$ 15,000,000	35%	\$ 5,250,000	\$ 9,750,000	\$ -	\$ 9,750,000	\$ -
3.1.16 Lakeview Library- Land	2026	\$ 2,500,000	\$ -	\$ 2,500,000	47%	\$ 1,175,000	\$ 1,325,000	\$ -	\$ 1,325,000	\$ -
3.1.17 Lakeview Library- Construction	2027	\$ 2,803,700	\$ -	\$ 2,803,700	47%	\$ 1,317,739	\$ 1,485,961	\$ -	\$ 1,485,961	\$ -
3.1.18 Port Credit Library	2027	\$ 5,333,300	\$ -	\$ 5,333,300	50%	\$ 2,666,650	\$ 2,666,650	\$ -	\$ 2,666,650	\$ -
3.1.19 Lakeview Library- Construction	2028	\$ 2,803,700	\$ -	\$ 2,803,700	47%	\$ 1,317,739	\$ 1,485,961	\$ -	\$ 1,485,961	\$ -
3.1.20 Lakeview Library- Construction	2029	\$ 2,803,700	\$ -	\$ 2,803,700	47%	\$ 1,317,739	\$ 1,485,961	\$ -	\$ 1,485,961	\$ -
3.1.21 Design and Construction of Cooksville Library	2029	\$ 14,400,000	\$ -	\$ 14,400,000	31%	\$ 4,464,000	\$ 9,936,000	\$ -	\$ 5,016,184	\$ 4,919,816
Subtotal Buildings, Land & Furnishings		\$ 81,976,914	\$ 8,575,620	\$ 73,401,294		\$ 32,410,341	\$ 40,990,953	\$ 6,021,133	\$ 30,050,004	\$ 4,919,816

APPENDIX B.3

TABLE B.3-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
LIBRARY SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
3.2 Materials and Equipment										
3.2.1 Library Collection Increases to reflect the growth in City	Various	\$ 1,000,000	\$ -	\$ 1,000,000	0%	\$ -	\$ 1,000,000	\$ 1,000,000	\$ -	\$ -
Subtotal Materials and Equipment		\$ 1,000,000	\$ -	\$ 1,000,000		\$ -	\$ 1,000,000	\$ 1,000,000	\$ -	\$ -
3.3 Development-Related Studies										
3.3.1 Library Future Directions Master Plan	2022	\$ 130,000	\$ -	\$ 130,000	0%	\$ -	\$ 130,000	\$ -	\$ 130,000	\$ -
Subtotal Library Furniture & Equipment		\$ 130,000	\$ -	\$ 130,000		\$ -	\$ 130,000	\$ -	\$ 130,000	\$ -
TOTAL LIBRARY SERVICES		\$ 83,106,914	\$ 8,575,620	\$ 74,531,294		\$ 32,410,341	\$ 42,120,953	\$ 7,021,133	\$ 30,180,004	\$ 4,919,816

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	100%	\$30,180,004
10-Year Growth in Population in New Units		76,646
Unadjusted Development Charge Per Capita		\$393.76
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	0%	\$0
10-Year Non-Res GFA Growth in New Space		1,721,850
Unadjusted Development Charge Per Employee		\$0.00

2022 - 2031 Net Funding Envelope	\$30,180,004
Reserve Fund Balance	\$7,021,133

APPENDIX B.3

TABLE B.3-3

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
LIBRARY SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

LIBRARY SERVICES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$7,021.1	\$7,863.0	\$7,399.9	\$9,064.1	\$8,814.9	(\$3,165.4)	(\$4,565.4)	(\$2,951.3)	(\$7,064.8)	(\$3,642.6)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Library Services: Prior Growth	\$2,052.4	\$3,506.0	\$762.7	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$7,021.1
- Library Services: Non Inflated	\$130.0	\$0.0	\$745.6	\$3,288.9	\$13,874.9	\$4,152.6	\$1,486.0	\$6,502.1	\$0.0	\$0.0	\$30,180.0
- Library Services: Inflated	\$2,182.4	\$3,576.1	\$1,569.2	\$3,596.3	\$15,126.8	\$4,695.2	\$1,786.0	\$7,583.8	\$117.2	\$119.5	\$40,352.6
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	6,980	7,064	7,150	7,235	7,377	7,998	8,103	8,206	8,312	8,221	76,646
REVENUE											
- DC Receipts: Inflated	\$2,768.3	\$2,857.6	\$2,950.3	\$3,045.0	\$3,166.9	\$3,502.2	\$3,619.1	\$3,738.4	\$3,862.4	\$3,896.5	\$33,406.7
INTEREST											
- Interest on Opening Balance	\$245.7	\$275.2	\$259.0	\$317.2	\$308.5	(\$174.1)	(\$251.1)	(\$162.3)	(\$388.6)	(\$200.3)	\$229.3
- Interest on In-year Transactions	\$10.3	(\$19.8)	\$24.2	(\$15.2)	(\$328.9)	(\$32.8)	\$32.1	(\$105.7)	\$65.5	\$66.1	(\$304.2)
TOTAL REVENUE	\$3,024.3	\$3,113.1	\$3,233.4	\$3,347.1	\$3,146.5	\$3,295.2	\$3,400.1	\$3,470.3	\$3,539.4	\$3,762.3	\$33,331.7
CLOSING CASH BALANCE	\$7,863.0	\$7,399.9	\$9,064.1	\$8,814.9	(\$3,165.4)	(\$4,565.4)	(\$2,951.3)	(\$7,064.8)	(\$3,642.6)	\$0.2	

2022 Adjusted Charge Per Capita

\$396.60

Allocation of Capital Program

Residential Sector	100.0%
Non-Residential Sector	0.0%

Rates for 2022

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

Appendix B.4

Fire Services

Fire Services

Mississauga Fire and Emergency Services (MFES) operates twenty-one stations and one training centre. The Department is responsible for fire prevention, public education, communications (including dispatching), and fire suppression.

Table 1 2012-2021 Historical Service Levels

The historical service level, as shown in Table 1, includes an inventory of fire buildings, land, vehicles as well as furniture and equipment. In total, the City has approximately 242,000 square feet in fire stations, training related space and associated gross floor area at City Hall related to fire services for inspecting plans. As discussed below, a share of the gross floor area, approximately 6,476 square feet has been removed as committed excess capacity. The total replacement cost of these facilities is valued at \$232.19 million. The land associated with these facilities totals 24.04 hectares and the associated replacement cost with this land area is \$209.98 million. Fire vehicles, which include fire trucks, vans and pickups, add \$54.78 million to the total value of the inventory. Finally, equipment related to fire vehicles, stations and personal fire fighter equipment is valued at \$29.92 million.

The 2021 full replacement value of the inventory of capital assets for Fire Services is \$526.89 million and the ten-year historical average service level is \$437.77 per population and employee. The historical service level, multiplied by the ten-year forecast City net population growth, results in a ten-year maximum allowable funding envelope of \$42.42 million.

Table 1 provides a summary of the level of service and the calculation of the ten-year historical service level. The calculation of the maximum allowable funding envelope is summarized as follows:

Ten-Year Funding Envelope Calculation	
Ten-Year Average Service Level (2012 – 2021)	\$437.77
Net Pop. and Emp. Growth (2019 – 2028)	96,890
Maximum Allowable Funding Envelope	\$42,415,535

The existing facilities have been examined and consideration has been given to whether or not “excess capacity” exists within the City’s infrastructure that may be available to partially meet the future servicing requirements. It has been determined that recent facility construction, primarily related to the Garry W. Morden Fire Training Centre and Station 120, has resulted in an excess capacity of service. A portion of the facilities is included for recovery in the capital program. As such, the related portion of the facilities has been removed from the historical inventory calculation.

Table 2 2022 – 2031 Development-Related Capital Program & Calculation of the Unadjusted Development Charge

The capital program includes the recovery of a negative reserve fund balance of \$6.60 million. The balance largely relates to the construction of the Garry W. Morden Fire Training Centre (opened in 2012) and Fire Station 120 (opened in 2019). It is noted that the associated share of the Fire Training Centre and Station 120 has been removed from the historical inventory.

In addition to the negative reserve fund balance, six stations are proposed to be constructed over the 2022 to 2031 period. Fire Station 124, 123, 125 and 128, as well as the associated vehicles and equipment are proposed to be fully funded from non-DC revenue sources (e.g. property taxes) and are included in the DC capital program for transparency.

Fire Stations 126 and 127 are proposed to be funded from development charges and are included in the capital program. Fire Stations 126 and 127

each amount to \$15.00 million in facility costs and \$2.24 million in vehicle and equipment acquisition costs. In addition to the fire stations and equipment, protective equipment for new hires is required at the cost of \$90,000 over the ten year period. Lastly, the capital program also includes a Fire & Emergency Services Master Plan Review valued at \$200,000.

In summary, the ten-year capital program for fire services amounts to \$92.11 million. Of this amount, \$50.74 million is intended to be funded from non-DC revenues and is removed from the DC eligible share. No shares of the projects to be funded from DCs are deemed to provide a benefit to the existing community as the new DC eligible stations are net new facilities and necessitated by new development. Therefore, the total DC eligible in-period cost amounts to \$41.37 million.

The ten-year development-related net capital cost is allocated 68 per cent, or \$27.96 million, against residential development, and 32 per cent, or \$13.41 million, against non-residential development. The allocation between residential and non-residential development is based on shares of gross population and employment growth in new space over the ten-year planning period. The resulting unadjusted development charge is \$364.77 per capita and \$7.79 per square metre.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential charge increases to \$377.05 per capita and the non-residential charge increases to \$7.92 per square metre. The increase reflects the front-ended nature of the capital program.

The following table summarizes the calculation of the fire services development charge.

FIRE SERVICES SUMMARY						
10-year Hist.	2022 - 2031		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/emp	\$/capita	\$/emp
\$437.77	\$92,110,403	\$41,369,403	\$364.77	\$7.79	\$377.05	\$7.92

**APPENDIX B.4
TABLE B.4-1**

**CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES**

BUILDINGS Station Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Station 101 Cooksville - 15 Fairview Road W.	28,484	28,484	28,484	28,484	28,484	28,484	28,484	28,484	28,484	28,484	\$1,020
Station 102 Lakeview- 710 Third Street	4,866	4,866	4,866	4,866	4,866	4,866	4,866	4,866	4,866	4,866	\$1,020
Station 103 Clarkson- 2035 Lushes Avenue	6,114	6,114	6,114	6,114	6,114	6,114	6,114	6,114	6,114	6,114	\$1,020
Station 104 Port Credit- 62 Port Street	5,522	5,522	5,522	5,522	5,522	5,522	5,522	5,522	5,522	5,522	\$1,020
Station 105 Malton - 7101 Goreway Drive	6,702	6,702	6,702	6,702	6,702	6,702	6,702	6,702	6,702	6,702	\$1,020
Station 106 - 3450 Dixie Road	5,576	-	-	-	-	-	-	-	-	-	\$1,020
Station 106 - 1355 Winding Trail	-	9,569	9,569	9,569	9,569	9,569	9,569	9,569	9,569	9,569	\$1,020
Station 106 Storage Building - 1355 Winding Trail	-	194	194	194	194	194	194	194	194	194	\$1,020
Station 107 Erindale - 1965 Dundas Street W.	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	\$1,020
Station 108 Streetsville - 2267 Britannia Road W.	5,641	5,641	5,641	5,641	5,641	5,641	5,641	5,641	5,641	5,641	\$1,020
Station 109 Britannia - 1735 Britannia Road East	5,503	5,503	5,503	5,503	5,503	5,503	5,503	5,503	5,503	5,503	\$1,020
Station 109 Britannia Fire Training Tower - 1735 Britannia Road East	-	-	-	-	-	-	-	-	-	-	\$1,020
Station 109 Britannia Fire - Fire Training House - 1735 Britannia Road East	-	-	-	-	-	-	-	-	-	-	\$1,020
Station 109 Britannia Fire - Portable #1 - Training Centre - Britannia Road East 1735	-	-	-	-	-	-	-	-	-	-	\$1,020
Station 109 Britannia Fire - Portable #2 - Training Centre - 1735 Britannia Road East	-	-	-	-	-	-	-	-	-	-	\$1,020
Station 110 Queensway - 2316 Hurontario St.	6,416	6,416	6,416	6,416	6,416	6,416	6,416	6,416	6,416	6,416	\$1,020
Station 111 Meadowvale - 2740 Derry Road W.	6,330	6,330	6,330	6,330	6,330	6,330	6,330	6,330	6,330	6,330	\$1,020
Station 112 Creditview - 4090 Creditview Rd.	6,986	6,986	6,986	6,986	6,986	6,986	6,986	6,986	6,986	6,986	\$1,020
Station 114 Heartland - 5845 Falbourne St.	7,030	7,030	7,030	7,030	7,030	7,030	7,030	7,030	7,030	7,030	\$1,020
Station 115 Erin Mills - 4595 Glen Erin Rd.	5,749	5,749	5,749	5,749	5,749	5,749	5,749	5,749	5,749	5,749	\$1,020

APPENDIX B.4
TABLE B.4-1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

BUILDINGS Station Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Station 116 West Malton - 6825 Tomken Rd.	9,736	9,736	9,736	9,736	9,736	9,736	9,736	9,736	9,736	9,736	\$1,020
Station 117 North Dixie - 1090 Nuvic Crt.	7,503	7,503	7,503	7,503	7,503	7,503	7,503	7,503	7,503	7,503	\$1,020
Station 118 East Credit - 1045 Bristol Rd. W.	7,891	7,891	7,891	7,891	7,891	7,891	7,891	7,891	7,891	7,891	\$1,020
Station 119 Airport - GTAA - 3201 Elmbank Rd.	7,848	7,848	7,848	7,848	-	-	-	-	-	-	\$1,020
Station 119 Airport - 6375 Airport Rd	-	-	-	-	8,310	8,310	8,310	8,310	8,310	8,310	\$1,020
Station 120 - 125 Eglinton Ave.	-	-	-	-	-	-	-	8,259	8,259	8,259	\$1,020
<i>Station 120 - 125 Eglinton Ave. Excess Capacity</i>	-	-	-	-	-	-	-	<i>(3,238)</i>	<i>(3,238)</i>	<i>(3,238)</i>	<i>\$1,020</i>
Station 121 Meadowvale Vlg. - 6745 Mavis Rd.	8,181	8,181	8,181	8,181	8,181	8,181	8,181	8,181	8,181	8,181	\$1,020
Station 122 Churchill Meadows - 3600 Thomas St.	8,278	8,278	8,278	8,278	8,278	8,278	8,278	8,278	8,278	8,278	\$1,020
Garry W. Morden Fire Training Centre (Main Building) - 7535 Ninth Line	50,972	50,972	50,972	50,972	50,972	50,972	50,972	50,972	50,972	50,972	\$1,020
<i>Garry W. Morden Fire Training Centre (Main Building) - 7535 Ninth Line Excess Capacity</i>	<i>(3,238)</i>	<i>(3,238)</i>	<i>(3,238)</i>	<i>(3,238)</i>	<i>(3,238)</i>	<i>(3,238)</i>	<i>(3,238)</i>	<i>(3,238)</i>	<i>(3,238)</i>	<i>(3,238)</i>	<i>\$1,020</i>
Garry W. Morden Fire Training Centre (Smoke Tower) - 7535 Ninth Line	12,753	12,753	12,753	12,753	12,753	12,753	12,753	12,753	12,753	12,753	\$390
Garry W. Morden Fire Training Centre (Burn Building) - 7535 Ninth Line	6,986	6,986	6,986	6,986	6,986	6,986	6,986	6,986	6,986	6,986	\$550
Garry W. Morden Fire Training Centre (Field Shelter) - 7535 Ninth Line	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	\$890
Garry W. Morden Fire Training Centre (Storage Building) - 7535 Ninth Line	-	-	1,615	1,615	1,615	1,615	1,615	1,615	1,615	1,615	\$670
Fire Services Plans Inspection Space at City Hall	5,435	5,435	5,435	5,435	6,080	6,080	6,080	6,080	6,080	6,080	\$590
Total (sq.ft.)	230,077	234,264	235,879	235,879	236,986	236,986	236,986	242,007	242,007	242,007	
Total (\$000)	\$220,884.1	\$225,154.9	\$226,236.9	\$226,236.9	\$227,088.7	\$227,088.7	\$227,088.7	\$232,209.8	\$232,209.8	\$232,209.8	

**APPENDIX B.4
TABLE B.4-1**

**CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES**

LAND Station Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Station 101 - 15 Fairview Road	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	\$8,648,500
Station 102 - 710 Third Street	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	\$8,648,500
Station 103 - 2035 Lushes Avenue	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	\$8,648,500
Station 104 - 62 Port Street West	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$8,648,500
Station 105 - 7101 Goreway Drive	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	\$8,648,500
Station 106 - 3450 Dixie Road	1.41	-	-	-	-	-	-	-	-	-	\$8,648,500
Station 106 Dixie - 1355 Winding Trail	-	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	\$8,648,500
Station 107 - 1965 Dundas Street West	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	\$8,648,500
Station 108 - 84 Britannia Road West	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	\$8,648,500
Station 109 & Training Centre - 1735 Britannia Road East	1.38	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	\$8,648,500
Station 110 - 2316 Hurontario St	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	\$8,648,500
Station 111 - 2740 Derry Road West	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	\$8,648,500
Station 112 - 4090 Creditview Road	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	\$8,648,500
Station 114 - 5845 Falbourne St.	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	\$8,648,500
Station 115 - 4595 Glen Erin Dr	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	\$8,648,500
Station 116 West Malton - 6825 Tomken Rd.	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	\$8,648,500
Station 117 - Nuvic Court - East Of Tomken Off Eglinton	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	\$8,648,500
Station 118 - Bristol Road	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	\$8,648,500
Station 119 - GTAA	0.37	0.37	0.37	0.37	-	-	-	-	-	-	\$8,648,500
Station 119 - Airport - 6375 Airport Rd	-	-	-	-	0.60	0.60	0.60	0.60	0.60	0.60	\$8,648,500
Station 120 - 125 Eglinton Ave.	-	-	-	-	-	-	-	0.40	0.40	0.40	\$8,648,500
Station 121 - 6745 Mavis Rd	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	\$8,648,500
Station 122 - 3600 Thomas St	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	\$8,648,500
Garry W. Morden Fire Training Centre - 7535 Ninth Line	14.52	14.52	14.52	14.52	14.52	14.52	14.52	14.52	14.52	14.52	\$8,648,500
Fire Services Plans Inspection Space at City Hall	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	\$43,242,500
Total (ha)	24.83	23.37	23.37	23.37	23.61	23.61	23.61	24.04	24.04	24.04	
Total (\$000)	\$216,501.4	\$203,860.7	\$203,860.7	\$203,860.7	\$206,280.6	\$206,280.6	\$206,280.6	\$209,981.9	\$209,981.9	\$209,981.9	

APPENDIX B.4
TABLE B.4-1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

VEHICLES Vehicle Type	# of Vehicles										UNIT COST (\$/vehicle)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Aerial Platforms	2	2	2	2	2	2	2	2	2	2	\$1,500,000
Aerials (17m) (Designated Pumpers)	3	3	3	3	3	3	3	1	1	1	\$1,400,000
Aerials (32m)	8	8	9	9	9	9	9	11	11	11	\$1,400,000
Air/Light Unit	1	1	1	1	1	1	1	1	1	1	\$500,000
Foam Truck/Tanker	1	1	1	1	1	1	1	1	1	1	\$500,000
Haz-Mat Response Unit	1	1	1	1	1	1	1	1	1	1	\$1,000,000
Mobile Command	1	1	1	1	1	1	1	1	1	1	\$1,000,000
Plow and Fire Prevention Car 124	-	2	2	2	2	2	2	3	3	3	\$70,000
Portable Hose Cart	2	2	2	2	2	2	2	2	2	2	\$6,000
Public Educ Fire Safety House Trailer	1	1	1	1	1	1	1	1	1	1	\$80,000
Public Educ Fire Extinguisher Trailer		1	1	1	1	1	1	1	1	1	\$60,000
Pumper-Rescue Squads	7	7	7	7	7	7	7	8	8	8	\$980,000
Pumpers	22	22	22	22	22	22	22	23	23	23	\$910,000
Trench Rescue	1	1	1	1	1	1	1	1	1	1	\$250,000
Service Vehicles (Support & Staff Cars)	17	17	17	17	17	17	17	20	20	20	\$60,000
Special Operations Vehicles (SOV)	1	1	1	1	1	1	1	1	1	1	\$260,000
Polaris Ranger	-	1	1	1	1	1	1	1	1	1	\$20,000
Utility Training Trailers	-	2	2	2	2	2	2	2	2	2	\$3,200
Telehandler	-	1	1	1	1	1	1	1	1	1	\$23,000
Telesquirts (Pumpers)	1	1	1	1	1	1	1	-	-	-	\$1,400,000
Vans & Pick Ups	17	17	17	17	17	17	17	14	14	14	\$60,000
Rehab 101	-	1	1	1	1	1	1	1	1	1	\$250,000
Total (#)	86	94	95	95	95	95	95	97	97	97	
Total (\$000)	\$52,322.0	\$52,821.4	\$54,221.4	\$54,221.4	\$54,221.4	\$54,221.4	\$54,221.4	\$54,781.4	\$54,781.4	\$54,781.4	

APPENDIX B.4
TABLE B.4-1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

FURNITURE & EQUIPMENT CONTINUED Description	Total Value of Furniture & Equipment (\$)										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Other Station Equipment											
Station Generators	4	4	11	11	11	11	11	11	11	11	\$135,000
1 x 1 Autochest Charger	6	6	6	6	6	6	6	6	6	6	\$500
Baby Ann CPR Manikins	32	32	32	32	32	32	32	32	32	32	\$200
Battery Sealed Lead Acid	6	6	6	6	6	6	6	6	6	6	\$200
CPR Training Pads	6	6	6	6	6	6	6	6	6	6	\$200
Defibrillator Training Units	30	30	30	30	30	30	30	30	30	30	\$4,000
Diagnostic Computer Equipment-Vetronix-MTS 3100 Mastertech and Toshiba laptop	1	1	1	1	1	1	1	1	1	1	\$20,000
Hose 45mm -15m lengths Hi Combat	16	16	16	16	16	16	16	16	16	16	\$500
Hose 65mm -15m lengths	7	7	7	7	7	7	7	8	8	8	\$500
Hose -Hi Vol -15m lengths	29	29	29	29	29	29	29	29	29	29	\$900
Gantry Crane-6,000 lbs-A frame-3 ton low head trolley hoist by hand chain	1	1	1	1	1	1	1	1	1	1	\$33,000
Hydraulic Hoist (Heavy)	1	1	1	1	1	1	1	1	1	1	\$550,000
Little Ann CPR Manikins	23	23	23	23	23	23	23	23	23	23	\$260
Pet Therapy Resuscitation Mask Kits	-	30	30	30	30	30	30	30	30	30	\$110
Space Saver Hoist	1	1	1	1	1	1	1	1	1	1	\$65,000
Sympton Assist Bags	-	30	30	30	30	30	30	30	30	30	\$55
Zonar Truck Inventory Equipment	30	30	30	30	30	30	-	-	-	-	\$1,750
Station Furnishings Single Truck Hall	11	11	11	11	11	11	11	11	11	11	\$55,000
Station Furnishings Multi Truck Hall	9	9	9	9	9	9	9	10	10	10	\$82,000
Infant Airway Management Trainer	2	2	2	2	2	2	2	2	2	2	\$810
Adult Airway Management Trainer	1	1	1	1	1	1	1	1	1	1	\$2,500
Resuci Anne Q-CPR	1	1	1	1	1	1	1	1	1	1	\$1,700
Simulaid 4002 CPR recording Manikin	1	1	1	1	1	1	1	1	1	1	\$3,000
Megacode Kelly Sim Dummy	-	-	-	-	-	-	3	3	3	3	\$17,500
Pediatric Intubation Trainer	3	3	3	3	3	3	3	3	3	3	\$1,560
S500 Advanced Childbirth Simulator (Gaumard)	3	3	3	3	3	3	3	3	3	3	\$650
Simulaid CPR/Trauma Manikin	1	1	1	1	1	1	1	1	1	1	\$3,300
LCSU4 with 300cc Unit	4	4	4	4	4	4	4	4	4	4	\$710
Zoll AEDPRO (Defib Training Unit)	2	2	2	2	2	2	2	2	2	2	\$3,800
Zoll AED Plus/AED Pro Simulator (Cardiac Arrest Simulator)	23	23	23	23	23	23	23	23	23	23	\$330
Single Bay SurePower Charging Station (For Defib Batteries)	21	21	21	21	21	21	21	21	21	21	\$1,100
Lithium Ion Battery Pack (For Training Defib)	23	23	23	23	23	23	23	23	23	23	\$500

APPENDIX B.4
TABLE B.4-1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

FURNITURE & EQUIPMENT Description	Total Value of Furniture & Equipment (\$)										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Equipment for Vehicles											
Equipment for Pumpers-Staffed	17	17	17	17	17	17	17	18	18	18	\$250,000
Equipment for Pumpers-Spares	5	5	5	5	5	5	5	5	5	5	\$25,000
Equipment for Aerials (17M) Designated Pumpers	3	3	3	3	3	3	3	1	1	1	\$250,000
Equipment for Aerials-Staffed	8	8	8	8	8	8	8	8	8	8	\$250,000
Equipment for Aerials-Spares	2	2	2	2	2	2	2	3	3	3	\$25,000
Equipment for Pumper Rescue Squads	6	6	6	6	6	6	6	6	6	6	\$250,000
Equipment for Pumper Rescue Squads - Spares	1	1	1	1	1	1	1	2	2	2	\$25,000
Equipment for Telesquirts (Pumpers)-Staffed	1	1	1	1	1	1	1	-	-	-	\$250,000
Portable Hose Cart Equipment	2	2	2	2	2	2	2	2	2	2	\$20,000
SCBA Cylinders	800	800	800	800	800	800	800	800	800	800	\$2,000

FURNITURE & EQUIPMENT CONTINUED Description	Total Value of Furniture & Equipment (\$)										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Firefighter Equipment											
- # of Firefighters	616	616	616	616	616	616	616	636	636	636	\$25,000
Total (#)	1,759	1,819	1,826	1,826	1,826	1,826	1,799	1,821	1,821	1,821	
Total (\$000)	\$28,840.3	\$28,845.2	\$29,790.2	\$29,790.2	\$29,790.2	\$29,790.2	\$29,790.2	\$29,922.7	\$29,922.7	\$29,922.7	

**APPENDIX B.4
TABLE B.4-1**

**CITY OF MISSISSAUGA
CALCULATION OF SERVICE LEVELS
FIRE SERVICES**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historic Population	715,067	716,694	718,325	719,960	721,599	729,753	737,999	746,338	754,771	763,300
Historic Employment	438,045	441,752	445,702	449,890	454,310	456,553	458,807	461,075	463,357	465,650
Total Population & Employment	1,153,112	1,158,446	1,164,027	1,169,850	1,175,909	1,186,306	1,196,806	1,207,413	1,218,128	1,228,950

INVENTORY SUMMARY (\$000)

Buildings	\$220,884.1	\$225,154.9	\$226,236.9	\$226,236.9	\$227,088.7	\$227,088.7	\$227,088.7	\$232,209.8	\$232,209.8	\$232,209.8
Land	\$216,501.4	\$203,860.7	\$203,860.7	\$203,860.7	\$206,280.6	\$206,280.6	\$206,280.6	\$209,981.9	\$209,981.9	\$209,981.9
Furniture & Equipment	\$28,840.3	\$28,845.2	\$29,790.2	\$29,790.2	\$29,790.2	\$29,790.2	\$29,790.2	\$29,922.7	\$29,922.7	\$29,922.7
Vehicles	\$52,322.0	\$52,821.4	\$54,221.4	\$54,221.4	\$54,221.4	\$54,221.4	\$54,221.4	\$54,781.4	\$54,781.4	\$54,781.4
Total (\$000)	\$518,547.8	\$510,682.2	\$514,109.2	\$514,109.2	\$517,380.9	\$517,380.9	\$517,380.9	\$526,895.8	\$526,895.8	\$526,895.8

											Average Service Level
SERVICE LEVEL (\$/pop & emp)											
Buildings	\$191.55	\$194.36	\$194.36	\$193.39	\$193.12	\$191.43	\$189.75	\$192.32	\$190.63	\$188.95	\$191.98
Land	\$187.75	\$175.98	\$175.13	\$174.26	\$175.42	\$173.88	\$172.36	\$173.91	\$172.38	\$170.86	\$175.19
Furniture & Equipment	\$25.01	\$24.90	\$25.59	\$25.46	\$25.33	\$25.11	\$24.89	\$24.78	\$24.56	\$24.35	\$25.00
Vehicles	\$45.37	\$45.60	\$46.58	\$46.35	\$46.11	\$45.71	\$45.31	\$45.37	\$44.97	\$44.58	\$45.59
Total (\$/pop & emp)	\$449.69	\$440.83	\$441.66	\$439.47	\$439.98	\$436.13	\$432.30	\$436.38	\$432.55	\$428.74	\$437.77

**CITY OF MISSISSAUGA
CALCULATION OF MAXIMUM ALLOWABLE
FIRE SERVICES**

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2012 - 2021	\$437.77
Net Population & Employment Growth 2022 - 2031	96,890
Maximum Allowable Funding Envelope	\$42,415,535

APPENDIX B.4
TABLE B.4-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
FIRE SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
4.0 FIRE SERVICES										
4.1 Recovery of Negative Reserve Fund Balance										
4.1.1 Reserve Fund Balance as at December 31, 2021	2022	\$ 6,605,403	\$ -	\$ 6,605,403	0%	\$ -	\$ 6,605,403	\$ -	\$ 6,605,403	\$ -
Subtotal Recovery of Negative Reserve Fund Balance		\$ 6,605,403	\$ -	\$ 6,605,403		\$ -	\$ 6,605,403	\$ -	\$ 6,605,403	\$ -
4.2 Stations & Auxiliary Buildings										
4.2.1 New Fire Station 124 - Dundas & Cawthra - Land, Design and Construction	2023	\$ 5,000,000	\$ 5,000,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.2.2 New Fire Station 124 - Dundas & Cawthra - Land, Design and Construction	2024	\$ 5,000,000	\$ 5,000,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.2.3 New Fire Station 123 - Burnhamthorpe/Winston Churchill - Land, Design and Construction	2024	\$ 5,000,000	\$ 5,000,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.2.4 New Fire Station 123 - Burnhamthorpe/Winston Churchill - Land, Design and Construction	2025	\$ 5,000,000	\$ 5,000,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.2.5 New Fire Station 125 - Tenth Line and Battleford - Land, Design and Construction	2022	\$ 4,200,000	\$ 4,200,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.2.6 New Fire Station 125 - Tenth Line and Battleford - Land, Design and Construction	2023	\$ 4,200,000	\$ 4,200,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.2.7 Fire Station 126 - Mavis and Dundas - Land, Design and Construction	2026	\$ 15,000,000	\$ -	\$ 15,000,000	0%	\$ -	\$ 15,000,000	\$ -	\$ 15,000,000	\$ -
4.2.8 New Fire Station 127 - Lorne Park - Land, Design and Construction	2026	\$ 5,000,000	\$ -	\$ 5,000,000	0%	\$ -	\$ 5,000,000	\$ -	\$ 5,000,000	\$ -
4.2.8 New Fire Station 127 - Lorne Park - Land, Design and Construction	2028	\$ 1,600,000	\$ -	\$ 1,600,000	0%	\$ -	\$ 1,600,000	\$ -	\$ 1,600,000	\$ -
4.2.9 New Fire Station 127 - Lorne Park - Land, Design and Construction	2029	\$ 6,400,000	\$ -	\$ 6,400,000	0%	\$ -	\$ 6,400,000	\$ -	\$ 6,400,000	\$ -
4.2.10 New Fire Station 127 - Lorne Park - Land, Design and Construction	2030	\$ 2,000,000	\$ -	\$ 2,000,000	0%	\$ -	\$ 2,000,000	\$ -	\$ 2,000,000	\$ -
4.2.11 New Fire Station 128 (North Lakeview)	2030	\$ 15,000,000	\$ 15,000,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Stations & Auxiliary Buildings		\$ 73,400,000	\$ 43,400,000	\$ 30,000,000		\$ -	\$ 30,000,000	\$ -	\$ 30,000,000	\$ -

APPENDIX B.4
TABLE B.4-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
FIRE SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
4.3 Vehicles and Equipment										
4.3.2 New Fire Truck - Fire Station 124	2024	\$ 2,237,000	\$ 2,237,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.3.3 New Fire Truck - Fire Station 123	2025	\$ 2,237,000	\$ 2,237,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.3.4 New Fire Truck - Fire Station 125	2023	\$ 2,237,000	\$ 2,237,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.3.5 New Fire Truck and Equipment - Fire Station 126	2026	\$ 2,237,000	\$ -	\$ 2,237,000	0%	\$ -	\$ 2,237,000	\$ -	\$ 2,237,000	\$ -
4.3.6 New Fire Truck and Equipment - Fire Station 127	2028	\$ 2,237,000	\$ -	\$ 2,237,000	0%	\$ -	\$ 2,237,000	\$ -	\$ 2,237,000	\$ -
Subtotal Vehicles and Equipment		\$ 11,185,000	\$ 6,711,000	\$ 4,474,000		\$ -	\$ 4,474,000	\$ -	\$ 4,474,000	\$ -
4.3 Additional FF Equipment										
4.3.1 Personal Protective Equip. for New Hires	2022	\$ 45,000	\$ 45,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.3.2 Personal Protective Equip. for New Hires	2023	\$ 90,000	\$ 90,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.3.3 Personal Protective Equip. for New Hires	2024	\$ 90,000	\$ 90,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.3.4 Personal Protective Equip. for New Hires	2025	\$ 90,000	\$ 90,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.3.5 Personal Protective Equip. for New Hires	2026	\$ 45,000	\$ 45,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.3.6 Personal Protective Equip. for New Hires	2027	\$ 90,000	\$ 90,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.3.7 Personal Protective Equip. for New Hires	2028	\$ 45,000	\$ -	\$ 45,000	0%	\$ -	\$ 45,000	\$ -	\$ 45,000	\$ -
4.3.8 Personal Protective Equip. for New Hires	2029	\$ 90,000	\$ 90,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
4.3.9 Personal Protective Equip. for New Hires	2030	\$ 45,000	\$ -	\$ 45,000	0%	\$ -	\$ 45,000	\$ -	\$ 45,000	\$ -
4.3.10 Personal Protective Equip. for New Hires	2031	\$ 90,000	\$ 90,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Additional FF Equipment		\$ 720,000	\$ 630,000	\$ 90,000		\$ -	\$ 90,000	\$ -	\$ 90,000	\$ -

APPENDIX B.4
TABLE B.4-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
FIRE SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
4.4 Development-Related Studies										
4.4.1 Fire & Emergency Services Future Directions Master Plan Review	2022	\$ 200,000	\$ -	\$ 200,000	0%	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
Subtotal Development-Related Studies		\$ 200,000	\$ -	\$ 200,000		\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
TOTAL FIRE SERVICES		\$ 92,110,403	\$ 50,741,000	\$ 41,369,403		\$ -	\$ 41,369,403	\$ -	\$ 41,369,403	\$ -

(1) Relates to funding from non-DC revenue sources including property taxes

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	67.6%	\$27,958,481
10-Year Growth in Population in New Units		76,646
Unadjusted Development Charge Per Capita		\$364.77
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	32.4%	\$13,410,922
10-Year Non-Res GFA Growth in New Space		1,721,850
Unadjusted Development Charge Per Employee		\$7.79

2022 - 2031 Net Funding Envelope	\$42,415,535
Reserve Fund Balance	(\$6,605,403)

APPENDIX B.4

TABLE B.4-3

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

FIRE SERVICES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	(\$4,464.1)	(\$2,169.3)	\$475.7	\$3,346.3	\$6,409.0	(\$6,987.6)	(\$3,984.2)	(\$3,708.6)	(\$5,365.8)	(\$3,572.3)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Fire Services: Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Fire Services: Non Inflated	\$135.2	\$0.0	\$0.0	\$0.0	\$15,028.3	\$0.0	\$2,623.6	\$4,325.3	\$1,382.1	\$0.0	\$23,494.4
- Fire Services: Inflated	\$135.2	\$0.0	\$0.0	\$0.0	\$16,267.1	\$0.0	\$2,954.5	\$4,968.4	\$1,619.3	\$0.0	\$25,944.5
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	6,980	7,064	7,150	7,235	7,377	7,998	8,103	8,206	8,312	8,221	76,646
REVENUE											
- DC Receipts: Inflated	\$2,631.8	\$2,716.8	\$2,804.8	\$2,894.9	\$3,010.8	\$3,329.5	\$3,440.7	\$3,554.1	\$3,672.0	\$3,704.5	\$31,759.9
INTEREST											
- Interest on Opening Balance	(\$245.5)	(\$119.3)	\$16.6	\$117.1	\$224.3	(\$384.3)	(\$219.1)	(\$204.0)	(\$295.1)	(\$196.5)	(\$1,305.8)
- Interest on In-year Transactions	\$43.7	\$47.5	\$49.1	\$50.7	(\$364.5)	\$58.3	\$8.5	(\$38.9)	\$35.9	\$64.8	(\$44.9)
TOTAL REVENUE	\$2,430.0	\$2,645.0	\$2,870.6	\$3,062.7	\$2,870.5	\$3,003.5	\$3,230.1	\$3,311.2	\$3,412.8	\$3,572.8	\$30,409.2
CLOSING CASH BALANCE	(\$2,169.3)	\$475.7	\$3,346.3	\$6,409.0	(\$6,987.6)	(\$3,984.2)	(\$3,708.6)	(\$5,365.8)	(\$3,572.3)	\$0.6	

2022 Adjusted Charge Per Capita

\$377.05

Allocation of Capital Program

Residential Sector	67.6%
Non-Residential Sector	32.4%

Rates for 2022

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

APPENDIX B.4

TABLE B.4-3

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE SERVICES
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

FIRE SERVICES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	(\$2,141.31)	(\$697.72)	\$940.16	\$2,699.92	\$4,574.15	(\$1,431.17)	(\$291.33)	(\$502.31)	(\$1,685.55)	(\$1,256.15)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Fire Services: Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Fire Services: Non Inflated	\$64.8	\$0.0	\$0.0	\$0.0	\$7,208.7	\$0.0	\$1,258.4	\$2,074.7	\$662.9	\$0.0	\$11,269.6
- Fire Services: Inflated	\$64.8	\$0.0	\$0.0	\$0.0	\$7,802.9	\$0.0	\$1,417.2	\$2,383.2	\$776.7	\$0.0	\$12,444.9
NEW NON-RESIDENTIAL DEVELOPMENT											
- Non-Residential GFA	201,937	203,929	205,967	208,110	210,257	136,957	137,622	138,335	139,000	139,736	1,721,850
REVENUE											
- DC Receipts: Inflated	\$1,599.3	\$1,647.4	\$1,697.2	\$1,749.1	\$1,802.5	\$1,197.6	\$1,227.5	\$1,258.5	\$1,289.9	\$1,322.6	\$14,791.6
INTEREST											
- Interest on Opening Balance	(\$117.8)	(\$38.4)	\$32.9	\$94.5	\$160.1	(\$78.7)	(\$16.0)	(\$27.6)	(\$92.7)	(\$69.1)	(\$152.8)
- Interest on In-year Transactions	\$26.9	\$28.8	\$29.7	\$30.6	(\$165.0)	\$21.0	(\$5.2)	(\$30.9)	\$9.0	\$23.1	(\$32.1)
TOTAL REVENUE	\$1,508.4	\$1,637.9	\$1,759.8	\$1,874.2	\$1,797.6	\$1,139.8	\$1,206.2	\$1,200.0	\$1,206.1	\$1,276.7	\$14,606.7
CLOSING CASH BALANCE	(\$697.7)	\$940.2	\$2,699.9	\$4,574.1	(\$1,431.2)	(\$291.3)	(\$502.3)	(\$1,685.5)	(\$1,256.2)	\$20.5	

2022 Adjusted Charge Per Sq.M.

\$7.92

Allocation of Capital Program

Residential Sector	67.6%
Non-Residential Sector	32.4%

Rates for 2022

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

Appendix B.5

Recreation and Parks Development

Recreation and Parks Development

The City of Mississauga Recreation and Parks Division is responsible for the indoor recreation and leisure needs of the community, including the provision and maintenance of arenas, facilities, recreation services and programs to the residents of the City. Recreation and Parks Development service also includes the activities of the City’s Parks and Forestry Division which maintains almost 1,800 hectares of developed parkland and many parks amenities. All City residents have access to all indoor and outdoor recreation facilities and parks. The benefits of the Recreation and Parks Development services are therefore deemed to be City-wide for the purpose of calculating the development charge.

Table 1 2012-2021 Historical Service Levels

Table 1 displays the Recreation and Parks Development ten-year historical inventory for buildings and land associated with the City’s community centres, indoor pools, senior centres, arenas, and other indoor recreation facilities. Of note, excess capacity related to the existing Recreation and Parks Service debt for the Hershey Centre (renamed to Paramount Sports Complex) has been netted off and the resulting building space amounts to 2.01 million square feet, which is valued at \$1.60 billion inclusive of fixtures, furniture, and equipment. The land area associated with the buildings is 59.09 hectares, and is valued at \$549.14 million.

Table 1 also shows that the City contains 1,799 hectares of developed parkland, including 220.17 hectares of woodlots, 1,128.52 hectares of community parks, 431.23 hectares of destination parks, 12.08 in urban destination parks, and 7.24 hectares of other tableland. The total replacement value of the developed parkland, net of acquisition costs, is \$1.59 billion. Development costs associated with the City’s 1,137.24 hectares of hazardlands are estimated at \$77.90 million.

The parkland has been improved with a variety of sports fields, rinks, golf courses, tracks, playgrounds, pools, buildings, bridges, and other infrastructure and amenities. A fleet of 916 vehicles is used to maintain the parks. These improvements and rolling stock have a combined current replacement value of \$818.09 million.

The 2021 full replacement value of the inventory of capital assets for Recreation and Parks Development amounts to \$4.63 billion. It has provided the City with a ten-year average service level of \$6,119.62 per capita. The historical service level multiplied by the ten-year forecast of net population growth results in a ten-year maximum allowable funding envelope of \$335.36 million.

Table 1 provides a summary of the level of service and the calculation of the ten-year historical service level. The calculation of the maximum allowable funding envelope is summarized as follows:

Ten-Year Funding Envelope Calculation	
Ten-Year Average Service Level (2012 – 2021)	\$6,119.62
Net Population Growth (2022 – 2031)	54,800
Maximum Allowable Funding Envelope	\$335,335,176

The existing facilities have been examined and consideration has been given to whether or not “excess capacity” exists within the City’s infrastructure that may be available to partially meet the future servicing requirements. It has been determined that no “uncommitted excess capacity” exists within the City’s Recreation and Parks Development infrastructure, and as such, no adjustments have been made to the service level calculations.

Table 2 2022 – 2031 Development-Related Capital Program & Calculation of the Unadjusted Development Charge

The development-related capital program for Recreation and Parks Development is substantial: \$550.72 million in total, of which \$118.38 million is to be funded by grants primarily from upper levels of government for Port Credit Marina Development, through partnership agreements with the Region of Peel for expanding the bicycle/pedestrian multi-use trail system, and other subsidies (including cash collected by the City in lieu of parkland dedication).

For the Recovery of the Hershey Centre Debt, only the growth related Principal Payment is included in the capital program, therefore it has a 0% BTE.

There are many other projects that are entirely growth-related and have a 0% BTE:

- **Recreation Future Directions Background Studies, Recreation Future Directions Master Plan, and Mississauga Valley Feasibility Study**
- **Cooksville Community Centre Design and Construction**
- **Burnhamthorpe Program Furniture and Equipment and Carmen Corbasson Furniture and Equipment** - the costs are related to new equipment for the expanded space.
- **Elmcreek Park Redevelopment** - only the growth related cost of the redevelopment is included
- **All new Park Facility Installations, new City Wide Facilities, and Municipal Fleet**

- **All new Parkland Development.**

Of the \$432.34 million in net municipal costs, \$41.79 million is deemed to benefit the existing community, including:

- **Burnhamthorpe CC Redevelopment** – 78% based on increase in net new space for the pool and new fitness facility as well as the increased programmable hours of the facility. Includes demolition of the Glenforest School Pool.
- **South Common CC Renovation - design & construction** – 56% based on previous review of the development-related share in the City's 2019 Development Charges Background Study.
- **Carmen Corbasson CC Redevelopment** – 82% based on increase in net new space as well as increased programmable hours. Analysis accounts for the demolition of Cawthra School Pool.
- **Major Redevelopment - Gulleden Park** – 62% relates to costs for redevelopment or replacement of existing facilities. The remaining cost is related to new basketball court, spray pad, and playground and is entirely related to growth.
- **Port Credit Marina Development - 1 Port Street East** – 14% to account for the share of demolition and replacement of existing leased space.
- **All Multi-Use Trails** – 23% applied to all City-wide active transportation infrastructure. Please see Appendix D.2 for further details on the BTE.

Of the remaining \$390.55 million, \$48.04 million can be funded from the existing Recreation & Parks Development development charge reserve fund. Another \$7.15 million represents that portion of the program that exceeds the maximum allowable funding envelope. This other

development related share will be considered for recovery under the City’s Community Benefits Charge Strategy or subsequent development charges studies.

The 2022-2031 development-related costs eligible for development charge recovery amount to \$335.35 million, equivalent to the maximum allowable funding envelope. This amount is allocated fully against future residential development in the City. This results in an unadjusted development charge of \$4,375.38 per capita.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential calculated charge is increased to \$4,418.56 per capita. The marginal increase in the charge reflects, in part, the balanced timing of expenditures over the next ten-years.

The following table summarizes the calculation of the Recreation and Parks Development development charge:

RECREATION & PARKS DEVELOPMENT SUMMARY						
10-year Hist.	2022 - 2031		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/emp	\$/capita	\$/emp
\$6,119.62	\$550,718,947	\$335,355,176	\$4,375.38	\$0.00	\$4,418.56	\$0.00

APPENDIX B.5
TABLE B.5-1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
RECREATION & PARKS DEVELOPMENT

COMMUNITY CENTRE BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Burnhamthorpe - Gulleden Drive 1500	64,670	64,670	64,670	64,670	64,670	64,670	64,670	64,670	64,670	64,670	\$840
Cawthra - Cawthra Road 1399	85,614	85,614	85,614	85,614	85,614	85,614	85,614	85,614	85,614	85,614	\$840
Central Library - Recreation Offices	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	\$840
Churchill Meadows - 5320 Ninth Line	-	-	-	-	-	-	-	-	-	36,760	\$1,030
Clarke Memorial Hall - Lakeshore Rd E 161	14,886	14,886	14,886	14,886	14,886	14,886	14,886	14,886	14,886	14,886	\$840
Clarkson - Truscott Drive 2475	78,803	78,803	78,803	78,803	78,803	78,803	78,803	78,803	78,803	78,803	\$1,030
Erin Meadows - Erin Centre Blvd 2800	53,561	53,561	53,561	53,561	53,561	53,561	53,561	53,561	53,561	53,561	\$1,030
Erindale Community Hall -Dundas Street	4,951	4,951	4,951	4,951	4,951	4,951	4,951	4,951	4,951	4,951	\$840
Frank McKechnie (Huronario) - 310 Bristol Rd.	48,611	48,611	48,611	48,611	48,611	48,611	48,611	48,611	48,611	48,611	\$1,030
Huron Park - Paisley Blvd W. 830	82,086	82,086	82,086	82,086	82,086	82,086	82,086	82,086	82,086	82,086	\$1,030
Lorne Park Hall C.C. - Lorne Park Road 1288	1,496	1,496	1,496	1,496	1,496	1,496	1,496	1,496	1,496	1,496	\$840
Malton - Morningstar Drive 3540	58,083	58,083	58,083	58,083	58,083	58,083	58,083	58,083	58,083	58,083	\$1,030
Malton Hall - Victory Crescent 3091	3,003	3,003	3,003	3,003	3,003	3,003	3,003	3,003	3,003	3,003	\$840
Meadowvale - Glen Erin Drive 6655	41,090	41,090	-	-	-	-	-	-	-	-	\$1,030
Meadowvale - Glen Erin Drive 6655	-	-	-	-	66,339	66,339	66,339	66,339	66,339	66,339	\$1,030
Meadowvale Village C.C. (Hall) - Second Line West	2,691	2,691	2,691	2,691	2,691	2,691	2,691	2,691	2,691	2,691	\$840
Mississauga Valley - Miss. Valley Blvd 1275	101,078	101,078	101,078	101,078	101,078	101,078	101,078	101,078	101,078	101,078	\$1,030
Old Fire Hall - Broadway St., 180	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	\$840
Old Fire Hall - Victory Crescent 3136	2,800	2,433	2,433	2,433	-	-	-	-	-	-	\$840
Rivergrove - Rivergrove Avenue 5800	68,200	68,200	69,190	69,190	69,190	69,190	69,190	69,190	69,190	69,190	\$1,030
Riverwood Park Visusal Arts Mississauga (VAM) Building	7,201	7,201	7,201	7,201	7,201	7,201	7,201	7,201	7,201	7,201	\$840
South Common - South Millway Dr 2233	64,719	64,719	64,719	65,623	65,623	65,623	65,623	65,623	65,623	65,623	\$1,030
Total (sq.ft.)	788,855	788,488	748,388	749,293	813,199	813,199	813,199	813,199	813,199	849,959	
Total (\$000)	\$775,922.4	\$775,614.1	\$734,311.1	\$735,242.7	\$801,528.2	\$801,528.2	\$801,528.2	\$801,528.2	\$801,528.2	\$839,391.0	

APPENDIX B.5
TABLE B.5-1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
RECREATION & PARKS DEVELOPMENT

INDOOR POOLS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Cawthra Park - Cawthra Road 1305	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	\$1,130
Glenforest - Fieldgate Drive 3575	18,998	18,998	18,998	18,998	18,998	18,998	18,998	18,998	18,998	18,998	\$1,130
Total (sq.ft.)	36,998	36,998	36,998	36,998	36,998	36,998	36,998	36,998	36,998	36,998	
Total (\$000)	\$41,807.7	\$41,807.7	\$41,807.7	\$41,807.7	\$41,807.7	\$41,807.7	\$41,807.7	\$41,807.7	\$41,807.7	\$41,807.7	

OTHER INDOOR FACILITIES Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Brookmede Centre - Council Ring Road 2264	1,605	1,605	1,605	1,605	1,605	1,605	1,605	1,605	1,605	1,605	\$840
Living Arts Centre - Living Arts Drive 4141	76,631	76,631	76,631	76,631	76,631	76,631	76,631	76,631	76,631	76,631	\$840
Miss. Valley Gymnastics Centre - Miss. Valley (Ph.4) 1395	20,873	20,873	20,873	20,873	20,873	20,873	20,873	20,873	20,873	20,873	\$590
Paramount (Hershey) Sports Complex - Rose Cherry Place 5500	193,770	193,770	193,770	193,770	193,770	193,770	193,770	193,770	193,770	193,770	\$610
Paramount (Hershey) Sports Complex - Rose Cherry Place 5500 (Excess Capacity)	(4,228)	(4,228)	(4,228)	(4,228)	(4,228)	(4,228)	(4,228)	(4,228)	(4,228)	(4,228)	\$610
Total (sq.ft.)	288,651	288,651	288,651	288,651	288,651	288,651	288,651	288,651	288,651	288,651	
Total (\$000)	\$193,653.9	\$193,653.9	\$193,653.9	\$193,653.9	\$193,653.9	\$193,653.9	\$193,653.9	\$193,653.9	\$193,653.9	\$193,653.9	

APPENDIX B.5

TABLE B.5-1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
RECREATION & PARKS DEVELOPMENT

SENIOR CENTRES Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Cawthra Mississauga Sr Ctzn Ctr - Cawthra Road 1389	23,134	23,134	23,134	23,134	23,134	23,134	23,134	23,134	23,134	23,134	\$840
Port Credit Lawn Bowling Club - Cawthra Road 1375	2,691	2,691	2,691	2,691	2,691	2,691	2,691	2,691	2,691	2,691	\$840
Sheridan Villa Sr. Ctzn Centre - Truscott Drive 2460	2,970	2,970	-	-	-	-	-	-	-	-	\$840
Square One Auditorium - City Centre Drive, 100	10,456	10,456	10,456	10,456	10,456	-	-	-	-	-	\$840
Active Adult Centre - Central Pkwy Mall	-	-	-	-	-	8,659	8,659	8,659	8,659	8,659	\$840
Total (sq.ft.)	39,251	39,251	36,281	36,281	36,281	34,484	34,484	34,484	34,484	34,484	
Total (\$000)	\$32,970.8	\$32,970.8	\$30,476.0	\$30,476.0	\$30,476.0	\$28,966.6	\$28,966.6	\$28,966.6	\$28,966.6	\$28,966.6	

ARENAS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Erin Mills - Unity Drive 3205	67,680	67,680	67,680	67,680	67,680	67,680	67,680	67,680	67,680	67,680	\$610
Iceland - Matheson Blvd E 705	177,515	177,515	177,515	177,515	177,515	177,515	177,515	177,515	177,515	177,515	\$610
Meadowvale - Torquay Mews 2160	97,875	97,875	97,875	97,875	97,875	97,875	97,875	97,875	97,875	97,875	\$610
Parmount (Hershey) Centre Main Rink - Rose Cherry Place 5500	166,954	166,954	166,954	166,954	166,954	166,954	166,954	166,954	166,954	166,954	\$610
Paramount (Hershey) Centre Community Rinks - Rose Cherry Place 5500	85,011	85,011	85,011	85,011	85,011	85,011	85,011	85,011	85,011	85,011	\$610
Paul Coffey (Malton) Arena - Derry Road East 3430	30,691	30,691	30,691	30,691	30,691	30,691	30,691	30,691	30,691	30,691	\$610
Port Credit - Stavebank Road 40	58,836	58,836	58,836	58,836	58,836	58,836	58,836	58,836	58,836	58,836	\$610
Tomken - Tomken Road 4495	71,921	71,921	71,921	71,921	71,921	71,921	71,921	71,921	71,921	71,921	\$610
Vic Johnston - Church Street 335	49,547	49,547	49,547	49,547	49,547	49,547	49,547	49,547	49,547	49,547	\$610
Total (sq.ft.)	806,030	806,030	806,030	806,030	806,030	806,030	806,030	806,030	806,030	806,030	
Total (\$000)	\$491,678.3	\$491,678.3	\$491,678.3	\$491,678.3	\$491,678.3	\$491,678.3	\$491,678.3	\$491,678.3	\$491,678.3	\$491,678.3	

APPENDIX B.5
TABLE B.5-1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
RECREATION & PARKS DEVELOPMENT

LAND FOR COMMUNITY CENTRES Facility Name	# of Hectares										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/ha)
Burnhamthorpe - Gullelen Drive 1500	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	\$8,648,500
Cawthra - Cawthra Road 1399	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	\$8,648,500
Churchill Meadows - 5320 Ninth Line	-	-	-	-	-	-	-	-	-	2.20	\$8,648,500
Clarke Memorial Hall - Lakeshore Rd E 161	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	\$8,648,500
Clarkson - Truscott Drive 2475	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	\$8,648,500
Erin Meadows - Erin Centre Blvd 2800	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	\$8,648,500
Erindale Community Hall -Dundas Street	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	\$8,648,500
Frank McKechnie (Huronario) - 310 Bristol Rd.	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	\$8,648,500
Huron Park - Paisley Blvd W. 830	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	\$8,648,500
Lorne Park Hall C.C. - Lorne Park Road 1288	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$8,648,500
Malton - Morningstar Drive 3540	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	\$8,648,500
Malton Hall - Victory Crescent 3091	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	\$8,648,500
Meadowvale - Glen Erin Drive 6655	2.17	2.17	2.17	-	1.76	1.76	1.76	1.76	1.76	1.76	\$8,648,500
Meadowvale Village C.C. (Hall) - Second Line West	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$8,648,500
Mississauga Valley - Miss. Valley Blvd 1275	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	\$8,648,500
Old Fire Hall - Broadway St., 180	0.10	0.10	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$8,648,500
Old Fire Hall - Victory Crescent 3136	0.12	0.12	0.12	0.12	-	-	-	-	-	-	\$8,648,500
Rivergrove - Rivergrove Avenue 5800	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	\$8,648,500
Riverwood Park Visual Arts Mississauga (VAM) Building	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$8,648,500
South Common - South Millway Dr 2233	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	\$8,648,500
Total (ha)	26.35	26.35	26.31	24.14	25.79	25.79	25.79	25.79	25.79	27.99	
Total (\$000)	\$227,847.5	\$227,847.5	\$227,544.8	\$208,777.6	\$223,004.4	\$223,004.4	\$223,004.4	\$223,004.4	\$223,004.4	\$242,031.1	

APPENDIX B.5
TABLE B.5-1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
RECREATION & PARKS DEVELOPMENT

LAND FOR INDOOR POOLS Facility Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Cawthra Park - Cawthra Road 1305	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	\$8,648,500
Glenforest - Fieldgate Drive 3575	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	\$8,648,500
Total (ha)	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	
Total (\$000)	\$4,991.9	\$4,991.9	\$4,991.9	\$4,991.9	\$4,991.9	\$4,991.9	\$4,991.9	\$4,991.9	\$4,991.9	\$4,991.9	

LAND FOR OTHER INDOOR FACILITIES Facility Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Brookmede Centre - Council Ring Road 2264	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$8,648,500
Living Arts Centre	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	\$43,242,500
Miss. Valley Gymnastics Centre - Miss. Valley (Ph.4) 1395	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	\$8,648,500
Total (ha)	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	
Total (\$000)	\$49,437.4	\$49,437.4	\$49,437.4	\$49,437.4	\$49,437.4	\$49,437.4	\$49,437.4	\$49,437.4	\$49,437.4	\$49,437.4	

APPENDIX B.5
TABLE B.5-1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
RECREATION & PARKS DEVELOPMENT

LAND FOR SENIOR CENTRES Facility Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Mississauga Sr Ctzn Ctr - Cawthra Road 1389	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	\$8,648,500
Sheridan Villa Sr. Ctzn Centre - Truscott Drive 2460	0.03	0.03	-	-	-	-	-	-	-	-	\$8,648,500
Square One Auditorium - City Centre Drive, 100	0.10	0.10	0.10	0.10	0.10	-	-	-	-	-	\$43,242,500
Active Adult Centre - Central Pkwy Mall	-	-	-	-	-	0.08	0.08	0.08	0.08	0.08	\$8,648,500
Total (ha)	1.19	1.19	1.16	1.16	1.16	1.14	1.14	1.14	1.14	1.14	
Total (\$000)	\$13,644.0	\$13,644.0	\$13,384.6	\$13,384.6	\$13,384.6	\$9,875.9	\$9,875.9	\$9,875.9	\$9,875.9	\$9,875.9	

LAND FOR ARENAS Facility Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Erin Mills - Unity Drive 3205	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	\$8,648,500
Iceland - Matheson Blvd E 705	5.36	5.36	5.36	5.36	5.36	5.36	5.36	5.36	5.36	5.36	\$8,648,500
Meadowvale - Torquay Mews 2160	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	\$8,648,500
Paramount Centre - Rose Cherry Place 5500	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	\$8,648,500
Paul Coffey - Derry Road East 3430	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	\$8,648,500
Port Credit - Stavebank Road 40	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	\$8,648,500
Tomken - Tomken Road 4495	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	\$8,648,500
Vic Johnston - Church Street 335	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	\$8,648,500
Total (ha)	28.07	28.07	28.07	28.07	28.07	28.07	28.07	28.07	28.07	28.07	
Total (\$000)	\$242,805.7	\$242,805.7	\$242,805.7	\$242,805.7	\$242,805.7	\$242,805.7	\$242,805.7	\$242,805.7	\$242,805.7	\$242,805.7	

**APPENDIX B.5
TABLE 1**

**CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
RECREATION & PARKS DEVELOPMENT
OUTDOOR RECREATION**

TABLELAND	# of Hectares of Tableland										UNIT COST
Type of Tableland	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/ha)
Woodlots	220.17	220.17	220.17	220.17	220.17	220.17	220.17	220.17	220.17	220.17	\$83,800
Community	1,123.60	1,123.60	1,123.60	1,123.74	1,127.62	1,127.62	1,127.62	1,126.40	1,128.52	1,128.52	\$470,500
Destination	413.04	413.04	413.04	413.04	413.04	413.04	413.04	431.38	431.23	431.23	\$2,196,800
Urban Destination	12.08	12.08	12.08	12.08	12.08	12.08	12.08	12.08	12.08	12.08	\$7,484,800
Other Tableland	7.00	7.20	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	\$328,000
Total (ha)	1,775.89	1,776.09	1,776.13	1,776.27	1,780.15	1,780.15	1,780.15	1,797.27	1,799.24	1,799.24	
Total (\$000)	\$1,547,182.7	\$1,547,248.3	\$1,547,261.4	\$1,547,327.3	\$1,549,152.8	\$1,549,152.8	\$1,549,152.8	\$1,588,868.1	\$1,589,536.1	\$1,589,536.1	

HAZARDLAND	# of Hectares of Hazardland										UNIT COST
Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/ha)
Various Hazardland	1,111.42	1,111.42	1,112.02	1,112.91	1,113.64	1,113.64	1,113.64	1,113.64	1,137.24	1,137.24	\$68,500
Total (ha)	1,111.42	1,111.42	1,112.02	1,112.91	1,113.64	1,113.64	1,113.64	1,113.64	1,137.24	1,137.24	
Total (\$000)	\$76,132.3	\$76,132.3	\$76,173.4	\$76,234.3	\$76,284.3	\$76,284.3	\$76,284.3	\$76,284.3	\$77,900.9	\$77,900.9	

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
RECREATION & PARKS DEVELOPMENT
SPORTS FIELDS

Sports Fields Park Name	# of Fields										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Major Soccer - Lighted	11	11	11	11	11	11	11	11	11	11	\$1,448,100
Major Soccer - Lighted - Artificial Turf	7	7	7	7	7	7	7	8	8	9	\$1,991,600
Major Diamond - Lighted	16	16	16	16	16	16	16	16	16	16	\$1,810,100
Football - Lighted	1	1	1	1	1	1	1	1	1	1	\$1,614,100
Football - Unlighted	2	2	2	2	2	2	2	1	1	1	\$581,500
11 v 11 - Unlighted (formerly Senior Soccer)	87	88	90	91	91	91	91	90	91	91	\$340,100
9v9 Minor Soccer - Unlighted	63	63	61	61	61	61	61	61	61	61	\$270,700
7v7 Mini Soccer - Unlighted	33	33	33	31	31	31	31	32	32	32	\$196,300
5v5 Mini Soccer - Unlighted	8	8	9	9	9	9	9	6	6	6	\$106,900
Boxed Soccer - Unlighted	-	-	-	-	-	1	1	2	2	2	\$275,000
Minor Diamond - Softball Lighted	27	27	27	27	26	26	26	26	26	26	\$1,251,500
Major Diamond - Unlighted	4	4	4	4	4	4	4	4	4	4	\$738,200
Minor Diamond - Unlighted	83	83	81	81	80	79	79	79	79	79	\$252,800
1-Lighted Tennis Court	1	1	1	1	1	1	1	1	1	1	\$399,400
2-Lighted Tennis Court	12	12	12	12	12	12	11	11	11	11	\$548,100
3-Lighted Tennis Court	2	2	2	2	2	2	2	2	2	2	\$685,800
4-Lighted Tennis Court	8	8	8	8	8	9	10	11	11	11	\$792,200
6-Lighted Tennis Court	2	2	2	1	1	1	1	1	1	1	\$1,020,900
8-Lighted Tennis Court	1	1	1	2	2	2	2	2	2	2	\$2,238,000
2-Unlighted Tennis Court	9	9	9	9	9	9	9	9	9	10	\$271,300
3-Unlighted Tennis Court	1	1	1	1	1	1	1	1	1	1	\$364,100
4-Unlighted Tennis Court	8	8	8	8	9	9	9	8	8	8	\$458,400
Bocce 1	4	4	4	4	4	4	4	2	2	2	\$29,900
Bocce 2	13	13	13	13	13	13	13	13	13	13	\$74,250
Bocce 3	4	4	4	4	4	4	4	4	4	4	\$227,500

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA

INVENTORY OF CAPITAL ASSETS

RECREATION & PARKS DEVELOPMENT

SPORTS FIELDS

Sports Fields Park Name	# of Fields										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Lawn Bowling	1	1	1	1	1	1	1	1	1	1	\$559,900
Cricket Minor Field	3	3	3	3	3	3	3	3	3	3	\$788,000
Cricket Major Field	5	5	3	3	4	4	6	6	6	6	\$996,800
Lacrosse	2	2	2	2	2	2	2	2	2	2	\$559,900
Skateboard Park Minor Park	7	7	7	7	8	8	8	8	8	9	\$237,800
Skateboard Park Major Park	1	1	1	1	1	1	1	1	1	1	\$959,800
Outdoor Rinks	3	3	3	3	3	3	3	3	3	3	\$3,271,767
Launching Ramps	5	5	5	5	5	5	5	5	5	5	\$936,652
Marina	2	2	2	2	2	2	2	2	2	2	\$3,066,718
BMX Parks Major Park	1	1	1	1	1	1	1	1	1	1	\$451,700
BMX Parks Minor Park	3	3	3	3	3	3	3	3	3	3	\$255,300
Spray Pads	25	25	25	25	25	26	26	26	27	28	\$480,300
Spray Pads - Lakefront	1	1	1	1	1	1	1	1	1	1	\$774,600
Outdoor Pools Minor	1	1	1	1	1	1	1	1	1	1	\$2,548,560
Outdoor Pools	5	5	5	5	5	5	5	5	5	5	\$2,791,280
Outdoor Pool - Lion's Park	1	1	1	1	1	1	1	1	1	1	\$4,636,840
Cooling Stations	-	-	1	1	1	2	2	2	2	2	\$44,800
Play Equipment - Inclusive	257	257	257	257	256	259	259	259	259	259	\$124,300
Accessible Play Sites	3	3	3	3	3	4	5	5	5	5	\$759,000
Adventure Play Sites	-	-	-	-	-	1	1	1	1	2	\$639,000
Adult Exercise Equipment	1	1	1	1	10	30	31	32	32	33	\$88,000
Basketball	78	78	74	74	78	76	77	77	78	80	\$60,700
Volleyball Unlit	3	3	3	3	4	4	4	4	4	4	\$46,900
Park Name Lt	-	-	-	-	4	4	4	4	4	4	\$83,750
Minor Track	1	1	1	1	1	1	1	1	-	-	\$568,400
Major Track	2	2	2	2	2	2	2	2	3	3	\$1,079,500
Leash Free	6	8	8	8	9	9	9	9	9	9	\$58,500
Total (#)	823	826	820	819	838	865	869	866	869	875	
Total (\$000)	\$309,226.6	\$309,683.7	\$307,062.2	\$308,396.8	\$310,004.5	\$314,822.3	\$317,831.7	\$319,414.3	\$320,806.5	\$323,927.0	

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA

INVENTORY OF CAPITAL ASSETS

RECREATION & PARKS DEVELOPMENT

OUTDOOR BUILDINGS

PARKS BUNKER Park Name	# of Square Feet										UNIT COST (\$/sq.ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Clarkson Park Bunker - 1125 Winston Churchill Blvd	240	240	240	240	240	240	240	240	240	240	\$470
Credit Meadows Park Bunker - 6545 Creditview Rd.	240	240	240	240	240	240	240	240	240	240	\$470
Dunton Athletic Field Park Bunker- 6180 Kennedy Road	240	240	240	240	240	240	240	240	240	240	\$1,890
Elmcreek Park Bunker - 7320 Kennedy Rd	240	240	240	240	240	240	240	240	240	240	\$470
Erin Meadows Park Bunker - 2800 Erin Centre Blvd	240	240	240	240	240	240	240	240	240	240	\$470
Erin Meadows Park Bunker - 2800 Erin Centre Blvd (2nd)	240	240	240	240	240	240	240	240	240	240	\$470
Erin Mills Twin Arena Parks Bunker - Unity Dr. 3205	240	240	240	240	240	240	240	240	240	240	\$470
Erindale Park Parks Bunker - Dundas St. W., 1695	240	240	240	240	240	240	240	240	240	240	\$1,890
Hershey Sportszone Parks Bunker - Matheson Blvd. E. 705	240	240	240	240	240	240	240	240	240	240	\$470
Huron Park Parks Bunker - Paisley Blvd W. 830	603	603	603	603	603	603	603	603	603	603	\$470
Huron Park Prefab Parks Bunker - Paisley Blvd. W. 830	240	240	240	240	240	240	240	240	240	240	\$470
Huron Park Prefab Parks Bunker - Paisley Blvd. W. 830 (2nd)	240	240	240	240	240	240	240	240	240	240	\$470
Ice Land Park Bunker - 705 Matheson Blvd.	240	240	240	240	240	240	240	240	240	240	\$470
Jack Darling Parks Bunker - Lakeshore Road West 1180	240	240	240	240	240	240	240	240	240	240	\$1,890
John C. Price Park - 3077 Littlejohn Land	240	240	240	240	240	240	240	240	240	240	\$470
Kariya Park Bunker - 3620 Kariya Dr.	240	240	240	240	240	240	240	240	240	240	\$470
Lake Aquitane Park - 2750 Aquitaine Ave	240	240	240	240	240	240	240	240	240	240	\$1,890
Lewis Bradley Park Barn (Parks Bunker) - Orr Road 1901	2,164	2,164	2,164	2,164	2,164	2,164	2,164	2,164	2,164	2,164	\$470
Lisgar Fields Park Parks Bunker - Doug Leavens Blvd. 3805	240	240	240	240	240	240	240	240	240	240	\$1,890
Malton CC Parks Bunker - Morning Star 3540	215	215	215	215	215	215	215	215	215	215	\$470
Max Ward Park Parks Bunker - Matheson Blvd. E 2380	240	240	240	240	240	240	240	240	240	240	\$470
Meadowvale CC Parks Bunker - Glen Erin Dr. 6655	240	240	240	240	240	-	-	-	-	-	\$1,890
Meadowvale Sports Park Parks Bunker - Meadowvale Blvd. 2255	240	240	240	240	240	240	240	240	240	240	\$1,890

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA

INVENTORY OF CAPITAL ASSETS

RECREATION & PARKS DEVELOPMENT

OUTDOOR BUILDINGS

PARKS BUNKER Park Name	# of Square Feet										UNIT COST (\$/sq.ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Meadowvale Sports Park Parks Bunker - Meadowvale Blvd. 2255 (2nd)	240	240	240	240	240	240	240	240	240	240	\$1,890
Miss. Valley Park Parks Bunker-New - Miss. Valley Blvd 1275	517	517	517	517	517	517	517	517	517	517	\$1,890
Miss. Valley Park Parks Bunker-Old- Miss. Valley Blvd 1275	215	215	215	215	215	215	215	215	215	215	\$1,890
Ninth Line Park Storage Parks Bunker - Ninth Line 3115	240	240	240	240	240	240	240	240	240	240	\$470
Paul Coffey (Wildwood) Park North Parks Bunker - Derry Rd. E. 3430	240	240	240	240	240	240	240	240	240	240	\$1,890
Paul Coffey (Wildwood) Park South Parks Bunker - Derry Rd. E. 3430 (2nd)	240	240	240	240	240	240	240	240	240	240	\$1,890
Port Credit Arena - 32 Stavebank Rd	240	240	240	240	240	240	240	240	240	240	\$470
Port Credit Memorial Park Parks Bunker - Stavebank Rd. 32	398	398	398	398	398	398	398	398	398	398	\$470
Red Brush Park Parks Bunker - Red Brush Drive 5139	240	240	240	240	240	240	240	240	240	240	\$470
Rivergrove CC Parks Bunker - River Grove Ave. 5800	240	240	240	240	240	240	240	240	240	240	\$470
Riverwood - 4190 Riverwood Park Lane	240	240	240	240	240	240	240	240	240	240	\$470
South Common Park Parks Bunker - South Millway 2233	240	240	240	240	240	240	240	240	240	240	\$470
St. Lawrence Park - 75 St. Lawrence Dr.	240	240	240	240	240	240	240	240	240	240	\$470
Streetsville Public Cemetery Parks Bunker - 1786 Bristol Rd. W.	240	240	240	240	240	240	240	240	240	240	\$470
Streetsville Memorial Park - 335 Church St.	240	240	240	240	240	240	240	240	240	240	\$470
Streetsville Memorial Park - 335 Church St. (2nd)	240	240	240	240	240	240	240	240	240	240	\$470
Tom Chater Memorial Park Parks Bunker - The Collegeway 3195	240	240	240	240	240	240	240	240	240	240	\$470
Tomken Twin Arena Parks Bunker - Tomken Rd. 4495	240	240	240	240	240	240	240	240	240	240	\$470
Total (sq.ft.)	12,512	12,512	12,512	12,512	12,512	12,272	12,272	12,272	12,272	12,272	
Total (\$000)	\$10,328.1	\$10,328.1	\$10,328.1	\$10,328.1	\$10,328.1	\$9,874.5	\$9,874.5	\$9,874.5	\$9,874.5	\$9,874.5	

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA

INVENTORY OF CAPITAL ASSETS

RECREATION & PARKS DEVELOPMENT

OUTDOOR BUILDINGS

Outdoor Recreation Buildings	# of Square Feet										UNIT COST (\$/sq.ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Applewood Tennis Clubhouse - Golden Orchard Dr 3505	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	\$760
A.E. Crookes Park - Clubhouse,Concession, - Lakefront Promenade 140	2,196	2,196	2,196	2,196	2,196	2,196	2,196	2,196	2,196	2,196	\$760
A.E. Crookes Parks - Storage Building - Lakefront Promenade 140	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	\$530
A.E. Crookes Park Scorers Booth - Lakefront Promenade 140	65	65	65	65	65	65	65	65	65	65	\$530
Albert McBride Park - Pergola - 3811 Teeswater Rd	248	248	248	248	248	248	248	248	248	248	\$530
Birchwood Park Storage - 1547 Lakeshore Road West	850	850	850	850	850	-	-	-	-	-	\$530
Birchwood Park Washroom - 1547 Lakeshore Road West	560	560	560	560	560	560	560	560	560	560	\$1,890
BraeBen Club House - Terry Fox Way 5700	14,802	14,802	14,802	14,802	14,802	14,802	14,802	14,802	14,802	14,802	\$760
BraeBen Academy Building -Terry Fox Way 5650	2,002	2,002	2,002	2,002	2,002	2,002	2,002	2,002	2,002	2,002	\$530
BraeBen Maintenance Building - Terry Fox Way 5750	13,532	13,532	13,532	13,532	13,532	13,532	13,532	13,532	13,532	13,532	\$530
BraeBen Ball Shack - Terry Fox Way 5650	97	97	97	97	97	97	97	97	97	97	\$530
Brickyard Park Comfort Station - Clayhill Rd. 3061	1,787	1,787	1,787	1,787	1,787	1,787	1,787	1,787	1,787	1,787	\$1,890
Brickyard Park Electrical Bunker - Clayhill Rd. 3061	65	65	65	65	65	65	65	65	65	65	\$530
Burnhamthorpe CC Comfort Station and Bunker - Gulleden Dr. 1500	1,173	1,173	1,173	1,173	1,173	1,173	1,173	1,173	1,173	1,173	\$1,890
Burnhamthorpe CC Covered Outdoor Rink - Gulleden Dr. 1500	13,207	13,207	13,207	13,207	13,207	13,207	13,207	13,207	13,207	13,207	\$530
Camp Totoredaca-Building A - Mississ. Road/Ninth Line	1,744	1,744	1,744	1,744	1,744	1,744	1,744	1,744	1,744	1,744	\$530
Camp Totoredaca-Building B - Mississ. Road/Ninth Line	2,713	2,713	2,713	2,713	2,713	2,713	2,713	2,713	2,713	2,713	\$530
Camp Totoredaca-Nurse's Hut - Mississ. Road/Ninth Line	226	226	226	226	226	226	226	226	226	226	\$530
Camp Totoredaca-Chief's Hut - Mississ. Road/Ninth Line	183	183	183	183	183	183	183	183	183	183	\$530
Century City Park Gazebo - Focal Rd. 933	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	\$530
Churchill Meadows Common Park - Comfort Station - McDowell Dr. 3370	721	721	721	721	721	721	721	721	721	721	\$1,890
Churchill Meadows Common Park - Gazebo - McDowell Dr. 3370	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	\$530
Churchill Meadows CC - Storage Ninth Line 5320	-	-	-	-	-	-	-	-	-	60	\$530
Churchill Meadows CC - Gazebo Ninth Line 5320	-	-	-	-	-	-	-	-	-	418	\$530
Community Common Park - Comfort Station - Princess Royal Dr. 355	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	\$1,890
Courtneypark Athletic Field Comfort Station - Courtneypark Dr. W. 600	1,959	1,959	1,959	1,959	1,959	1,959	1,959	1,959	1,959	1,959	\$1,890
Credit Village Marina - Stavebank Road 12	1,981	1,981	1,981	1,981	1,981	1,981	1,981	1,981	1,981	1,981	\$530

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA

INVENTORY OF CAPITAL ASSETS

RECREATION & PARKS DEVELOPMENT

OUTDOOR BUILDINGS

Outdoor Recreation Buildings	# of Square Feet										UNIT COST (\$/sq.ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Don Rowing Club Bldg - Front Street North 25	14,791	14,791	14,791	14,791	14,791	14,791	14,791	14,791	14,791	14,791	\$530
Douglas Kennedy Concession Stand - Lakefront Promenade 810	355	355	355	355	355	355	355	355	355	355	\$530
Dr. Martin Dobkin Park Comfort Station & Parks Bunker - Fairview Rd W 395	240	240	240	240	786	786	786	786	786	786	\$530
Dunton Athletic Field Comfort Station - Kennedy Rd. 6180	560	560	560	560	560	560	560	560	560	560	\$1,890
Dunton Athletic Field Electrical Bunker - Kennedy Rd. 6180	-	38	38	38	38	38	38	38	38	38	\$530
Dunton Athletic Field Picnic Shelter-East - Kennedy Rd. 6180	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	\$530
Dunton Athletic Field Picnic Shelter-West - Kennedy Rd. 6180	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	\$530
Erindale Park Comfort Station - Dundas St. W., 1711	301	301	301	-	-	-	1,636	1,636	1,636	1,636	\$1,890
Erindale Park Picnic Shelter - Dundas St. W., 1695	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	\$530
Fallingbrook Park Comfort Station 5135 Fallingbrook Dr	-	-	-	-	-	-	463	463	463	463	\$1,890
Fleetwood Park Comfort. Station - Ponytrail Dr. 3651	883	883	883	883	883	883	883	883	883	883	\$1,890
Frank McKecknie CC Picnic Shelter - Bristol Rd E 310	689	689	689	689	689	689	689	689	689	689	\$530
Front St. Pumping Station Bldg - Lighthouse/BIA/Comfort Station - Lakeshore Rd. W. 105	3,681	3,681	3,681	3,681	3,681	3,681	3,681	3,681	3,681	3,681	\$1,890
Garnetwood Park Comfort Station - 1996 Rathburn Rd East	-	-	-	-	-	-	441	441	441	441	\$1,890
Hancock Park Shelter - Camilla Rd 2151	-	-	-	-	-	-	495	495	495	495	\$530
Harold E Kennedy Park Shelter - Rosewood Avenue 20	355	355	355	355	355	355	355	355	355	355	\$530
Huron Park (Credit Valley) Tennis Clubhouse - Paisley Blvd W 830	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	\$530
Huron Park (Credit Valley) Tennis Clubhouse Storage Shed - Paisley Blvd W 830	183	183	183	183	183	183	183	183	183	183	\$530
Huron Park Electrical Bunker - Paisley Blvd W. 830	97	97	97	97	97	97	97	97	97	97	\$530
Huron Park Picnic Shelter - Paisley Blvd. W. 830	646	646	646	646	646	646	646	646	646	646	\$530
Huron Park Picnic Shelter B - Paisley Blvd. W. 830	-	-	-	-	1,636	1,636	1,636	1,636	1,636	1,636	\$530
Iceland Park Electrical Bunker - Matheson Blvd. E. 705	97	97	97	97	97	97	97	97	97	97	\$530
Jack Darling Comfort Station - North - Lakeshore Road West 1180	603	603	603	603	603	603	603	603	603	603	\$1,890
Jack Darling Comfort Station - East - Lakeshore Road West 1180	2,153	2,153	2,153	2,153	2,153	2,153	2,153	2,153	2,153	2,153	\$1,890
Jack Darling Comfort Station - West- Lakeshore Road West 1180	1,119	1,119	1,119	1,119	1,119	1,119	1,119	1,119	1,119	1,119	\$1,890
Jack Darling Park Picnic Shelter - Lakeshore Road West 1180	560	560	560	560	560	560	560	560	560	560	\$530
J.C. Saddington Park Comfort. Station - Lake Street 53	850	850	850	850	850	850	850	850	850	850	\$1,890
J.C. Saddington Park Garage # 1 - Lake Street 53	603	603	603	603	603	603	603	603	603	603	\$530
J.C. Saddington Park Pump House - Lake Street 53	1,249	1,249	1,249	1,249	1,249	1,249	1,249	1,249	1,249	1,249	\$530
J.C. Saddington Park Pavillion - Lake Street 53	958	958	958	958	958	958	958	958	958	958	\$530
Jim Murray Park Shelter Gazebo -5225 Tenth Line W	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	\$530

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA

INVENTORY OF CAPITAL ASSETS

RECREATION & PARKS DEVELOPMENT

OUTDOOR BUILDINGS

Outdoor Recreation Buildings	# of Square Feet										UNIT COST (\$/sq.ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Kariya Park Pavilion and Bell Cover - Kariya Dr. 3620	1,324	1,324	1,324	1,324	1,324	1,324	1,324	1,324	1,324	1,324	\$530
Kariya Park Mech and Electrical Bunker - Kariya Dr. 3620	226	226	226	226	226	226	226	226	226	226	\$530
Kariya Park Service Building-North - Kariya Dr. 3620	151	151	151	151	151	151	151	151	151	151	\$530
Kariya Park Service Building-South - Kariya Dr. 3620	151	151	151	151	151	151	151	151	151	151	\$530
Lake Aquitaine Park Bldg & Comfort Station West - Aquitaine Ave. 2750	1,851	1,851	1,851	1,851	1,851	1,851	1,851	1,851	1,851	1,851	\$1,890
Lake Aquitaine Park Bldg & Comfort Station East - Aquitaine Ave. 2750	517	517	517	517	517	517	517	517	517	517	\$1,890
Lakefront Promenade Parks Depot - Lakefront Prom Pk 725	11,603	11,603	11,603	11,603	11,603	11,603	11,603	11,603	11,603	11,603	\$530
Lakefront Promenade Marina - Offices and W/C - Lakefront Promenade Park 135	5,328	5,328	5,328	5,328	5,328	5,328	5,328	5,328	5,328	5,328	\$530
Lakefront Promenade Picnic Shelter - Lakefront Promenade 95 (at A.E. Crookes Headland	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	\$530
Lakefront Promenade Comfort Station - Lakefront Promenade 110 (at A.E. Crookes Headl	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	\$1,890
Lakefront Promenade Comfort Station - Lakefront Promenade 110 (at R.K. McMillan Head	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	\$1,890
Lakefront Promenade Comfort Station-Splash Pad-Lakefront Promenade 155 (at Douglas	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	\$1,890
Lakeside Park - Comfort Station/ Parks Bunker - Lakeshore Rd W 2268	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	\$1,890
Lakeside Park - Irrigation Bunker (Pond) - Lakeshore Rd W 2268	32	32	32	32	32	32	32	32	32	32	\$530
Lakeside Park Picnic Shelter East	678	678	678	678	678	678	678	678	678	678	\$530
Lakeside Park Picnic Shelter West	678	678	678	678	678	678	678	678	678	678	\$530
Lakeview Golf Course Cart Storage - Dixie Road 1190	2,863	2,863	2,863	2,863	2,863	2,863	2,863	2,863	2,863	2,863	\$530
Lakeview Golf Course Clubhouse - Dixie Road 1190	9,860	9,860	9,860	9,860	9,860	9,860	9,860	9,860	9,860	9,860	\$530
Lakeview Golf Course Starter Shed - Dixie Road 1190	161	161	161	161	161	161	161	161	161	161	\$530
Lakeview Golf Course Grounds Keeper House - Dixie Road 1392	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	\$530
Lakeview Golf Course Pump House - Dixie Road 1190	484	484	484	484	484	484	484	484	484	484	\$530
Lakeview Golf Course Maintenance Building - Dixie Road 1190	5,995	5,995	5,995	5,995	5,995	5,995	5,995	5,995	5,995	5,995	\$530
Lakeview Golf Course Sign Shelter - Dixie Road 1190	54	54	54	54	54	54	54	54	54	54	\$530
Lakeview Golf Course Fuel Station Shelter - Dixie Road 1190	205	205	205	205	205	205	205	205	205	205	\$530
Lakeview Park Picnic Shelter #1 - Lakefront Promenade 811	958	958	958	958	958	958	958	958	958	958	\$530
Lakeview Park Picnic Shelter #2 - Lakefront Promenade 811	958	958	958	958	958	958	958	958	958	958	\$530
Lisgar Fields Park Comfort Station and Parks Bunker	-	-	-	-	786	786	786	786	786	786	\$1,890
Lisgar Fields Park Shelter Gazebo- Doug Leavens Blvd. 3805	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	\$530
Loyola Secondary School - Changerooms - Sladeview Cres. 4010	423	423	423	423	423	423	423	423	423	423	\$530
Malton Village Park Gazebo	-	-	-	301	301	301	301	301	301	301	\$530
Marina Park Fish Grinding Station/Shelter-Heritage Designation	108	108	108	108	108	108	108	108	108	108	\$530

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA

INVENTORY OF CAPITAL ASSETS

RECREATION & PARKS DEVELOPMENT

OUTDOOR BUILDINGS

Outdoor Recreation Buildings	# of Square Feet										UNIT COST (\$/sq.ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Max Ward Park Gazebo - Matheson Blvd. E 2380	291	291	291	291	291	291	291	291	291	291	\$530
Meadowvale CC Exterior Shade Structure - Glen Erin 6655	-	-	-	-	807	807	807	807	807	807	\$530
Meadowvale Conservation Area Comfort Station - Derry Rd. W. 1081	829	829	829	829	829	829	829	829	829	829	\$1,890
Meadowvale Conservation Area Picnic Shelter A - Derry Rd. W. 1081	721	721	721	721	721	721	721	721	721	721	\$530
Meadowvale Conservation Area Picnic Shelter B - Derry Rd. W. 1081	721	721	721	721	721	721	721	721	721	721	\$530
Meadowvale Conservation Area Sign Shelter - 1081 Old Derry Road	108	108	108	108	108	108	108	108	108	108	\$530
Meadowvale Four Rinks Hydro Vault	377	377	377	377	377	377	377	377	377	377	\$530
Meadowvale North Sports Park Comfort Station - Meadowvale Blvd. 2255	893	893	893	893	893	893	893	893	893	893	\$1,890
Meadowwood Park Tennis Club Storage Building - Apple Lane 484	226	226	226	226	226	226	226	226	226	226	\$530
Mississauga Canoe Club Bldg - Front Street North 31	9,418	9,418	9,418	9,418	9,418	9,418	9,418	9,418	9,418	9,418	\$530
Mississauga Sailing Club Bldg - Lakefront Prom Pk 120	2,314	2,314	2,314	2,314	2,314	2,314	2,314	2,314	2,314	2,314	\$530
Mississauga Sailing Club Garage - Lakefront Prom Pk 120	484	484	484	484	484	484	484	484	484	484	\$530
Miss. Valley Comfort Stn. - Miss. Valley Blvd 1275	893	893	893	893	893	893	893	893	893	893	\$1,890
Miss. Valley Park Picnic Shelter - Miss. Valley Blvd. 1385	2,271	2,271	2,271	2,271	2,271	2,271	2,271	2,271	2,271	2,271	\$530
Miss. Valley Park - Picnic Shelter (B) - Miss. Valley Blvd. 1386	3,035	3,035	3,035	3,035	3,035	3,035	3,035	3,035	3,035	3,035	\$530
O'Connor Park Gazebo - Bala Dr 3570	1,830	1,830	1,830	1,830	1,830	1,830	1,830	1,830	1,830	1,830	\$530
Paramount (Hershey) Outdoor Soccer Change House Comfort Station - Rose Cherry Place	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	\$1,890
Paramount (Hershey) Sportszone South Park Gazebo - Matheson Blvd. E. 705	2,045	2,045	2,045	2,045	2,045	2,045	2,045	2,045	2,045	2,045	\$530
Parks & Forestry Depot - Burnhamthorpe Rd W 950	47,700	47,700	47,700	47,700	47,700	47,700	47,700	47,700	47,700	47,700	\$530
Paul Coffey Park Malton Tennis Clubhouse - Derry Road East 3430	700	700	700	700	700	700	700	700	700	700	\$530
Paul Coffey (Wildwood) Park Picnic Shelter North Bldg A - Derry Road East 3430	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	\$530
Paul Coffey (Wildwood) Park Picnic Shelter North Bldg B - Derry Road East 3430	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	\$530
Paul Coffey (Wildwood) Park Picnic Shelter South - Derry Road East 3430	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	\$530
Paul Coffey (Wildwood) Park Comfort Station & Concession - Derry Road East 3430	2,379	2,379	2,379	2,379	2,379	2,379	2,379	2,379	2,379	2,379	\$1,890
Port Credit Memorial Park Electrical Bunker - Stavebank Rd. 32	86	86	86	86	86	86	86	86	86	86	\$530
Port Credit Memorial Park Gazebo - Stavebank Rd. 32	2,002	2,002	2,002	2,002	2,002	2,002	2,002	2,002	2,002	2,002	\$530

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA

INVENTORY OF CAPITAL ASSETS

RECREATION & PARKS DEVELOPMENT

OUTDOOR BUILDINGS

Outdoor Recreation Buildings	# of Square Feet										UNIT COST (\$/sq.ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Quenippenon Meadows Park Comfort Station - Erin Centre Blvd. 2625	980	980	980	980	980	980	980	980	980	980	\$1,890
Rhododendron Gdns Comfort Station - Lakeshore Rd W. 400	753	753	753	753	753	753	753	753	753	753	\$1,890
Richards Mem. Pk Comft. Stn. - Lakeshore Road West 804	603	603	603	603	603	603	603	603	603	603	\$1,890
Richards Mem. Pk Picnic Shelter - Lakeshore Road West 804	958	958	958	958	958	958	958	958	958	958	\$530
Riverwood Park - Storage Bunker - Riverwood Park Land 4190	452	452	452	452	452	452	452	452	452	452	\$530
Scholar's Green Park (Sheridan College) - (Pavillion) - Prince of Wales Dr. 275	578	578	578	578	578	578	578	578	578	578	\$530
Sherwood Green Park Gazebo - Deer's Wold 1864	140	140	140	140	140	140	140	140	140	140	\$530
South Common Park Tennis Shelter - South Millway 2233	753	753	753	753	753	753	753	753	753	753	\$530
Springfield Pk-Erindale Baseball Clubhouse - Shamir Crescent 1244	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	\$760
Springfield Pk Tennis Clubhouse - The Credit Woodlands 3325	797	797	797	797	797	797	797	797	797	797	\$760
St. Lawrence Park Gazebo - St. Lawrence Dr. 75	624	624	624	624	624	624	624	624	624	624	\$530
St. Lawrence Park Mechanical/Electrical Bunker - St. Lawrence Dr. 75	97	97	97	97	97	97	97	97	97	97	\$530
Streetsville Mem Pk Electrical Bunker - Church Street 335	484	484	484	484	484	484	484	484	484	484	\$530
Streetsville Mem Pk North Miss Soccer Clubhouse/Concession - Church St 335	2,002	2,002	2,002	2,002	2,002	2,002	2,002	2,002	2,002	2,002	\$530
Streetsville Village Hall/Lawn Bowling - Queen Street South 280	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	\$530
Tobias Mason Park Gazebo Shelter -3274 Cactus Gate	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	\$530
Tom Chater Memorial Park-Clubhouse - The Collegeway	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932	\$760
Whiteoaks Pk Tennis Clubhouse - Birchwood Drive 340	850	850	850	850	850	850	850	850	850	850	\$760
Union Park Shelter - Tenth Line West 6627	-	-	-	-	215	215	215	215	215	215	\$530
Woodeden Park Tennis Shelter - Woodeden Dr. 1535	840	840	840	840	840	840	840	840	840	840	\$530
Woodhurst Heights Rink/Tennis Comfort Station - Ashrow Crescent 3475	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	\$1,890
Woodlands Track Clubhouse - Erindale Station Rd 3225	800	-	-	-	-	-	-	-	-	-	\$530
Total (sq.ft.)	276,037	275,275	275,275	275,275	279,265	278,415	281,450	281,450	281,450	281,927	
Total (\$000)	\$211,569.7	\$211,165.9	\$211,165.9	\$210,756.5	\$213,940.2	\$213,489.7	\$218,552.6	\$218,552.6	\$218,552.6	\$218,805.4	

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
RECREATION & PARKS DEVELOPMENT
OUTDOOR BUILDINGS

Outdoor Pools Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Applewood Hts Pk Pool Building - Constitution Blvd 3119	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	\$740
David Ramsey Pool Building - Thornlodge Drive 2470	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	\$740
Erindale Pool Building (Springfield Pool) - Shamir Crescent 1244	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	\$740
Lewis Bradley Pk Pool Building - Inverhouse Road 745	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	\$740
Port Credit Pool Building (Lions Club of Credit Valley) - Rosewood Avenue 20	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	\$740
Streetsville Pool Building - Church Street 335	3,477	3,477	3,477	3,477	3,477	3,477	3,477	3,477	3,477	3,477	\$740
Westacres Park (Don McLean) - Pool Building - Westfield Drive 2166	2,400	-	3,821	3,821	3,821	3,821	3,821	3,821	3,821	3,821	\$740
Total (sq.ft.)	26,007	23,607	27,428	27,428	27,428	27,428	27,428	27,428	27,428	27,428	
Total (\$000)	\$19,245.2	\$17,469.2	\$20,296.7	\$20,296.7	\$20,296.7	\$20,296.7	\$20,296.7	\$20,296.7	\$20,296.7	\$20,296.7	

Land for Outdoor Recreation Buildings Park Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
BraeBen Club House - Terry Fox Way 5700 (Region of Peel owns land)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$8,648,500
BraeBen Academy Building - Terry Fox Way 5650 (Region of Peel owns land)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$8,648,500
BraeBen Maintenance Building - Terry Fox Way 5750 (Region of Peel owns land)	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$8,648,500
BraeBen Ball Shack - Terry Fox Way 5650 (Region of Peel owns land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$8,648,500
Churchill Meadows Outdoor Buildings	-	-	-	-	-	-	-	-	-	3.80	\$8,648,500
Credit Village Marina	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$8,648,500
Loyola Secondary School - Changerooms - 4010 Sladeview Cres	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$8,648,500
Mississauga Canoe Club Bldg	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	\$8,648,500
Mississauga Sailing Club Bldg	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	\$8,648,500
Total (ha)	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	6.39	
Total (\$000)	\$22,374.9	\$22,374.9	\$22,374.9	\$22,374.9	\$22,374.9	\$22,374.9	\$22,374.9	\$22,374.9	\$22,374.9	\$55,239.2	

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
RECREATION & PARKS DEVELOPMENT
OUTDOOR BUILDINGS

Miscellaneous Special Facilities Type	# of Square Feet										UNIT COST (\$/sq.ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Adamson - Derry House - Enola Avenue 875	4,338	4,338	4,338	4,338	4,338	4,338	4,338	4,338	4,338	4,338	\$530
Adamson Barn - Enola Avenue 850	4,198	4,198	4,198	4,198	4,198	4,198	4,198	4,198	4,198	4,198	\$530
Adamson Coach House - Enola Avenue 850	915	915	915	915	915	915	915	915	915	915	\$530
Adamson Main House - Enola Avenue 850	8,148	8,148	8,148	8,148	8,148	8,148	8,148	8,148	8,148	8,148	\$530
Benares Estate - House - Clarkson Rd N 1503	5,759	5,759	5,759	5,759	5,759	5,759	5,759	5,759	5,759	5,759	\$530
Benares Estate - Little Bake Oven - Clarkson Rd N 1503	22	22	22	22	22	22	22	22	22	22	\$530
Benares Estate - Old Ice House - Clarkson Rd N 1503	237	237	237	237	237	237	237	237	237	237	\$530
Benares Estate - Stable - Clarkson Rd N 1503	1,249	1,249	1,249	1,249	1,249	1,249	1,249	1,249	1,249	1,249	\$530
Benares Estate - Visitor Centre - Clarkson Rd N 1503	3,520	3,520	3,520	3,520	3,520	3,520	3,520	3,520	3,520	3,520	\$530
Benares Estate - Woodshed - Clarkson Rd N 1503	431	431	431	431	431	431	431	431	431	431	\$530
Cawthra Elliot Estate House - Cawthra Road 1507	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	\$530
Chappel Estate - House - Riverwood Park Lane 4300	8,461	8,461	8,461	8,461	8,461	8,461	8,461	8,461	8,461	8,461	\$530
Chappel Estate Carport - Riverwood Park Lane 4300	800	800	800	800	800	800	800	800	800	800	\$530
Churchill Meadows CC Air Supported Structure - Ninth Line 5320	-	-	-	-	-	-	-	-	-	44,138	\$23
Lewis Bradley - The Anchorage - Orr Road 1620	1,765	1,765	1,765	1,765	1,765	1,765	1,765	1,765	1,765	1,765	\$530
Lewis Bradley Barn - Orr Road 1620	1,249	1,249	1,249	1,249	1,249	1,249	1,249	1,249	1,249	1,249	\$530
Lewis Bradley Log Cabin - Orr Road 1620	1,356	1,356	1,356	1,356	1,356	1,356	1,356	1,356	1,356	1,356	\$530
Lewis Bradley Pioneer Museum - Orr Road 1620	1,625	1,625	1,625	1,625	1,625	1,625	1,625	1,625	1,625	1,625	\$530
Lewis Bradley Shed - Orr Road 1620	301	301	301	301	301	301	301	301	301	301	\$530
Mary Fix House - 1608 Hurontario St	1,507	1,507	1,507	1,507	1,507	1,507	1,507	1,507	1,507	1,507	\$530
Paramount Fine Foods Centre Air Supported Structure	86,400	86,400	86,400	86,400	86,400	86,400	86,400	86,400	86,400	86,400	\$23
Pinchin Farm - Leslie Log House - 4415 Mississauga Rd.	1,572	1,572	1,572	1,572	1,572	1,572	1,572	1,572	1,572	1,572	\$530
Pinchin Property - Steel Shed - Mississauga Rd. North 4415	2,659	2,659	2,659	2,659	2,659	2,659	2,659	2,659	2,659	2,659	\$530
Riverwood - MacEwan Estate - Burnhamthorpe Rd W., 1465	3,681	3,681	3,681	3,681	3,681	3,681	3,681	3,681	3,681	3,681	\$530
Riverwood - MacEwan Barn - Burnhamthorpe Rd W., 1465	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	\$530
Robinson/Adamson (The Grange) - Dundas Street W 1921	4,070	4,070	4,070	4,070	4,070	4,070	4,070	4,070	4,070	4,070	\$530
Russell Langmaid School (Streetsville Cadets) - Church St 170	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	\$530
Streetsville Cadet Centre Garage - 56 Ontario Street E.	344	344	344	344	344	344	344	344	344	344	\$530
Streetsville Cadet Centre - 56 Ontario Street E.	3,649	3,649	3,649	3,649	3,649	3,649	3,649	3,649	3,649	3,649	\$530
Streetsville Kinsmen (Old Grammar School) - Queen St. S. 327	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	\$530
Timothy Street House - Mill Street 41	2,400	2,400	2,400	2,400	-	-	-	-	-	-	\$530
Total (sq.ft.)	182,455	182,455	182,455	182,455	180,055	180,055	180,055	180,055	180,055	224,193	
Total (\$000)	\$52,898.9	\$52,898.9	\$52,898.9	\$52,898.9	\$51,626.9	\$51,626.9	\$51,626.9	\$51,626.9	\$51,626.9	\$52,621.8	

Land for Miscellaneous Special Facilities Type	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Robinson/Adamson (The Grange) - Dundas Street W 1921	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	\$8,648,500
Streetsville Kinsmen (Old Grammar School) - Queen St. S. 327	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$8,648,500
Total (ha)	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	
Total (\$000)	\$6,116.1	\$6,116.1	\$6,116.1	\$6,116.1	\$6,116.1	\$6,116.1	\$6,116.1	\$6,116.1	\$6,116.1	\$6,116.1	

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA

INVENTORY OF CAPITAL ASSETS

RECREATION & PARKS DEVELOPMENT

PARK BRIDGES

Park Bridges Park Name	# of Metres										UNIT COST (\$/m)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Victory - P-001-01	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	\$23,185
Victory - P-001-02	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	\$23,185
Serson - P-002-01	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	\$23,185
Whiteoaks - P003-01	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	\$23,185
Whiteoaks - P003-02	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	\$23,185
Dellwood - P005-01	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	\$23,185
Dellwood - P005-02	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	\$23,185
Wabukayne - P007-01	35.0	35.0	35.0	35.0	0.0	0.0	0.0	0.0	0.0	0.0	\$23,185
Tecumseh - P015-01	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	\$23,185
Tecumseh - P015-02	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	\$23,185
Huron - P026-01	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	\$23,185
Huron - P026-02	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	\$23,185
Hindhead - P027-01	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	\$23,185
Camilla - P028-01	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	\$23,185
Camilla - P028-02	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	\$23,185
Applewood Hills - P049-01	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	\$23,185
Applewood Hills - P049-02	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	\$23,185
Applewood Hills - P049-03	12.2	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	\$23,185
Applewood Hills - P049-04	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	\$23,185
Applewood Hills - P049-05	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	\$23,185
Applewood Hills - P049-06	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	\$23,185
Applewood Hills - P049-07	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	\$23,185
Applewood Hills - P049-08	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	\$23,185
Thornlodge - P051-01	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	\$23,185
Wildwood Park - P059-01	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	\$23,185
Wildwood Park - P059-02	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	\$23,185
Wildwood Park - P059-03	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	\$23,185

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
RECREATION & PARKS DEVELOPMENT
PARK BRIDGES

Park Bridges Park Name	# of Metres										UNIT COST (\$/m)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Erindale Park - P060-01	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	\$23,185
Erindale Park - P060-02	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	\$23,185
Erindale Park - P060-03	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	\$23,185
Erindale Park - P060-04	15.8	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	\$23,185
Brandon Gate - P068-01	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	\$23,185
Glen Erin Trail - P079-01	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	\$23,185
Stonebrook - P087-01	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	\$23,185
Malton Greenway - P090-01	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	\$23,185
Malton Greenway - P090-02	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	\$23,185
Malton Greenway - P090-03	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	\$23,185
Malton Greenway - P090-04	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	\$23,185
Mississauga Valley - P096-01	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	\$23,185
Birchwood Creek - P099-01	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	\$23,185
Birchwood Creek - P099-02	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	\$23,185
Lake Aquitaine - P102-01	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	\$23,185

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA

INVENTORY OF CAPITAL ASSETS

RECREATION & PARKS DEVELOPMENT

PARK BRIDGES

Park Bridges Park Name	# of Metres										UNIT COST (\$/m)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Lake Aquitaine - P102-02	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	\$23,185
Lake Aquitaine - P102-03	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	\$23,185
Lake Aquitaine - P102-04	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	\$23,185
Port Credit Harbour - P109-01	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	\$23,185
Streetsville Memorial - P114-01	30.8	30.8	30.8	30.8	30.8	30.8	30.8	30.8	30.8	30.8	\$23,185
Frank Dowling - P115-01	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	\$23,185
Riverview Park - P118-01	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	\$23,185
Derry Greenway - P125-01	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	\$23,185
Pinecliff - P128-01	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	\$23,185
Lake Aquitaine Trail - P-130-01	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	\$23,185
Lake Wabukayne Trail - P-132-01	8.2	8.2	8.2	8.2	0.0	0.0	0.0	0.0	0.0	0.0	\$23,185
Garnetwood Park - P-135-01	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	\$23,185
Mullet Creek - P141-01	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	\$23,185
Mullet Creek - P141-02	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	\$23,185
Bonnie Brae - P155-01	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	\$23,185

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA

INVENTORY OF CAPITAL ASSETS

RECREATION & PARKS DEVELOPMENT

PARK BRIDGES

Park Bridges Park Name	# of Metres										UNIT COST (\$/m)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Rhododendron Gardens - P156-01	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	\$23,185
Rhododendron Gardens - P156-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	21.0	21.0	\$23,185
Rhododendron Gardens - P156-03	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	\$23,185
Sawmill Valley Trail - P161-01	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	\$23,185
Sawmill Valley Trail - P161-02	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	\$23,185
Sawmill Valley Trail - P161-03	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	\$23,185
Sawmill Valley Trail - P161-04	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	\$23,185
Sawmill Valley Trail - P161-05	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	\$23,185
Sawmill Valley Trail - P161-06	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	\$23,185
Sawmill Valley Trail - P161-07	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	\$23,185
Sawmill Valley Trail - P161-08	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	\$23,185
Sawmill Valley Trail - P161-09	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	\$23,185
Sawmill Valley Trail - P161-10	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	\$23,185
Sawmill Valley Trail - P161-11	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	\$23,185
Sawmill Valley Trail - P161-12	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	\$23,185
Sawmill Valley Trail - P161-14	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	\$23,185
Sawmill Valley Trail - P161-15	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	\$23,185
McCauley Green - P165-01	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	\$23,185
J.C. Saddington - P167-01	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	\$23,185
J.C. Saddington - P167-02	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	\$23,185
J.C. Saddington - P167-03	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	\$23,185
Adamson Estate - P169-01	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	\$23,185
Lakeview Golf Course - P173-01	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	\$23,185
Lakeview Golf Course - P173-02	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	\$23,185
Lakeview Golf Course - P173-03	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	\$23,185
Lakeview Golf Course - P173-04	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	\$23,185
Lakeview Golf Course - P173-05	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	\$23,185
Lakeview Golf Course - P173-06	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	\$23,185
Lakeview Golf Course - P173-07	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	\$23,185

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA

INVENTORY OF CAPITAL ASSETS

RECREATION & PARKS DEVELOPMENT

PARK BRIDGES

Park Bridges Park Name	# of Metres										UNIT COST (\$/m)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Lakeview Golf Course - P173-08	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	\$23,185
Lakeview Golf Course - P173-09	6.6	6.6	6.6	6.6	6.6	6.6	0.0	0.0	0.0	0.0	\$23,185
Lakeview Golf Course - P173-10	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	\$23,185
Coppersmith Grove - P177-01	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	\$23,185
Woodington Green - P180-01	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	\$23,185
Bishopstoke Walk P-194-01	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	\$23,185
Millgrove Trail - P-196-01	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	\$23,185
Wood Creek P-210-01	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	\$23,185
Wood Creek P-210-02	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	\$23,185
Kariya Park - P231-01	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	\$23,185
Not yet named - P235-01	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	\$23,185
Sismet Park P-236-01	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	\$23,185
Sismet Park P-236-02	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	\$23,185
Edward L. Scarlett Park P-248-01	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	\$23,185
Carolyn Creek - P250-01	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	\$23,185

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
RECREATION & PARKS DEVELOPMENT
PARK BRIDGES

Park Bridges Park Name	# of Metres										UNIT COST (\$/m)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Red Oak Plain P-254-01	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	\$23,185
Helen Molasy Memorial - P261-01	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	\$23,185
Helen Molasy Memorial - P261-02	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	\$23,185
Woodland Chase Trail - P269-01	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	\$23,185
Woodland Chase Trail - P269-02	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	\$23,185
Cooksville Common P-293-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	10.5	10.5	\$23,185
Dr. Martin Dobkin - P290-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	10.5	10.5	\$23,185
Hawthorne Valley Trail - P296-01	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	\$23,185
Barbertown Road Bridge - P306-01	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	\$23,185
Culham Trail - P306-02	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	\$23,185
Culham Trail - P306-03	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	\$23,185
Culham Trail - P306-04	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	\$23,185
Lakefront Promenade - P323-01	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	\$23,185
Lakefront Promenade - P323-02	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	\$23,185
Lakefront Promenade - P323-03	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	\$23,185

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA

INVENTORY OF CAPITAL ASSETS

RECREATION & PARKS DEVELOPMENT

PARK BRIDGES

Park Bridges Park Name	# of Metres										UNIT COST (\$/m)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Lakefront Promenade - P323-04	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	\$23,185
Lakefront Promenade - P323-05	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	\$23,185
Lakefront Promenade - P323-06	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	\$23,185
Lakefront Promenade - P323-07	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	\$23,185
Lakefront Promenade - P323-08	165.0	165.0	165.0	165.0	165.0	165.0	165.0	165.0	165.0	165.0	\$23,185
Lakefront Promenade - P323-09	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	\$23,185
Meadowvale Conservation - P328-01	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	\$23,185
Meadowvale Conservation - P328-02	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	\$23,185
Meadowvale Conservation - P328-03	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	\$23,185
Garden Park - P331-01	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	\$23,185
Garden Park - P331-02	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	\$23,185
Garden Park - P331-03	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	\$23,185
Garden Park - P331-04	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	\$23,185
Garden Park - P331-05	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	\$23,185
Lisgar Meadow Brook - P334-01	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	\$23,185
Lisgar Meadow Brook - P334-02	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	\$23,185
Lisgar Meadow Brook - P334-03	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	\$23,185
Iceland - P-357-01	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	\$23,185
Trail Over Streetsville Cemetery	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	\$23,185
Fletcher's Flats - P-428-01	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	\$23,185
Fletcher's Flats - P-428-02	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	\$23,185
Fletcher's Flats - P-428-03	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	\$23,185
Fletcher's Flats - P-428-04	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	\$23,185
Fletcher's Flats - P428-05	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	\$23,185
Nine Creeks Trail - P534-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	21.0	21.0	\$23,185
Nine Creeks Trail - P534-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.5	75.5	75.5	\$23,185
Total (metres)	3,575	3,577	3,577	3,577	3,534	3,534	3,528	3,666	3,666	3,666	
Total (\$000)	\$82,897.5	\$82,943.9	\$82,943.9	\$82,943.9	\$81,942.3	\$81,942.3	\$81,789.3	\$85,000.4	\$85,000.4	\$85,000.4	

APPENDIX B.5

TABLE 1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
FLEET - FORESTRY, PARKS AND RECREATION

FLEET - FORESTRY, PARKS AND RECREATION Description	# of Fleet										UNIT COST (\$/vehicle)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Total Fleet Inventory	647	662	719	780	808	813	824	839	916	916	\$50,445
Total (#)	647	662	719	780	808	813	824	839	916	916	
Total (\$000)	\$32,638.2	\$33,394.9	\$36,270.3	\$39,347.4	\$40,759.9	\$41,012.1	\$41,567.0	\$42,323.7	\$46,208.0	\$46,208.0	

**APPENDIX B.5
TABLE B.5-1**

**CITY OF MISSISSAUGA
CALCULATION OF SERVICE LEVELS
RECREATION & PARKS DEVELOPMENT**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historic Population	715,067	716,694	718,325	719,960	721,599	729,753	737,999	746,338	754,771	763,300

INVENTORY SUMMARY (\$000)

Indoor Recreation	\$2,074,759.7	\$2,074,451.4	\$2,030,091.5	\$2,012,255.8	\$2,092,768.1	\$2,087,749.9	\$2,087,749.9	\$2,087,749.9	\$2,087,749.9	\$2,144,639.4
Sports Fields	\$309,226.6	\$309,683.7	\$307,062.2	\$308,396.8	\$310,004.5	\$314,822.3	\$317,831.7	\$319,414.3	\$320,806.5	\$323,927.0
Outdoor Buildings	\$322,532.9	\$320,353.0	\$323,180.5	\$322,771.2	\$324,682.8	\$323,778.7	\$328,841.7	\$328,841.7	\$328,841.7	\$362,953.7
Parkland	\$1,623,315.0	\$1,623,380.6	\$1,623,434.8	\$1,623,561.6	\$1,625,437.2	\$1,625,437.2	\$1,625,437.2	\$1,665,152.5	\$1,667,437.0	\$1,667,437.0
Park Bridges	\$82,897.5	\$82,943.9	\$82,943.9	\$82,943.9	\$81,942.3	\$81,942.3	\$81,789.3	\$85,000.4	\$85,000.4	\$85,000.4
Fleet - Forestry, Parks And Recreation	\$32,638.2	\$33,394.9	\$36,270.3	\$39,347.4	\$40,759.9	\$41,012.1	\$41,567.0	\$42,323.7	\$46,208.0	\$46,208.0
Total (\$000)	\$4,445,369.9	\$4,444,207.5	\$4,402,983.2	\$4,389,276.8	\$4,475,594.7	\$4,474,742.6	\$4,483,216.8	\$4,528,482.5	\$4,536,043.5	\$4,630,165.5

SERVICE LEVEL (\$/capita)

**Average
Service
Level**

Indoor Recreation	\$2,901.5	\$2,894.5	\$2,826.1	\$2,795.0	\$2,900.2	\$2,860.9	\$2,828.9	\$2,797.3	\$2,766.1	\$2,809.7	\$2,838.02
Sports Fields	\$432.44	\$432.10	\$427.47	\$428.35	\$429.61	\$431.41	\$430.67	\$427.98	\$425.04	\$424.38	\$428.94
Outdoor Buildings	\$451.05	\$446.99	\$449.91	\$448.32	\$449.95	\$443.68	\$445.59	\$440.61	\$435.68	\$475.51	\$448.73
Parkland	\$2,270.16	\$2,265.10	\$2,260.03	\$2,255.07	\$2,252.55	\$2,227.38	\$2,202.49	\$2,231.10	\$2,209.20	\$2,184.51	\$2,235.76
Park Bridges	\$115.93	\$115.73	\$115.47	\$115.21	\$113.56	\$112.29	\$110.83	\$113.89	\$112.62	\$111.36	\$113.69
Fleet - Forestry, Parks And Recreation	\$45.64	\$46.60	\$50.49	\$54.65	\$56.49	\$56.20	\$56.32	\$56.71	\$61.22	\$60.54	\$54.49
Total (\$/capita)	\$6,216.72	\$6,200.98	\$6,129.51	\$6,096.56	\$6,202.33	\$6,131.86	\$6,074.83	\$6,067.60	\$6,009.83	\$6,065.98	\$6,119.62

**CITY OF MISSISSAUGA
CALCULATION OF MAXIMUM ALLOWABLE
RECREATION & PARKS DEVELOPMENT**

10-Year Funding Envelope Calculation

10 Year Average Service Level 2012 - 2021	\$6,119.62
Net Population Growth 2022 - 2031	54,800
Maximum Allowable Funding Envelope	\$335,355,176



APPENDIX B.5
TABLE B.5-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
RECREATION & PARKS DEVELOPMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022- 2031	Other Dev. Related*
5.0 RECREATION & PARKS DEVELOPMENT										
5.1 Recovery of Hershey Centre Debt										
5.1.1 Principal Payment	2022	\$ 368,408	\$ -	\$ 368,408	0%	\$ -	\$ 368,408	\$ -	\$ 368,408	\$ -
5.1.2 Principal Payment	2023	\$ 368,408	\$ -	\$ 368,408	0%	\$ -	\$ 368,408	\$ -	\$ 368,408	\$ -
5.1.3 Principal Payment	2024	\$ 368,408	\$ -	\$ 368,408	0%	\$ -	\$ 368,408	\$ -	\$ 368,408	\$ -
5.1.4 Principal Payment	2025	\$ 368,408	\$ -	\$ 368,408	0%	\$ -	\$ 368,408	\$ -	\$ 368,408	\$ -
5.1.5 Principal Payment	2026	\$ 368,408	\$ -	\$ 368,408	0%	\$ -	\$ 368,408	\$ -	\$ 368,408	\$ -
5.1.6 Principal Payment	2027	\$ 368,408	\$ -	\$ 368,408	0%	\$ -	\$ 368,408	\$ -	\$ 368,408	\$ -
5.1.7 Principal Payment	2028	\$ 368,408	\$ -	\$ 368,408	0%	\$ -	\$ 368,408	\$ -	\$ 368,408	\$ -
Subtotal Recovery of Hershey Centre Debt		\$ 2,578,859	\$ -	\$ 2,578,859		\$ -	\$ 2,578,859	\$ -	\$ 2,578,859	\$ -
5.2 City Wide Recreation										
5.2.1 Burnhamthorpe CC Redevelopment	2022	\$ 21,115,000	\$ 9,501,750	\$ 11,613,250	78%	\$ 9,058,335	\$ 2,554,915	\$ 2,554,915	\$ -	\$ -
5.2.2 Recreation Future Directions Background Studies	2022	\$ 120,000	\$ -	\$ 120,000	0%	\$ -	\$ 120,000	\$ 120,000	\$ -	\$ -
5.2.3 South Common CC renovation - design & construction	2022	\$ 1,545,000	\$ 1,018,966	\$ 526,034	56%	\$ 294,579	\$ 231,455	\$ 231,455	\$ -	\$ -
5.2.4 Carmen Corbasson CC Redevelopment	2022	\$ 5,000,000	\$ 4,350,000	\$ 650,000	82%	\$ 533,000	\$ 117,000	\$ 117,000	\$ -	\$ -
5.2.5 Carmen Corbasson CC Redevelopment	2023	\$ 20,000,000	\$ 13,500,000	\$ 6,500,000	82%	\$ 5,330,000	\$ 1,170,000	\$ 1,170,000	\$ -	\$ -
5.2.6 Burnhamthorpe CC Redevelopment	2023	\$ 1,478,000	\$ 672,497	\$ 805,503	78%	\$ 628,292	\$ 177,211	\$ 177,211	\$ -	\$ -
5.2.7 Recreation Future Directions Master Plan	2023	\$ 200,000	\$ -	\$ 200,000	0%	\$ -	\$ 200,000	\$ 200,000	\$ -	\$ -
5.2.8 South Common CC renovation - design & construction	2023	\$ 2,060,000	\$ 1,358,622	\$ 701,378	56%	\$ 392,772	\$ 308,606	\$ 308,606	\$ -	\$ -
5.2.9 Burnhamthorpe Program Furniture and Equipment	2024	\$ 500,000	\$ 227,503	\$ 272,497	0%	\$ -	\$ 272,497	\$ -	\$ 272,497	\$ -
5.2.10 Carmen Corbasson CC Redevelopment	2024	\$ 11,742,000	\$ 9,111,990	\$ 2,630,010	82%	\$ 2,156,608	\$ 473,402	\$ -	\$ 473,402	\$ -
5.2.11 Carmen Corbasson Furniture and Equipment	2024	\$ 500,000	\$ 388,009	\$ 111,991	0%	\$ -	\$ 111,991	\$ -	\$ 111,991	\$ -
5.2.12 Mississauga Valley Feasibility Study	2024	\$ 150,000	\$ -	\$ 150,000	0%	\$ -	\$ 150,000	\$ -	\$ 150,000	\$ -
5.2.13 Glenforest School Pool Demolition	2024	\$ 2,060,000	\$ 90,000	\$ 1,970,000	78%	\$ 1,536,600	\$ 433,400	\$ -	\$ 433,400	\$ -
5.2.14 South Common CC renovation - design & construction	2024	\$ 25,933,000	\$ 17,103,465	\$ 8,829,535	56%	\$ 4,944,540	\$ 3,884,995	\$ -	\$ 3,884,995	\$ -
5.2.15 South Common CC renovation - design & construction	2025	\$ 20,600,000	\$ 13,586,217	\$ 7,013,783	56%	\$ 3,927,718	\$ 3,086,065	\$ -	\$ 3,086,065	\$ -
5.2.16 Cawthra School Pool Demolition	2025	\$ 2,060,000	\$ 400,000	\$ 1,660,000	82%	\$ 1,361,200	\$ 298,800	\$ -	\$ 298,800	\$ -
5.2.17 South Common CC renovation - design & construction	2026	\$ 4,841,000	\$ 3,192,760	\$ 1,648,240	56%	\$ 923,014	\$ 725,226	\$ -	\$ 725,226	\$ -
5.2.18 South Common CC Furniture and Equipment	2026	\$ 500,000	\$ 329,760	\$ 170,240	0%	\$ -	\$ 170,240	\$ -	\$ 170,240	\$ -
5.2.19 Recreation Future Directions Background Studies	2027	\$ 120,000	\$ -	\$ 120,000	0%	\$ -	\$ 120,000	\$ -	\$ 120,000	\$ -
5.2.20 Cooksville Community Centre Design and Construction	2028	\$ 1,023,525	\$ -	\$ 1,023,525	0%	\$ -	\$ 1,023,525	\$ -	\$ 1,023,525	\$ -
5.2.21 Recreation Future Directions Master Plan	2028	\$ 200,000	\$ -	\$ 200,000	0%	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
5.2.22 Cooksville Community Centre Design and Construction	2029	\$ 1,748,897	\$ 207,681	\$ 1,541,216	0%	\$ -	\$ 1,541,216	\$ -	\$ 1,541,216	\$ -
5.2.23 Cooksville Community Centre Design and Construction	2030	\$ 18,638,295	\$ -	\$ 18,638,295	0%	\$ -	\$ 18,638,295	\$ -	\$ 18,638,295	\$ -
5.2.24 Cooksville Community Centre Design and Construction	2031	\$ 18,589,283	\$ -	\$ 18,589,283	0%	\$ -	\$ 18,589,283	\$ -	\$ 18,589,283	\$ -
Subtotal City Wide Recreation		\$ 160,724,000	\$ 75,039,220	\$ 85,684,780		\$ 31,086,659	\$ 54,598,121	\$ 4,879,187	\$ 49,718,934	\$ -

APPENDIX B.5
TABLE B.5-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
RECREATION & PARKS DEVELOPMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
5.3 Park Redevelopment										
5.3.1 Major Redevelopment - Gulleden Park	2022	\$ 3,560,036	\$ -	\$ 3,560,036	62%	\$ 2,207,222	\$ 1,352,814	\$ 1,352,814	\$ -	\$ -
5.3.2 Major Redevelopment - Elmcreek Park	2022	\$ 369,000	\$ -	\$ 369,000	0%	\$ -	\$ 369,000	\$ 369,000	\$ -	\$ -
Subtotal Park Redevelopment		\$ 3,929,036	\$ -	\$ 3,929,036		\$ 2,207,222	\$ 1,721,814	\$ 1,721,814	\$ -	\$ -
5.4 Park Facility Installation										
5.4.1 Multi Use Ramp Facility (New) - Design and Construction	2022	\$ 157,500	\$ -	\$ 157,500	0%	\$ -	\$ 157,500	\$ 157,500	\$ -	\$ -
5.4.2 New Outdoor Fitness - Mississauga Valleys (P_096)	2022	\$ 88,000	\$ -	\$ 88,000	0%	\$ -	\$ 88,000	\$ 88,000	\$ -	\$ -
5.4.3 New Outdoor Fitness - Old Ridge Park	2022	\$ 88,000	\$ -	\$ 88,000	0%	\$ -	\$ 88,000	\$ 88,000	\$ -	\$ -
5.4.4 Sports Fields (New) - Lit Artificial Turf Football Field and Track - Lincoln Alexander SS	2022	\$ 2,640,000	\$ 1,320,000	\$ 1,320,000	0%	\$ -	\$ 1,320,000	\$ 1,320,000	\$ -	\$ -
5.4.5 Northwest Sports Park Phase 2A Park Development - Tennis facility	2022	\$ 4,310,000	\$ -	\$ 4,310,000	0%	\$ -	\$ 4,310,000	\$ 4,310,000	\$ -	\$ -
5.4.6 Spray Pads (New) - Design & Construction - Various Locations	2022	\$ 404,400	\$ -	\$ 404,400	0%	\$ -	\$ 404,400	\$ 404,400	\$ -	\$ -
5.4.7 Multi-Use Ramp Facility Development	2022	\$ 468,000	\$ -	\$ 468,000	0%	\$ -	\$ 468,000	\$ 468,000	\$ -	\$ -
5.4.8 Community Parks - Basic Development - construction - Not Yet Named F_486 Solmar	2022	\$ 434,000	\$ 384,000	\$ 50,000	0%	\$ -	\$ 50,000	\$ 50,000	\$ -	\$ -
5.4.9 Play Equipment (New) - Play Site - Not Yet Named F_486 (Solmar)	2022	\$ 109,700	\$ 109,700	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
5.4.10 Play Equipment (New) - Play Site - Not Yet Named F_411 (Rogers)	2022	\$ 110,000	\$ -	\$ 110,000	0%	\$ -	\$ 110,000	\$ 110,000	\$ -	\$ -
5.4.11 Spray Pads (New) - Design & Construction - Zonta Meadows (P_294)	2023	\$ 404,400	\$ -	\$ 404,400	0%	\$ -	\$ 404,400	\$ 404,400	\$ -	\$ -
5.4.12 Multi Use Ramp Facility (New) - Design and Construction - Zonta Meadows Park (P294)	2023	\$ 157,500	\$ -	\$ 157,500	0%	\$ -	\$ 157,500	\$ 157,500	\$ -	\$ -
5.4.13 Sports Fields (New) - Cricket Pitch Lighting - Not Yet Named P_302	2025	\$ 1,950,000	\$ -	\$ 1,950,000	0%	\$ -	\$ 1,950,000	\$ 1,950,000	\$ -	\$ -
5.4.14 Outdoor Basketball Installation of unlit full court (4 hoops) - Zonta Meadows	2023	\$ 254,000	\$ -	\$ 254,000	0%	\$ -	\$ 254,000	\$ 254,000	\$ -	\$ -
5.4.15 Outdoor Volleyball (new)	2023	\$ 212,000	\$ -	\$ 212,000	0%	\$ -	\$ 212,000	\$ 212,000	\$ -	\$ -
5.4.16 Park Development - Cooksville Parkland Development	2023	\$ 1,200,000	\$ -	\$ 1,200,000	0%	\$ -	\$ 1,200,000	\$ 1,200,000	\$ -	\$ -
5.4.17 Park Development - Hancock Woodlands	2023	\$ 426,440	\$ -	\$ 426,440	0%	\$ -	\$ 426,440	\$ 426,440	\$ -	\$ -
5.4.18 Sports Fields - Design and Construction - 2 unlit tennis courts - Various Community Parks	2023	\$ 157,000	\$ -	\$ 157,000	0%	\$ -	\$ 157,000	\$ 157,000	\$ -	\$ -
5.4.19 Sports Fields - Design and Construction - 1 unlit tennis court - Various Community Parks	2023	\$ 606,000	\$ -	\$ 606,000	0%	\$ -	\$ 606,000	\$ 606,000	\$ -	\$ -
5.4.20 Sports Fields - Lit Baseball - Location TBD	2024	\$ 335,500	\$ -	\$ 335,500	0%	\$ -	\$ 335,500	\$ 335,500	\$ -	\$ -
5.4.21 New Outdoor Fitness - Various Locations	2024	\$ 352,000	\$ -	\$ 352,000	0%	\$ -	\$ 352,000	\$ 352,000	\$ -	\$ -
5.4.22 Sports Fields - 1 Lit Softball - Design and Construction - TBD	2024	\$ 1,195,000	\$ -	\$ 1,195,000	0%	\$ -	\$ 1,195,000	\$ 1,195,000	\$ -	\$ -
5.4.23 Sports Fields - Design and Construction - 2 unlit tennis courts - Various Community Parks	2024	\$ 157,000	\$ -	\$ 157,000	0%	\$ -	\$ 157,000	\$ 157,000	\$ -	\$ -
5.4.24 Park Facility Installation - Leash Free Zone	2024	\$ 351,000	\$ -	\$ 351,000	0%	\$ -	\$ 351,000	\$ 351,000	\$ -	\$ -
5.4.25 Sports Fields - 1 Lit Baseball Diamond - Design and Construction - Location To Be Determined	2024	\$ 2,074,000	\$ -	\$ 2,074,000	0%	\$ -	\$ 2,074,000	\$ 2,074,000	\$ -	\$ -
5.4.26 Sports Fields - 1 Lit Baseball Diamond - Design and Construction - Not Yet Named (F_551) (Adjacent)	2024	\$ 2,073,000	\$ -	\$ 2,073,000	0%	\$ -	\$ 2,073,000	\$ 2,073,000	\$ -	\$ -

APPENDIX B.5
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CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
RECREATION & PARKS DEVELOPMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
5.4 Park Facility Installation Continued										
5.4.27 Sports Fields - Design and Construction - 2 unlit tennis courts - Various Community Parks	2025	\$ 157,000	\$ -	\$ 157,000	0%	\$ -	\$ 157,000	\$ 157,000	\$ -	\$ -
5.4.28 BMX Bike Facility (New) - Design and Construction - Various Community Parks	2026	\$ 364,000	\$ -	\$ 364,000	0%	\$ -	\$ 364,000	\$ 180,961	\$ 183,039	\$ -
5.4.29 Sports Fields - Lit Baseball Diamond -Design and Construction- Not Yet Named (F_551)	2026	\$ 2,073,000	\$ -	\$ 2,073,000	0%	\$ -	\$ 2,073,000	\$ -	\$ 2,073,000	\$ -
5.4.30 Park Improvements - Batting Cage - Cricket - Courtney Park Athletic Park (P_445)	2026	\$ 312,000	\$ 148,000	\$ 164,000	0%	\$ -	\$ 164,000	\$ -	\$ 164,000	\$ -
5.4.31 Sports Fields - Design and Construction - 4 Lit tennis courts - Various Community Parks	2026	\$ 887,000	\$ -	\$ 887,000	0%	\$ -	\$ 887,000	\$ -	\$ 887,000	\$ -
5.4.32 Sports Fields (New) - Convert Major unlit to Lit - Various Locations	2026	\$ 350,000	\$ -	\$ 350,000	0%	\$ -	\$ 350,000	\$ -	\$ 350,000	\$ -
5.4.33 Sports Fields (New)-Lit Artificial Turf Football Field and Track Ascension of Our Lord SS	2027	\$ 3,300,000	\$ 1,650,000	\$ 1,650,000	0%	\$ -	\$ 1,650,000	\$ -	\$ 1,650,000	\$ -
5.4.34 Park Development - Not Yet Named F_551	2027	\$ 3,000,000	\$ -	\$ 3,000,000	0%	\$ -	\$ 3,000,000	\$ -	\$ 3,000,000	\$ -
5.4.35 Park Development - Not Yet Named F_551	2028	\$ 7,000,000	\$ -	\$ 7,000,000	0%	\$ -	\$ 7,000,000	\$ -	\$ 7,000,000	\$ -
5.4.36 Park Development - Addition to King's Masting Park	2028	\$ 910,000	\$ -	\$ 910,000	0%	\$ -	\$ 910,000	\$ -	\$ 910,000	\$ -
5.4.37 Park Development - Addition to Rhododendron Gardens	2028	\$ 206,000	\$ -	\$ 206,000	0%	\$ -	\$ 206,000	\$ -	\$ 206,000	\$ -
5.4.38 Sports Fields (New) - Lit Artificial Turf Soccer conversion from unlit soccer - Various Locations	2028	\$ 2,252,000	\$ -	\$ 2,252,000	0%	\$ -	\$ 2,252,000	\$ -	\$ 2,252,000	\$ -
5.4.39 Sports Fields (New) - Convert Major unlit to Lit - Various Locations	2029	\$ 350,000	\$ -	\$ 350,000	0%	\$ -	\$ 350,000	\$ -	\$ 350,000	\$ -
5.4.40 Sports Fields (New) - Convert Major unlit to Lit - Various Locations	2029	\$ 350,000	\$ -	\$ 350,000	0%	\$ -	\$ 350,000	\$ -	\$ 350,000	\$ -
5.4.41 Sports Fields - Design and Construction - 4 unlit Pickleball Courts - Various Community Parks	2029	\$ 376,000	\$ -	\$ 376,000	0%	\$ -	\$ 376,000	\$ -	\$ 376,000	\$ -
5.4.42 Sports Fields (New) - Lit Artificial Turf Soccer conversion from unlit soccer - Various Locations	2030	\$ 2,252,000	\$ -	\$ 2,252,000	0%	\$ -	\$ 2,252,000	\$ -	\$ 2,252,000	\$ -
Subtotal Park Facility Installation		\$ 44,853,440	\$ 3,611,700	\$ 41,241,740		\$ -	\$ 41,241,740	\$ 19,238,701	\$ 22,003,039	\$ -
5.5 Parkland Development										
5.5.1 Park Development - Not Yet Named (F_411) (Rogers) - Community Facility	2022	\$ 500,000	\$ -	\$ 500,000	0%	\$ -	\$ 500,000	\$ 500,000	\$ -	\$ -
5.5.2 Community Parks-Design & Cons - Credit Meadows (P_122) (Former Harris Property) - Phase 1 Park Dev	2022	\$ 2,425,000	\$ -	\$ 2,425,000	0%	\$ -	\$ 2,425,000	\$ 2,425,000	\$ -	\$ -
5.5.3 Northwest Sports Park Phase 2B Park Development - sport field, Natural Heritage area	2022	\$ 13,127,000	\$ -	\$ 13,127,000	0%	\$ -	\$ 13,127,000	\$ 13,127,000	\$ -	\$ -
5.5.4 Community Parks - Woodlot basic development - Ninth Line - Not Yet Named P_460	2023	\$ 307,000	\$ -	\$ 307,000	0%	\$ -	\$ 307,000	\$ -	\$ 307,000	\$ -
5.5.5 Community Parks - Woodlot basic development - Not Yet Named P_454 (Ninth Line)	2025	\$ 53,000	\$ -	\$ 53,000	0%	\$ -	\$ 53,000	\$ -	\$ 53,000	\$ -
5.5.6 Park Development - Downtown 21 (F_411) (Rogers)	2025	\$ 5,976,000	\$ -	\$ 5,976,000	0%	\$ -	\$ 5,976,000	\$ -	\$ 5,976,000	\$ -
5.5.7 Danville Park Phase 2 - South End	2028	\$ 3,870,000	\$ -	\$ 3,870,000	0%	\$ -	\$ 3,870,000	\$ -	\$ 3,870,000	\$ -
Subtotal Parkland Development		\$ 26,258,000	\$ -	\$ 26,258,000		\$ -	\$ 26,258,000	\$ 16,052,000	\$ 10,206,000	\$ -

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CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
RECREATION & PARKS DEVELOPMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
5.6 Port Credit Marina										
5.6.1 Port Credit Marina Development - 1 Port Street East	2025	\$ 77,273,000	\$ 35,636,500	\$ 41,636,500	14%	\$ 6,000,000	\$ 35,636,500	\$ -	\$ 35,636,500	\$ -
Subtotal Port Credit Marina		\$ 77,273,000	\$ 35,636,500	\$ 41,636,500		\$ 6,000,000	\$ 35,636,500	\$ -	\$ 35,636,500	\$ -
5.7 Multi-Use Trails										
5.7.1 Bicycle/Pedestrian System_Design_Culham Trail - Harris Lands (ORT05D)	2022	\$ 1,750,000	\$ -	\$ 1,750,000	23%	\$ 402,500	\$ 1,347,500	\$ 1,347,500	\$ -	\$ -
5.7.2 Parks Union Gas Pipe line Corridor Development - 9th Line East	2022	\$ 768,000	\$ -	\$ 768,000	23%	\$ 176,640	\$ 591,360	\$ 591,360	\$ -	\$ -
5.7.3 Bicycle/Pedestrian System Development_Const_Culham Trail-ORT 05B Derry Rd Connection	2022	\$ 200,000	\$ -	\$ 200,000	23%	\$ 46,000	\$ 154,000	\$ 154,000	\$ -	\$ -
5.7.4 Bicycle/Pedestrian System_Const_FletchersCreekTrail_Sombrero Way to Donway Dr (ORT14E)	2022	\$ 800,000	\$ 360,000	\$ 440,000	23%	\$ 101,200	\$ 338,800	\$ 338,800	\$ -	\$ -
5.7.6 Bicycle/Pedestrian System_Const_FletchersCreekTrail_St. Lija-Derrydale Golf Course(ORT14C)	2025	\$ 1,558,000	\$ -	\$ 1,558,000	23%	\$ 358,340	\$ 1,199,660	\$ -	\$ 1,199,660	\$ -
5.7.5 Bicycle/Pedestrian System Development -Lakeshore Corridor Trail - QEW Bridge OTR_02	2025	\$ 2,414,000	\$ 1,240,000	\$ 1,174,000	23%	\$ 270,020	\$ 903,980	\$ -	\$ 903,980	\$ -
5.7.5 Bicycle/Pedestrian System Development -Lakeshore Corridor Trail - QEW Bridge OTR_02	2026	\$ 3,900,000	\$ 1,860,000	\$ 2,040,000	23%	\$ 469,200	\$ 1,570,800	\$ -	\$ 1,570,800	\$ -
5.7.7 Bicycle/Pedestrian System_Design_403 Corridor/BRT Trail_Central Pkwy-Mavis Rd(ORT07D)	2027	\$ 1,569,000	\$ 627,600	\$ 941,400	23%	\$ 216,522	\$ 724,878	\$ -	\$ 724,878	\$ -
5.7.8 Bicycle/Pedestrian System_Desg&Const_PipelineCorridor_9th Line to 10th Line (ORT18B)	2027	\$ 487,000	\$ -	\$ 487,000	23%	\$ 112,010	\$ 374,990	\$ -	\$ 374,990	\$ -
5.7.9 Bicycle/Pedestrian System_Construction - Mullet Creek Trail - Folkway to Eglinton Ave(ORT15B)	2029	\$ 226,000	\$ -	\$ 226,000	23%	\$ 51,980	\$ 174,020	\$ -	\$ 174,020	\$ -
5.7.10 Bicycle/Pedestrian System_Design&Construction_410 Corridor_Park 302 (ORT13A)	2029	\$ 796,000	\$ -	\$ 796,000	23%	\$ 183,080	\$ 612,920	\$ -	\$ 612,920	\$ -
5.7.11 Bicycle/Pedestrian System_Desg&Cons_EtobicokeCreek_ApplewoodTrail_Eastgate-Eglinton(ORT12B)	2030	\$ 483,000	\$ -	\$ 483,000	23%	\$ 111,090	\$ 371,910	\$ -	\$ 371,910	\$ -
Subtotal Multi-Use Trails		\$ 14,951,000	\$ 4,087,600	\$ 10,863,400		\$ 2,498,582	\$ 8,364,818	\$ 2,431,660	\$ 5,933,158	\$ -

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Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
5.8 City Wide Facilities										
5.8.1 Park Development - (F_105) West Village, 70 Mississauga Road	2022	\$ 1,100,000	\$ -	\$ 1,100,000	0%	\$ -	\$ 1,100,000	\$ 1,100,000	\$ -	\$ -
5.8.2 Planning and Development Studies - Future Directions review (Full) - Future Directions (BD_003)	2022	\$ 120,000	\$ -	\$ 120,000	0%	\$ -	\$ 120,000	\$ 120,000	\$ -	\$ -
5.8.3 Sanitation Infrastructure	2022	\$ 500,000	\$ -	\$ 500,000	0%	\$ -	\$ 500,000	\$ 500,000	\$ -	\$ -
5.8.4 Park Development - Not Yet Named (F_303) - Lakeview Village (East of Lakefront Promenade Park)	2022	\$ 4,922,000	\$ -	\$ 4,922,000	0%	\$ -	\$ 4,922,000	\$ -	\$ 4,922,000	\$ -
5.8.5 Park Development - Not Yet Named (F_303) - Lakeview Village (East of Lakefront Promenade Park)	2023	\$ 15,547,222	\$ -	\$ 15,547,222	0%	\$ -	\$ 15,547,222	\$ -	\$ 15,547,222	\$ -
5.8.6 City Centre Development - Park Development Expansion - Construction - Zonta Meadows (P_294)	2023	\$ 4,389,000	\$ -	\$ 4,389,000	0%	\$ -	\$ 4,389,000	\$ -	\$ 4,389,000	\$ -
5.8.7 Park Development - (F_105) West Village, 70 Mississauga Road	2023	\$ 6,300,000	\$ -	\$ 6,300,000	0%	\$ -	\$ 6,300,000	\$ -	\$ 6,300,000	\$ -
5.8.8 Planning and Development Studies - Future Directions review (Update) - Future Directions (BD_003)	2023	\$ 200,000	\$ -	\$ 200,000	0%	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
5.8.9 Park Development - Harbour West - (P_112) Marina Park	2023	\$ 11,068,000	\$ -	\$ 11,068,000	0%	\$ -	\$ 11,068,000	\$ -	\$ 11,068,000	\$ -
5.8.10 City Centre Park Development - Design & Construction - Not Yet Named P_509 (Arbutus Way)	2023	\$ 397,500	\$ -	\$ 397,500	0%	\$ -	\$ 397,500	\$ -	\$ 397,500	\$ -
5.8.11 Park Development - (F_105) West Village, 70 Mississauga Road	2024	\$ 4,000,000	\$ -	\$ 4,000,000	0%	\$ -	\$ 4,000,000	\$ -	\$ 4,000,000	\$ -
5.8.12 Park Development - Not Yet Named (F_303) - Lakeview Village (East of Lakefront Promenade Park)	2024	\$ 27,638,350	\$ -	\$ 27,638,350	0%	\$ -	\$ 27,638,350	\$ -	\$ 27,638,350	\$ -
5.8.13 Park Development - Not Yet Named (F_303) - Lakeview Village (East of Lakefront Promenade Park)	2025	\$ 30,878,320	\$ -	\$ 30,878,320	0%	\$ -	\$ 30,878,320	\$ -	\$ 30,878,320	\$ -
5.8.14 Park Development - (F_105) West Village, 70 Mississauga Road	2025	\$ 13,500,000	\$ -	\$ 13,500,000	0%	\$ -	\$ 13,500,000	\$ -	\$ 10,025,396	\$ 3,474,604
5.8.15 Park Development - (F_105) West Village, 70 Mississauga Road	2026	\$ 4,000,000	\$ -	\$ 4,000,000	0%	\$ -	\$ 4,000,000	\$ -	\$ 3,600,000	\$ 400,000
5.8.16 Park Development - Not Yet Named (F_303) - Lakeview Village (East of Lakefront Promenade Park)	2026	\$ 15,939,580	\$ -	\$ 15,939,580	0%	\$ -	\$ 15,939,580	\$ -	\$ 14,345,622	\$ 1,593,958
5.8.17 Park Development - Not Yet Named (F_303) - Lakeview Village (East of Lakefront Promenade Park)	2027	\$ 9,100,000	\$ -	\$ 9,100,000	0%	\$ -	\$ 9,100,000	\$ -	\$ 8,190,000	\$ 910,000
5.8.18 Park Development - (F_105) West Village, 70 Mississauga Road	2027	\$ 4,743,640	\$ -	\$ 4,743,640	0%	\$ -	\$ 4,743,640	\$ -	\$ 4,269,276	\$ 474,364
5.8.19 Park Development - (F_304) Destination, Arrival Park, 1 Port Street	2027	\$ 960,000	\$ -	\$ 960,000	0%	\$ -	\$ 960,000	\$ -	\$ 960,000	\$ -
5.8.20 Planning and Development Studies - Future Directions review (Update)	2027	\$ 320,000	\$ -	\$ 320,000	0%	\$ -	\$ 320,000	\$ -	\$ 320,000	\$ -
5.8.21 Park Development - Not Yet Named (F_303) - Lakeview Village (East of Lakefront Promenade Park)	2028	\$ 2,000,000	\$ -	\$ 2,000,000	0%	\$ -	\$ 2,000,000	\$ -	\$ 1,800,000	\$ 200,000
5.8.22 Park Development - (F_304) Promenade Around Warf - 1 Port Street	2028	\$ 14,960,000	\$ -	\$ 14,960,000	0%	\$ -	\$ 14,960,000	\$ -	\$ 14,960,000	\$ -
5.8.23 Park Development - Cooksville Parkland Development	2028	\$ 2,915,000	\$ -	\$ 2,915,000	0%	\$ -	\$ 2,915,000	\$ -	\$ 2,915,000	\$ -
5.8.24 Park Development - Cooksville Parkland Development	2029	\$ 4,115,000	\$ -	\$ 4,115,000	0%	\$ -	\$ 4,115,000	\$ -	\$ 4,115,000	\$ -
5.8.25 Park Development - Cooksville Parkland Development	2030	\$ 16,459,000	\$ -	\$ 16,459,000	0%	\$ -	\$ 16,459,000	\$ -	\$ 16,459,000	\$ -
5.8.26 Park Development - (F_105) West Village, 70 Mississauga Road	2030	\$ 1,000,000	\$ -	\$ 1,000,000	0%	\$ -	\$ 1,000,000	\$ -	\$ 900,000	\$ 100,000
5.8.27 Park Development (F_304) - Destination Park - 1 Port Street	2030	\$ 4,620,000	\$ -	\$ 4,620,000	0%	\$ -	\$ 4,620,000	\$ -	\$ 4,620,000	\$ -
5.8.28 Park Development - Cooksville Parkland Development	2031	\$ 16,459,000	\$ -	\$ 16,459,000	0%	\$ -	\$ 16,459,000	\$ -	\$ 16,459,000	\$ -
Subtotal City Wide Facilities		\$ 218,151,612	\$ -	\$ 218,151,612		\$ -	\$ 218,151,612	\$ 1,720,000	\$ 209,278,686	\$ 7,152,926

APPENDIX B.5
TABLE B.5-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
RECREATION & PARKS DEVELOPMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
5.9 Municipal Fleet										
5.9.1 Vehicles & Equipment - Growth Related Equipment - Parks	Various	\$ 2,000,000	\$ -	\$ 2,000,000	0%	\$ -	\$ 2,000,000	\$ 2,000,000	\$ -	\$ -
Subtotal Municipal Fleet		\$ 2,000,000	\$ -	\$ 2,000,000		\$ -	\$ 2,000,000	\$ 2,000,000	\$ -	\$ -
TOTAL RECREATION & PARKS DEVELOPMENT		\$ 550,718,947	\$ 118,375,020	\$ 432,343,927		\$ 41,792,463	\$ 390,551,464	\$ 48,043,362	\$ 335,355,176	\$ 7,152,926

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	100%	\$335,355,176
10-Year Growth in Population in New Units		76,646
Unadjusted Development Charge Per Capita		\$4,375.38
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	0%	\$0
10-Year Non-Res GFA Growth in New Space		1,721,850
Unadjusted Development Charge Per Employee		\$0.00

2022 - 2031 Net Funding Envelope	\$335,355,176
Reserve Fund Balance	\$48,043,362

APPENDIX B.5

TABLE B.5-3

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
RECREATION & PARKS DEVELOPMENT
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

RECREATION & PARKS DEVELOPMENT	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$48,043.4	\$42,808.1	\$30,738.0	\$18,388.8	(\$45,102.1)	(\$39,046.8)	(\$24,162.7)	(\$25,351.6)	\$6,610.7	(\$1,240.9)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Recreation & Parks Development: Prior Growth	\$32,144.7	\$5,473.2	\$6,737.5	\$2,307.0	\$381.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$48,043.4
- Recreation & Parks Development: Non Inflated	\$4,922.0	\$38,208.7	\$36,964.6	\$88,057.7	\$24,068.9	\$19,609.1	\$35,136.5	\$7,519.2	\$43,241.2	\$35,048.3	\$332,776.3
- Hershey Centre Debt (1)	\$368.4	\$368.4	\$368.4	\$368.4	\$368.4	\$368.4	\$368.4	\$0.0	\$0.0	\$0.0	\$2,578.9
- Recreation & Parks Development: Inflated	\$37,435.15	\$44,923.93	\$45,836.11	\$96,264.17	\$26,833.75	\$22,239.30	\$40,163.07	\$8,866.88	\$50,898.30	\$42,124.96	\$415,585.6
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	6,980	7,064	7,150	7,235	7,377	7,998	8,103	8,206	8,312	8,221	76,646
REVENUE											
- DC Receipts: Inflated	\$30,841.5	\$31,837.0	\$32,869.0	\$33,925.0	\$35,282.7	\$39,017.8	\$40,320.7	\$41,649.9	\$43,031.6	\$43,411.7	\$372,186.9
INTEREST											
- Interest on Opening Balance	\$1,681.5	\$1,498.3	\$1,075.8	\$643.6	(\$2,480.6)	(\$2,147.6)	(\$1,328.9)	(\$1,394.3)	\$231.4	(\$68.2)	(\$2,289.1)
- Interest on In-year Transactions	(\$181.3)	(\$359.9)	(\$356.6)	(\$1,714.3)	\$147.9	\$293.6	\$2.8	\$573.7	(\$216.3)	\$22.5	(\$1,788.0)
- Interest on Hershey Centre Debt	(\$141.8)	(\$121.6)	(\$101.3)	(\$81.0)	(\$60.8)	(\$40.5)	(\$20.3)	\$0.0	\$0.0	\$0.0	(\$567.3)
TOTAL REVENUE	\$32,199.9	\$32,853.8	\$33,487.0	\$32,773.2	\$32,889.1	\$37,123.3	\$38,974.2	\$40,829.2	\$43,046.7	\$43,366.0	\$367,542.4
CLOSING CASH BALANCE	\$42,808.1	\$30,738.0	\$18,388.8	(\$45,102.1)	(\$39,046.8)	(\$24,162.7)	(\$25,351.6)	\$6,610.7	(\$1,240.9)	\$0.1	

1 Principal payments not inflated

2022 Adjusted Charge Per Capita

\$4,418.56

Allocation of Capital Program

Residential Sector	100.0%
Non-Residential Sector	0.0%

Rates for 2022

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

Appendix B.6

Living Arts Centre Debt

Living Arts Centre Debt

This section discusses the Living Arts Centre (LAC) debt related to internal borrowings from reserve funds on hand to provide funding for the development-related share of the City’s LAC. While cultural facilities are no longer eligible for inclusion in development charges, *Ontario Regulation 82/98* provides for the continued recovery from development charges of debt or internal borrowings incurred prior to November 25, 1996.

Table 1 2022 – 2031 Development-Related Capital Program and Calculation of the Unadjusted Development Charge

Table 1 presents the calculation of the capital costs to be included for recovery through development charges for the LAC debt. As at December 31, 2021, the outstanding balance remaining on the debt was \$669,750 and it is allocated entirely against new residential development as cultural and entertainment facilities are planned for use by the residential community. The debt is anticipated to be paid in full by 2026 and as such the costs are allocated only to the next five years to growth from 2022 to 2026. The five year population in new units forecast is 35,806 which yields an unadjusted development charge of \$18.70 per capita.

Table 2 Cash Flow Analysis

After cash flow analysis, the residential charge increases to \$21.64 per capita. The following table summarizes the calculation of the LAC debt development charge:

LAC DEBT SUMMARY					
2022 - 2031		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/emp	\$/capita	\$/emp
\$669,750	\$669,750	\$18.70	\$0.00	\$21.64	\$0.00

APPENDIX B.6

TABLE B.6-1

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
LAC DEBT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
6.0 LIVING ARTS CENTRE DEBT										
6.1 Recovery of Living Arts Centre Debt										
6.1.1 Principal Payment	2022	\$ 133,950	\$ -	\$ 133,950	0%	\$ -	\$ 133,950	\$ -	\$ 133,950	\$ -
6.1.2 Principal Payment	2023	\$ 133,950	\$ -	\$ 133,950	0%	\$ -	\$ 133,950	\$ -	\$ 133,950	\$ -
6.1.3 Principal Payment	2024	\$ 133,950	\$ -	\$ 133,950	0%	\$ -	\$ 133,950	\$ -	\$ 133,950	\$ -
6.1.4 Principal Payment	2025	\$ 133,950	\$ -	\$ 133,950	0%	\$ -	\$ 133,950	\$ -	\$ 133,950	\$ -
6.1.5 Principal Payment	2026	\$ 133,950	\$ -	\$ 133,950	0%	\$ -	\$ 133,950	\$ -	\$ 133,950	\$ -
Subtotal Recovery of Living Arts Centre Debt		\$ 669,750	\$ -	\$ 669,750		\$ -	\$ 669,750	\$ -	\$ 669,750	\$ -
TOTAL LIVING ARTS CENTRE DEBT		\$ 669,750	\$ -	\$ 669,750		\$ -	\$ 669,750	\$ -	\$ 669,750	\$ -

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2022 - 2026 DC Eligible Costs	100%	\$669,750
5-Year Growth in Population in New Units		35,806
Unadjusted Development Charge Per Capita		\$18.70
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2026 DC Eligible Costs	0%	\$0
5-Year Non-Res GFA Growth in New Space		1,030,200
Unadjusted Development Charge Per Employee		\$0.00

2022 - 2031 Net Funding Envelope	N/A
Reserve Fund Balance	\$0

APPENDIX B.6

TABLE B.6-2

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
LIVING ARTS CENTRE DEBT
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

LIVING ARTS CENTRE DEBT	2022	2023	2024	2025	2026	TOTAL
OPENING CASH BALANCE	\$0.00	(\$26.14)	(\$40.31)	(\$41.55)	(\$28.90)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS						
- Living Arts Centre Debt: Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Living Arts Centre Debt: Non Inflated (Principle Payment)	\$133.9	\$133.9	\$133.9	\$133.9	\$133.9	\$669.7
NEW RESIDENTIAL DEVELOPMENT						
- Population Growth in New Units	6,980	7,064	7,150	7,235	7,377	35,806
REVENUE						
- DC Receipts: Inflated	\$151.0	\$155.9	\$161.0	\$166.1	\$172.8	\$806.9
INTEREST						
- Interest on Opening Balance	\$0.0	(\$1.7)	(\$2.6)	(\$2.7)	(\$1.9)	(\$8.9)
- Interest on In-year Transactions	\$0.3	\$0.4	\$0.5	\$0.6	\$0.7	\$2.4
- Interest on Living Arts Centre Debt	(\$43.5)	(\$34.8)	(\$26.1)	(\$17.4)	(\$8.7)	(\$130.6)
TOTAL REVENUE	\$107.8	\$119.8	\$132.7	\$146.6	\$162.9	\$669.8
CLOSING CASH BALANCE	(\$26.1)	(\$40.3)	(\$41.5)	(\$28.9)	\$0.0	

2022 Adjusted Charge Per Capita	\$21.64
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Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2022	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	6.5%

Appendix C

Transit Services Technical Appendix

Transit Services

The City of Mississauga's Transit Services operates under the brand MiWay. MiWay is Ontario's third largest transit service which provides connections to other transit systems including GO Transit, Toronto Transit Commission, Brampton Transit and Oakville Transit. MiWay owns and operates over 1,000 transit operators, 500 buses, and more than 72 bus routes servicing approximately 3,300 bus stops.

A. Ridership Analysis

In accordance with the *DCA*, Transit Services must be based on a “planned level of service” rather than the “10-year historical average level of service”. As discussed further in Appendix C.2, for the purposes of determining the “planned level of service” for transit, the City's Transit Services development-related capital program has been informed based on existing and proposed capital budget documents, discussions with staff from MiWay, other long-term planning documents and Council directed initiatives.

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)5).

The ridership forecast for the purposes of the DC Background Study was prepared by HDR on behalf of the City for the 2016, 2031 and 2041 planning horizons. The allocation of ridership for the interim planning years from 2022 to 2031 is based on the DC Background Study shares of population and

employment growth. The ridership analysis is discussed further in Appendix C.1.

It is noted that the *DCA* requires a DC Background Study that includes a transit category of service to include the ridership data and forecast but does not direct that this data must be used in determining the transit DC rate for any or all transit projects included in the development-related capital program.

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 ten-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 ten-year development-related capital program (2022-2031), as informed by the City’s current and proposed capital budgets, long range plans and discussions with City and MiWay 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. 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);

s.10 (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) was included as 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 regulations, *O.Reg. 82/98*, identify 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 (2022-2031)

- 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(2) 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

Transit Ridership Forecast

A. Transit Service Delivery in the City of Mississauga

As demonstrated in Appendix A, Mississauga has experienced steady 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 Services.

The ridership forecast for the purposes of the DC Background Study was developed by HDR (the City's transportation consultant). The following summarizes the transit ridership forecast. Additional information on the underlying model inputs and assumptions are provided in the 2022 Development Charges - Transportation Background Study.

B. Travel Demand Model

The 2022 Development Charges - Transportation Background Study prepared by HDR provides the following description of the study:

The City of Mississauga completed its Pedestrian Master Plan in 2021, Transportation Master Plan in 2019 and Cycling Master Plan in 2018. The City is currently undertaking the Transit and Road Infrastructure Plan that will confirm and identify city-wide long-term transit and road network needs, the Downtown Movement Plan that focuses on the transportation needs for the City Centre, and the Official Plan Review that will address issues for long-term growth. As the timing of the DC update has been advanced by two years, these infrastructure planning studies are still in process and any recommendations from these studies must complete the environmental assessment process that includes public and stakeholder consultation.

The 2022 Transportation Background Study carries forward the same long-term road and transit network as identified in the 2019 Transportation Background Study with only updates for completed projects and other approved network changes.

The 2019 Transportation Background Study prepared by WSP provided the following description of the travel demand model:

The City of Mississauga's most recent travel demand model is based on the GTAModel4 platform, which is a state-of-the-art activity-based model, developed by the Travel Demand Modelling Group (TMG) at the University of Toronto. As part of the Transportation Background Study, the 2016 base year of the travel demand model was updated and calibrated with up-to-date information such as 2016 TTS data, traffic counts, transit ridership data, 2016 census data, etc. The model was updated by WSP with support from TMG.

The travel demand model was updated for the 2022 Transportation Background Study:

For the purposes of the 2022 DC Background Study, the model was also used to forecast the travel demand and transit ridership for the future (2031 and 2041) planning horizon years. The travel demand forecasts were modelled based on future land use, network characteristics, and demographic data received from the City of Mississauga and adjacent municipalities.

C. Transit Demand Forecast Methodology and Key Assumptions

The 2022 Transportation Background Study describes the forecast methodology and key assumptions as follows:

The City's travel demand model was used to forecast future transit ridership as an indicator of the planned level of service based on future land use (population and employment) and future network. The planned future transit network in Mississauga includes:

- Hurontario LRT between Port Credit GO and Main Street at Steeles Avenue (currently under construction)
- Dundas Street BRT between Confederation Parkway to Toronto border (planning for TPAP underway)
- Lakeshore Road BRT between East Avenue to Toronto border (TPAP/EA and preliminary design underway)
- MiWay Express bus routes, including new routes along Bloor Street, Britannia Road- Matheson Boulevard, Burnhamthorpe Road, Eglinton Avenue, Mavis Road, McLaughlin Road, and Tomken Road
- GO Rail Expansion, including 15-min two-way all-day service on the Lakeshore West and Kitchener Lines
- Other transit expansions outside of Mississauga such as Brampton Züm, York Region Transit Viva, and TTC routes, including Eglinton West LRT to Pearson Airport.

The future transit network is consistent with the future network assumed in the 2019 DC study, with the exception of the removal of the Hurontario LRT Downtown loop. With the on-going and continuous model updates undertaken by the City of Mississauga, revised transit ridership forecasts were developed.

D. Ridership Forecast

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.

E. Anticipated Ridership

Table C.1-1 summarizes the direct ridership model outputs of the AM (morning) peak period transit demand for 2016 (2016 network), 2016 (2031 network) and 2041 (2031 network). By applying the proposed 2031 transit network to the anticipated population and employment in 2041, the total AM peak period trips are anticipated to increase from 40,820 in 2016 (base) to 78,660 in 2041 (2031 network).

Table C.1-1: Summary of Ridership Analysis

Scenario	Land Use	Network	AM Peak Period Transit Demand
A	2016	2016	40,820
B	2016	2031	57,550
C	2041	2031	78,660

For the purposes of the DC Background Study analysis, Hemson utilized the ridership forecast prepared by HDR in Table C.1-1 to allocate trips arising from development over the 2016 and 2041 planning period. Table C.1-2 below provides a summary of the ridership growth from 2016 to 2041 as informed from the scenarios identified in Table C.1-1.

Item D in Table C.1-2 below equals the increased ridership arising from Scenario C (78,660 AM peak period trips) less Scenario A (40,820 AM peak period trips) for a total of 37,840 AM peak period trips over the 2016 to 2041 planning period. In order to determine the share of the ridership related to existing development, the 2016 (base) scenario was applied to the proposed 2031 network (shown in Scenario B). The difference between Scenario B

and A is 16,730 AM peak period trips (57,550 – 40,820 AM peak period trips) reflects the increase in trips generated from existing population and employment if the 2031 network were available in 2016.

The AM peak period trips arising from new development is calculated based on the total identified trips for the planning period (37,840 AM peak period trips) less the trips that relate to the existing population (16,730 AM peak period trips). After adjusting for trips added from the existing base, the trips identified as being generated by development occurring over the 2016 to 2041 planning period is equal to 21,110 AM peak period trips (37,840 – 16,730 AM peak period trips).

Table C.1-2: Summary of Ridership Growth

	Analysis of Ridership Growth	AM Peak Period Trips
D	Increased Ridership 2016-2041 (C - A)	37,840
	Trips from 2016 Base (B - A)	
E	Added trips if network improvements available in 2016 (B-A)	16,730
F	Trips Generated from Growth 2016 to 2041 (D – E)	21,110

The ridership model and input data limitations prohibit the production of ridership forecasts for the interim planning years of 2018 and 2029. As a result, the anticipated ridership growth for these years was extrapolated using shares of population and employment growth. Table C.1-3 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 of the DC Background Study.

Table C.1-3a: Summary of Population and Employment

Year	Population	Employment	Total
2016	721,599	454,310	1,175,909
2022	769,022	471,575	1,240,597
2031	818,100	507,740	1,325,840
2041	883,290	531,030	1,414,320

Table C.1-3b: Summary of Population and Employment Growth

Year	Population	Employment	Total	%
2016-2021	47,423	17,265	64,688	27%
2022-2031	49,078	36,165	85,243	36%
2032-2041	65,190	23,290	88,480	37%
2016-2041	161,691	76,720	238,411	100%

The ridership forecast is allocated using shares of population and employment growth shown in Table C.1-3. As shown in Tables C.1-4a and C.1-4b, the 21,110 AM peak period trips deemed to benefit growth occurring from 2016 to 2041 is then allocated at 27 per cent, or 5,730 trips, to 2016-2021 period, 36 per cent, or 7,550 trips, to the 2022-2031 period, and 37 per cent, or 7,830 trips to the 2032-2041 period.

Table C.1-4a: Allocation of Ridership Forecast Ridership Analysis

Year	AM Peak Ridership
Pre 2016	16,730
2016-2041	21,110
Total	37,840

Table C.1-4b: Allocation of Ridership Forecast (Increased Ridership 2016-2041)

Year	AM Peak Ridership	% of Allocation
2016-2021	5,730	27%
2022-2031	7,550	36%
2032-2041	7,830	37%
Total	21,110	100%

F. Assessment of Ridership Capacity

The proposed transit infrastructure included in the Transit Services capital program is required to achieve the total AM peak period trips of 37,840 by 2041. However, recognizing that 7,550 AM peak period transit trips will be added over 2022-2031, there is available ridership capacity at the end of the ten-year planning period.

G. Transit Ridership Allocations

Table C.1-5 provides a summary of the transit ridership allocations used to arrive at the benefit to existing, in-period and post-period share calculations for some of the Transit Services related projects. Of particular importance, the allocations of benefit to existing were determined on a project-by-project basis and are discussed further in Appendix C.2, thus the allocations arising from ridership were not applied to all projects. Table C.1-5 provides a summary of the transit ridership allocations.

H. Benefit to Existing Share (BTE) and Post-Period Benefit Calculation

Using the scenarios identified in Table C.1-1 and the ridership allocations in Tables C.1-4a and C.1-4b, the benefit to existing share is calculated based

on the 2016 (base) trips (16,730 AM peak period trips) plus the 2016-2021 trips (5,730 AM peak period trips). In total, this amounts to 22,460 AM peak period trips, or 59 per cent.

The post-period benefit is based on the trips identified in Table C.1-4 occurring from beyond 2031 to 2041. As shown in Table C.1-5, in total 7,830, or 21 per cent of trips are deemed to relate to development occurring beyond the ten-year planning horizon. The remaining portion, 7,550 trips, or 20 per cent, is related to development occurring within the planning period.

Table C.1-5: Ridership Allocations

Allocation	Year	AM Peak Period	% of Allocation
Benefit to Existing	2016 + (2016-2021)	22,460	59%
In-Period	2022-2031	7,550	20%
Post-Period	Beyond 2031	7,830	21%
Total		37,840	100%

Note: Ridership values have been rounded; allocation based on actual values.

Appendix C.2

Transit Development-Related Capital Program (2022-2031)

Transit Development Related Capital Program (2022-2031)

A. Description of Projects Included in the Capital Program

Table 1 provides details on the 2022-2031 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 Hurontario Light Rail Transit (LRT) project is anticipated to be completed in 2024 and will provide 18-kilometres that will run between Mississauga and Brampton. The higher order infrastructure will be provided and funded by Metrolinx. As such, these costs are not included in the development-related capital program.

i. Buses

The capital program includes the acquisition of buses over the ten-year planning period from 2022-2031. The identified vehicles represent net new acquisitions. As a result of the construction of the proposed Hurontario LRT, approximately 28 buses will be redirected to existing bus routes. It is intended that these buses will be used to meet the increase in need for transit services arising from the existing base as they have been funded by past growth and previous tax revenues.

ii. Vehicles (Non-Bus) and Equipment

The vehicle and equipment category includes transit security and change-off vehicles and associated equipment. Similar to the identified bus infrastructure, the identified fleet acquisitions represent net new infrastructure.

iii. Buildings and Facilities

The buildings and facilities category includes infrastructure that relates to the proposed Transit LRT Hub (infrastructure that is the City's responsibility which could include customer amenities at LRT stops) and the design and construction of the Transit Meadowvale Satellite facility.

iv. Bus Stations, Shelters and Pads

Infrastructure relating to bus shelters, loops and pads on new and existing bus routes is included. The provision for bus shelters and pads is provided where no existing infrastructure is in place on both existing and new routes. The location of shelters is based on ridership thresholds that support a shelter. For bus pads, new pads are installed when new routes are introduced or if existing routes are re-configured. Bus landing pads are proposed on both new and existing routes with the highest amount of ridership and high frequency of buses. Two bus loops are proposed on Central Parkway Transitway Station and Cawthra Transitway Station. Finally, the Dundas and Lakeshore BRT Stations are included as well.

v. Studies

The capital program also includes two studies relating to the electrification of the transit fleet and the MiWay Infrastructure Growth Plan.

B. Calculation of Discounted Development-Related Capital Costs

The 2022-2031 gross development-related capital program for Transit Services amounts to \$455.17 million. Anticipated grants, subsidies or other recoveries are estimated at \$91.00 million yielding a net-City cost of \$364.17 million.

The capital program provides for acquisitions of additional buses at a total cost of \$56.25 million, non-bus vehicle and equipment purchases at a cost of \$660,000, expansion and improvements to buildings and facilities for \$244.00 million, the construction of bus shelters and pads for \$153.41 million, and study costs of \$850,000.

Approximately a total of \$102.33 million has been identified as a benefit to existing share related to:

- **Buses** - 67% based on number of redeployed buses (BTE) and new acquisitions related to growth for the first three buses. The remaining buses are at 0% BTE as they are new acquisitions.
- **Meadowvale Satellite Facility** – 30% based on estimated number of existing buses to be serviced by the facility.

Ridership BTE (59%) is applied to Transit LRT Hub Enhanced Customer Amenities, certain bus stations, shelters and pads, and studies. Details on the calculation is located in Appendix C.1.

The total DC costs eligible for recovery amounts to \$261.84 million. For the purposes of the Transit Services DC calculations, a share of existing reserve funds are assumed to be paying for space, and/or servicing capacity which has paid DCs but has yet to receive new facilities. This is in addition to the requirement of identifying BTE shares and relates to development that occurred prior to the passage of the 2022 DC by-law (“prior growth”).

This includes a share of the monies in the City’s existing DC reserve fund related to applications that have been approved and permits issued but for which construction has yet to be completed, or, in some cases, started. The population, household, employment and non-residential space that will arise from these applications is part of the 2022–2031 planning horizon, and hence development, that has been used in the DC Background Study to establish new proposed DC rates.

A portion of the eligible costs have been deemed a post-period benefit and will be considered for recovery in subsequent development charge studies. Relating to the Transit Meadowvale Satellite facility, 50 per cent of the DC eligible costs have been identified as a post-period benefit recognizing that this facility will benefit growth beyond the 2031 planning horizon. Additionally, 21 per cent of the DC eligible costs have been identified as post-period benefit of the Dundas and Lakeshore BRT Stations. In total, \$123.26 million has been identified as a post-period benefitting share and will be considered for recovery under subsequent development charges studies.

After these adjustments the total 2022-2031 DC eligible share is reduced to \$138.58 million. 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

i. Residential and Non-Residential Allocation

The development charge eligible cost of \$138.58 million is allocated 68 per cent against residential development, or \$93.66 million, and 32 per cent against non-residential development, or \$44.92 million, based on the ratio of forecast growth in population in new units and employment in new floor space. This yields unadjusted development charge rates of \$1,221.94 per capita and \$26.09 per square metre, respectively.

ii. Cash Flow Analysis

After cash flow and reserve fund consideration, the residential calculated charge increases to \$1,228.24 per capita and the non-residential charge decreases slightly to \$25.88 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 SERVICES SUMMARY					
2022 - 2031		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/emp	\$/capita	\$/emp
\$455,174,823	\$138,581,676	\$1,221.94	\$26.09	\$1,228.24	\$25.88

APPENDIX C.2

TABLE 1

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
TRANSIT SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth ¹	2022-2031	Other Dev. Related ¹
1.0 TRANSIT SERVICES										
1.1 Buses										
1.1.1 40' Diesel Hybrid (3 total)	2023	\$ 2,700,000	\$ -	\$ 2,700,000	67%	\$ 1,800,000	\$ 900,000	\$ -	\$ 900,000	\$ -
1.1.2 40' Diesel Hybrid (3 total)	2024	\$ 2,700,000	\$ -	\$ 2,700,000	0%	\$ -	\$ 2,700,000	\$ -	\$ 2,700,000	\$ -
1.1.3 60' Diesel Hybrid (5 per year) (15 total)	2025-2027	\$ 21,000,000	\$ -	\$ 21,000,000	0%	\$ -	\$ 21,000,000	\$ -	\$ 21,000,000	\$ -
1.1.4 60' Diesel Hybrid (5 per year) (20 total)	2028-2031	\$ 28,000,000	\$ -	\$ 28,000,000	0%	\$ -	\$ 28,000,000	\$ -	\$ 28,000,000	\$ -
1.1.5 Bus Equipment (35 total) (2)	2025-2031	\$ 1,855,000	\$ -	\$ 1,855,000	0%	\$ -	\$ 1,855,000	\$ -	\$ 1,855,000	\$ -
Subtotal Buses		\$ 56,255,000	\$ -	\$ 56,255,000		\$ 1,800,000	\$ 54,455,000	\$ -	\$ 54,455,000	\$ -
1.2 Vehicles (Non-Bus) and Equipment										
1.2.1 Non-revenue vehicles	2023	\$ 495,000	\$ -	\$ 495,000	0%	\$ -	\$ 495,000	\$ -	\$ 495,000	\$ -
1.2.2 Non-revenue vehicles	2024	\$ 55,000	\$ -	\$ 55,000	0%	\$ -	\$ 55,000	\$ -	\$ 55,000	\$ -
1.2.3 Non-revenue vehicles	2028	\$ 110,000	\$ -	\$ 110,000	0%	\$ -	\$ 110,000	\$ -	\$ 110,000	\$ -
Subtotal Vehicles (Non-Bus) and Equipment		\$ 660,000	\$ -	\$ 660,000		\$ -	\$ 660,000	\$ -	\$ 660,000	\$ -
1.3 Buildings and Facilities										
1.3.1 Transit LRT Hub – Enhanced Customer Amenities	2023	\$ 2,000,000	\$ -	\$ 2,000,000	59%	\$ 1,187,045	\$ 812,955	\$ -	\$ 812,955	\$ -
1.3.2 Transit Meadowvale Satellite – Design	2025	\$ 2,000,000	\$ -	\$ 2,000,000	30%	\$ 600,000	\$ 1,400,000	\$ -	\$ 440,000	\$ 960,000
1.3.3 Transit Meadowvale Satellite – Construction	2025-2028	\$ 240,000,000	\$ -	\$ 240,000,000	30%	\$ 72,000,000	\$ 168,000,000	\$ -	\$ 52,800,000	\$ 115,200,000
Subtotal Buildings and Facilities		\$ 244,000,000	\$ -	\$ 244,000,000		\$ 73,787,045	\$ 170,212,955	\$ -	\$ 54,052,955	\$ 116,160,000

APPENDIX C.2

TABLE 1

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
TRANSIT SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth ¹	2022- 2031	Other Dev. Related ¹
1.4 Bus Shelters and Pads										
1.4.1 Bus shelters	2022-2031	\$ 9,000,000	\$ 2,375,892	\$ 6,624,108	0%	\$ -	\$ 6,624,108	\$ -	\$ 6,624,108	\$ -
1.4.2 Bus pads and bus landing pads	2022-2031	\$ 4,500,000	\$ 123,194	\$ 4,376,806	0%	\$ -	\$ 4,376,806	\$ -	\$ 4,376,806	\$ -
1.4.3 Central Parkway Transitway Station Bus Loop	2022	\$ 3,000,000	\$ -	\$ 3,000,000	59%	\$ 1,780,568	\$ 1,219,432	\$ -	\$ 1,219,432	\$ -
1.4.4 Laird/Vega On-Street Terminal	2022	\$ 400,000	\$ -	\$ 400,000	59%	\$ 237,409	\$ 162,591	\$ -	\$ 162,591	\$ -
1.4.5 Cawthra Transitway Station Bus Loop	2023	\$ 3,000,000	\$ -	\$ 3,000,000	59%	\$ 1,780,568	\$ 1,219,432	\$ -	\$ 1,219,432	\$ -
1.4.6 Meadowvale Town Centre Terminal Improvements	2025	\$ 2,500,000	\$ -	\$ 2,500,000	59%	\$ 1,483,806	\$ 1,016,194	\$ -	\$ 1,016,194	\$ -
1.4.8 Enhanced Stop Amenities for Priority (Express) Bus Corridors	2027-2031	\$ 6,000,000	\$ -	\$ 6,000,000	0%	\$ -	\$ 6,000,000	\$ -	\$ 6,000,000	\$ -
1.4.9 Bus Terminal Shelter Enhancements	2028, 2030	\$ 800,000	\$ -	\$ 800,000	0%	\$ -	\$ 800,000	\$ -	\$ 800,000	\$ -
1.4.10 Variable message signs (display equipment for LRT)	2022	\$ 400,000	\$ -	\$ 400,000	0%	\$ -	\$ 400,000	\$ -	\$ 400,000	\$ -
1.4.11 Carmen Corbasson Community Centre transit infrastructure	2023	\$ 1,000,000	\$ -	\$ 1,000,000	59%	\$ 593,523	\$ 406,477	\$ -	\$ 406,477	\$ -
1.4.12 Dundas BRT Stations	2022-2026	\$ 109,101,023	\$ 80,003,780	\$ 29,097,243	59%	\$ 17,269,868	\$ 11,827,374	\$ -	\$ 5,803,496	\$ 6,023,878
1.4.13 Lakeshore BRT Stations	2022-2026	\$ 13,708,800	\$ 8,496,125	\$ 5,212,675	59%	\$ 3,093,840	\$ 2,118,835	\$ -	\$ 1,039,677	\$ 1,079,158
Subtotal Bus Shelters and Pads		\$ 153,409,823	\$ 90,998,991	\$ 62,410,832		\$ 26,239,581	\$ 36,171,251	\$ -	\$ 29,068,215	\$ 7,103,036
1.5 Studies										
1.5.1 On-route charging feasibility study	2022	\$ 150,000	\$ -	\$ 150,000	59%	\$ 89,028	\$ 60,972	\$ -	\$ 60,972	\$ -
1.5.2 MiWay Infrastructure Growth Plan 2.0	2023-2028	\$ 700,000	\$ -	\$ 700,000	59%	\$ 415,466	\$ 284,534	\$ -	\$ 284,534	\$ -
Subtotal Studies		\$ 850,000	\$ -	\$ 850,000		\$ 504,494	\$ 345,506	\$ -	\$ 345,506	\$ -
TOTAL TRANSIT SERVICES		\$ 455,174,823	\$ 90,998,991	\$ 364,175,832		\$ 102,331,120	\$ 261,844,712	\$ -	\$ 138,581,676	\$ 123,263,036

(1) BTE includes costs related to prior growth

(2) Bus Equipment includes CadAVL, MG90 Router, Radio, Passenger Counters, Camera, FarePayment, Farebox

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	67.6%	\$93,656,974
10-Year Growth in Population in New Units		76,646
Unadjusted Development Charge Per Capita		\$1,221.94
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	32.4%	\$44,924,701
10-Year Non-Res GFA Growth in New Space		1,721,850
Unadjusted Development Charge Per Employee		\$26.09

APPENDIX C.2

TABLE C.2-2

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
TRANSIT SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

TRANSIT SERVICES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$0.00	\$5,758.18	\$10,443.95	\$16,368.85	\$8,658.06	\$1,800.24	(\$4,446.25)	(\$11,487.33)	(\$7,894.43)	(\$4,186.48)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Transit Services: Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Transit Services: Non Inflated	\$2,913.97	\$4,355.6	\$3,530.3	\$16,483.3	\$15,499.2	\$15,385.2	\$15,826.0	\$6,464.3	\$6,734.7	\$6,464.3	\$93,657.0
- Transit Services: Inflated	\$2,914.0	\$4,442.7	\$3,673.0	\$17,492.2	\$16,776.8	\$16,986.5	\$17,822.7	\$7,425.5	\$7,890.7	\$7,725.5	\$103,149.6
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	6,980	7,064	7,150	7,235	7,377	7,998	8,103	8,206	8,312	8,221	76,646
REVENUE											
- DC Receipts: Inflated	\$8,573.1	\$8,849.8	\$9,136.7	\$9,430.2	\$9,807.6	\$10,845.9	\$11,208.1	\$11,577.5	\$11,961.6	\$12,067.3	\$103,457.9
INTEREST											
- Interest on Opening Balance	\$0.0	\$201.5	\$365.5	\$572.9	\$303.0	\$63.0	(\$244.5)	(\$631.8)	(\$434.2)	(\$230.3)	(\$34.8)
- Interest on In-year Transactions	\$99.0	\$77.1	\$95.6	(\$221.7)	(\$191.7)	(\$168.9)	(\$181.9)	\$72.7	\$71.2	\$76.0	(\$272.5)
TOTAL REVENUE	\$8,672.2	\$9,128.5	\$9,597.9	\$9,781.4	\$9,919.0	\$10,740.0	\$10,781.6	\$11,018.4	\$11,598.7	\$11,913.0	\$103,150.6
CLOSING CASH BALANCE	\$5,758.2	\$10,443.9	\$16,368.9	\$8,658.1	\$1,800.2	(\$4,446.2)	(\$11,487.3)	(\$7,894.4)	(\$4,186.5)	\$1.1	

2022 Adjusted Charge Per Capita **\$1,228.24**

Allocation of Capital Program

Residential Sector	67.6%
Non-Residential Sector	32.4%

Rates for 2022

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

APPENDIX C.2

TABLE C.2-2

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
TRANSIT SERVICES
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

TRANSIT SERVICES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$0.00	\$3,895.37	\$7,340.82	\$11,447.92	\$9,100.04	\$7,201.83	\$3,102.82	(\$1,451.43)	(\$971.00)	(\$587.02)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Transit Services: Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Transit Services: Non Inflated	\$1,397.8	\$2,089.3	\$1,693.4	\$7,906.6	\$7,434.5	\$7,379.9	\$7,591.3	\$3,100.8	\$3,230.4	\$3,100.8	\$44,924.7
- Transit Services: Inflated	\$1,397.8	\$2,131.0	\$1,761.8	\$8,390.5	\$8,047.4	\$8,148.0	\$8,549.1	\$3,561.8	\$3,785.0	\$3,705.7	\$49,478.0
NEW NON-RESIDENTIAL DEVELOPMENT											
- Non-Residential GFA	201,937	203,929	205,967	208,110	210,257	136,957	137,622	138,335	139,000	139,736	1,721,850
REVENUE											
- DC Receipts: Inflated	\$5,226.1	\$5,383.2	\$5,545.8	\$5,715.5	\$5,890.0	\$3,913.4	\$4,011.0	\$4,112.4	\$4,214.8	\$4,321.9	\$48,334.2
INTEREST											
- Interest on Opening Balance	\$0.0	\$136.3	\$256.9	\$400.7	\$318.5	\$252.1	\$108.6	(\$79.8)	(\$53.4)	(\$32.3)	\$1,307.6
- Interest on In-year Transactions	\$67.0	\$56.9	\$66.2	(\$73.6)	(\$59.3)	(\$116.5)	(\$124.8)	\$9.6	\$7.5	\$10.8	(\$156.1)
TOTAL REVENUE	\$5,293.1	\$5,576.5	\$5,868.9	\$6,042.7	\$6,149.2	\$4,049.0	\$3,994.8	\$4,042.2	\$4,169.0	\$4,300.4	\$49,485.7
CLOSING CASH BALANCE	\$3,895.4	\$7,340.8	\$11,447.9	\$9,100.0	\$7,201.8	\$3,102.8	(\$1,451.4)	(\$971.0)	(\$587.0)	\$7.7	

2022 Adjusted Charge Per Sq.M.

\$25.88

Allocation of Capital Program

Residential Sector	67.6%
Non-Residential Sector	32.4%

Rates for 2022

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

Transit Cost of Growth Analysis

This appendix addresses the capital, operating and asset management plan requirements for Transit Services. The analysis examines how the City of Mississauga utilizes long-term financial 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 greater than ten years, the analysis contained in this appendix focuses on the *DCA* legislated ten-year transit planning horizon (the period immediately following the preparation of the 2022 DC Background Study) of 2022–2031. The analysis focuses on the share of capital assets included in the calculation of the DC rates; however, the non DC-eligible components are also identified.

The cost of growth (COG) analysis contained herein has been developed by Hemson and HDR (the City’s transportation consultants) in consultation with City Staff. The 2022 Transportation Background Study, as prepared by HDR, includes an appendix detailing the COG analysis for fleet related Transit assets (see Appendix G of the 2022 Transportation Background Study). The COG analysis included in this appendix addresses all of the identified Transit assets, as such; the relevant sections of the 2022 Transportation Background Study are referenced where appropriate.

A. Operating & Capital Cost Impacts and Asset Management Plan Legislative Requirements

Section 10 of the *DCA* identifies what must be included in a DC 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.

In accordance with the *DCA* amendments that came into effect on January 1, 2016, the DC Background Study must include an Asset Management Plan (AMP). 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 regulations, *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.

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 Services infrastructure. For example, the City has completed a Long-Range Financial Plan and

three-year business plan for Transit assets operated by MiWay (the City's Transit provider) to ensure that funds are managed efficiently.

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

- City of Mississauga Long Range Financial Plan
- City of Mississauga 2022-2025 Business Plan and 2022 Budget
- City of Mississauga 2016 MiWay Asset Management Plan

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 Services 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.

For the purpose of the AMP analysis, assets have been grouped into the following categories identified in the Transit Services capital program (see Appendix C.2).

1. Buses
2. Vehicles (Non-Bus) and Equipment
3. Buildings and Facilities
4. Bus Stations, Shelters and Pads
5. Studies

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

i. 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 Services infrastructure including development charge eligible and ineligible costs. However, the share of the development charge eligible works related to the ten-year Transit Services DC planning, 2022-2031, are the focus.

ii. State of Local Infrastructure

Transit Assets: Inventory

The 2022 Transportation Background Study and 2016 MiWay AMP provides details on the Transit fleet inventory. The following figure is sourced from the 2022 Transportation Background Study.

Figure 1: MiWay Fleet Asset Inventory

Service Area	Asset Category	Asset Sub-Category	Inventory
MiWay	Vehicles	Major Licensed Vehicles (Buses)	514
MiWay	Vehicles	Medium Licensed Vehicles	65
MiWay	Equipment	Major Operating Equipment	Various
MiWay	Equipment	Medium Operating Equipment	Various

In addition to fleet, MiWay also operates a range of Transit related buildings and facilities, shelters, loops, signs and bays and various equipment.

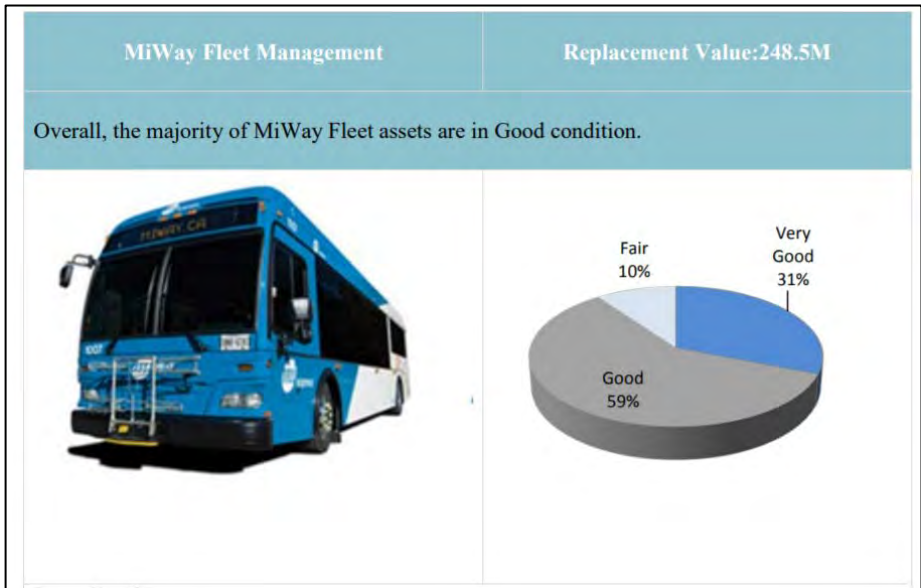
Transit Assets: Condition Ratings

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. This section of the regulation also address the principles, policies and approaches used by the municipality in asset management planning.

As discussed in Appendix G of the 2019 Transportation Background Study and the 2016 MiWay Asset Management Plan (Section 2.4), the majority of MiWay fleet assets are in a state of “good” condition. As such this section was not updated in the 2022 Transportation Background Study.

An excerpt from Section 2.4 (p. 10) of the 2016 MiWay AMP is provided below:

Figure 2: 2016 MiWay AMP (State of Assets)



iii. Levels of Service

For the purposes of the development charge calculations, the “planned level of service” is considered the ten-year development-related capital forecast (2022-2031) in the 2022 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 particular, the City’s 2022 Transportation Background Study provides details on the Transit levels of service, and various service level measures, as identified by MiWay.

iv. Asset Management Strategy

Useful Life Assumptions

A summary of the estimated useful life assumptions for transit capital works considered in the 2022 DC Background Study is outlined in Table C.3-1. Although all capital assets considered in the 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 the DC 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 identified in the 2016 MiWay AMP (Table C.3-4-C.3-3) and the 2019 Transportation Background Study (Appendix G).

Table C.3-1: Summary of Assets Considered and Useful Life Assumptions

Asset Category	Useful Life
Buses <ul style="list-style-type: none">• Diesel 40 ft.• Diesel 60 ft.	12 years 15 years
Vehicles (Non-Bus) and Equipment <ul style="list-style-type: none">• Other Vehicles	10 years

Asset Category	Useful Life
Buildings and Facilities <ul style="list-style-type: none"> Transit LRT Hub - Enhanced Customer Amenities Transit Meadowvale Satellite-Design Transit Meadowvale Satellite - Construction 	40 years 0 years 40 years
Bus Shelters and Pads <ul style="list-style-type: none"> Bus shelter, loops and pads Bus turnaround facilities BRT Stations 	20 years 40 years 40 years
Studies	0 years

Summary of the Transit Capital Program

Table C.3-2 provides a summary of the future Transit projects identified in the capital program. The gross capital costs and 2022-2031 development charge recoverable shares are described further in Appendix C.2

Table C.3-2: Summary of Development-Related Capital Program

Capital Project Description	Gross Cost	2022-2031 DC Recoverable
Buses	\$56,255,000	\$54,455,000
Vehicles (Non-Bus) and Equipment	\$660,000	\$660,000
Buildings and Facilities	\$244,000,000	\$54,052,955
Bus Stations, Shelters and Pads	\$153,409,823	\$29,068,215
Studies	\$850,000	\$345,506
Total	\$455,174,823	\$138,581,676

Annual Provision

Table C.3-3 provides a summary of the calculated annual reserve fund contributions based on the identified useful lives of the various assets and projects shown in Table 1.

Table C.3-3: Summary of Calculated Full Life Cycle Annual Contributions at 2032

	2022 - 2031		Calculated AMP Annual	
Transit Services	Capital Program		Provision by 2032	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Buses	\$54,455,000	\$1,800,000	\$4,316,000	\$154,000
Vehicles (Non-Bus) and Equipment	\$660,000	\$0	\$69,000	\$0
Buildings and Facilities	\$54,053,000	\$189,947,000	\$1,521,000	\$5,350,000
Bus Stations, Shelters and Pads	\$29,068,000	\$124,342,000	\$1,440,000	\$3,578,000
Studies	\$346,000	\$504,000	\$0	\$0
Total	\$138,582,000	\$316,593,000	\$7,346,000	\$9,082,000

As shown in Table C.3-3, the annual provision of \$7.35 million relates to the Transit assets supported under the 2022 DC by-law. A further \$9.08 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 expenditures. It is anticipated that, on average, the actual useful lives of the Transit assets will be longer than the estimates. The earliest point at which contributions will begin is from the initial year of operating the associated asset. The annual contribution at 2032 in Table 3 is the annual contribution for the entire ten-year period, 2022-2031, as the expenditures in 2031 will not trigger asset management contributions until 2032. In addition, the 2032 calculated contribution is the maximum cumulative annual contribution, of any year for all assets over the longest useful life of any specific asset.

Risk Management

The 2016 MiWay AMP identifies several risk management and mitigation measures. The following table is sourced from the 2016 MiWay AMP (section 4.7 Risks to the Asset Management Strategy).

Figure C.3-3: AMP 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 MiWay 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

Identified Risk	Potential Impacts	Mitigation
Economic Changes	<ul style="list-style-type: none"> ▪ Reduced/increased public demand for MiWay 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)

Source: MiWay AMP (2016)

v. Financial Strategy

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

Figure 4 below provides an excerpt from the 2016 MiWay AMP that identifies various funding sources for Transit assets. Funding sources include development charges, federal and provincial gas tax, property tax revenues, debt and other sources.

Figure C.3-4: Transit Funding Source (2017-2026)

Funding	2017 Approved Budget (\$000's)	2018 Forecast (\$000's)	2019 Forecast (\$000's)	2020- 2026 Forecast (\$000's)	Total 2017- 2026 (\$000's)
Development Charges	1,128	1,560	-	11,238	13,926
Federal Gas Tax	11,978	4,820	6,755	272,792	296,345
Provincial Gas Tax	-	2,700	-	-	2,700
Other	8,552	29,751	-	-	38,303

Funding	2017 Approved Budget (\$000's)	2018 Forecast (\$000's)	2019 Forecast (\$000's)	2020- 2026 Forecast (\$000's)	Total 2017- 2026 (\$000's)
Subsidies and Senior Govt. Level Grants	-	-	-	-	-
Tax	6,625	30,791	3,733	1,606	42,795
Debt	1,250	-	-	-	1,250
Total	29,532	69,622	10,528	285,636	395,318

Source: MiWay AMP (2016)

Transit infrastructure in the City of Mississauga is funded from a number of different sources including property taxes, federal and provincial funding (including gas tax, PTIF and ICIP) and development charges. The funding of major projects is addressed individually, and Mississauga works with partners such as TTC, Metrolinx, and others to define service requirements and capital funding needs. These major regional projects are addressed outside of this work.

D. AMP Checklist

Table C.3-4 provides a checklist of how the AMP analysis for Transit services, as required by the provisions of the *DCA*, has been addressed.

O.Reg. 82/98 Public Transit DC Requirements

i. 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 C.3-4: Transit AMP Checklist

O.Reg. 82/98 Section	Comments and Relevant Sections of the 2022 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.	<p>Appendix C provides details on this calculation.</p> <p>The City's transit planned level of service largely relates to the expansion of the existing bus transit system for the residents and businesses of the City of Mississauga.</p>
<p>2. An identification of the portion of the total estimated capital cost relating to the transit services that would benefit,</p> <ul style="list-style-type: none"> 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. 	<p>Appendix A provides details on the anticipated development over the ten-year planning period.</p> <p>Appendix C.1 provides details as it relates to transit ridership over the ten-year planning period.</p>
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 ten-year planning period.

O.Reg. 82/98 Section	Comments and Relevant Sections of the 2022 DC Background Study
4. An assessment of ridership forecasts for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study, categorized by development types, and whether the forecasted ridership will be from existing or planned development.	
5. An assessment of the ridership capacity for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study. O. Reg. 428/15, s. 4.	Appendix C.1 provides details on the ridership capacity calculation.

ii. **Assessment 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 C.3-4: Transit AMP Checklist

O.Reg. 82/98 Section	Comments and Relevant Sections of the 2022 Development Charges Background Study
i. the types of assets and their quantity or extent	Appendix C.3 of the City-wide DC Background Study and Appendix G of the 2019 Transportation Background Study
ii. the financial accounting valuation	

O.Reg. 82/98 Section	Comments and Relevant Sections of the 2022 Development Charges Background Study
and replacement cost valuation for all assets,	provides a discussion of the AMP requirements and how they are met.
iii. the asset age distribution and asset age as a proportion of expected useful life for all assets, and	Relevant City documents that also address these requirements include: <ul style="list-style-type: none"> ▪ City of Mississauga <u>Long Range Financial Plan</u>
iv. the asset condition based on standard engineering practices for all assets	<ul style="list-style-type: none"> ▪ City of Mississauga <u>2022-2025 Business Plan and 2022 Budget</u> ▪ City of Mississauga <u>2016 MiWay Asset Management Plan</u>

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

Table C.3-4: Transit AMP Checklist

O.Reg. 82/98 Section	Comments and Relevant Sections of the 2022 Development Charges Background Study
i. defines the proposed level of service through timeframes and performance measures,	Appendix C.1 and C.2 provide details on the proposed level of service in the City of Mississauga and current ridership performance relative to targets.
ii. discusses any external trends or issues that may affect the proposed level of service or the municipality's ability to meet it, and	Relevant City documents that also address these requirements include: <ul style="list-style-type: none"> ▪ City of Mississauga <u>2022-2025 Business Plan and 2022 Budget</u> ▪ City of Mississauga <u>2016 MiWay Asset Management Plan</u>
iii. shows current performance relative to the targets set out.	The City's 2016 MiWay AMP identifies risks and mitigation measures to the proposed level of service. In particular, the MiWay 2022-2025 and 2022 Budget is updated on an ongoing basis and identifies required investment in transit infrastructure to support transit related strategic priorities and objectives.

3. An asset management strategy that,

Table C.3-4: Transit AMP Checklist

O.Reg. 82/98 Section	Comments and Relevant Sections of the 2022 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 City-wide DC Background Study and Appendix G of the 2019 Transportation Background Study provide details on the actions to implement a sustainable transit system.
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,	<p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> ▪ City of Mississauga 2022-2025 Business Plan and 2022 Budget ▪ City of Mississauga 2016 MiWay Asset Management Plan

O.Reg. 82/98 Section	Comments and Relevant Sections of the 2022 Development Charges Background Study
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,	<p>Appendix C.3 of the City-wide DC Background Study and Appendix G of the 2019 Transportation Background Study provide details on the actions to implement a sustainable transit system.</p> <p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> ▪ City of Mississauga <u>2022-2025 Business Plan and 2022 Budget</u> ▪ City of Mississauga <u>2016 MiWay Asset Management Plan</u> <p>In particular, disposal activities are addressed through vehicles replacement/management – no revenue is generated from vehicles that are disposed of.</p> <p>Appendix C.2 provides details on expansion plans.</p>
iv. discusses the procurement measures that are intended to achieve the proposed level of service	<p>Relevant City documents that address these requirements include:</p> <ul style="list-style-type: none"> • City's annual budget • RFP policies and practices
v. includes an overview of the risks associated with the strategy and any actions that will be taken in response to those risks	<p>Appendix C.3 of the City-wide DC Background Study and Appendix G of the 2019 Transportation Background Study provides details on potential risks and mitigation strategies.</p>

4. A financial strategy that,

Table C.3-4: Transit AMP Checklist

O.Reg. 82/98 Section	Comments and Relevant Sections of the 2022 Development Charges Background Study
<p>i. shows the yearly expenditure forecasts that are proposed to achieve the proposed level of service, categorized by,</p> <p>A. non-infrastructure solutions,</p> <p>B. maintenance activities,</p> <p>C. renewal and rehabilitation activities,</p> <p>D. replacement activities,</p> <p>E. disposal activities, and</p> <p>F. expansion activities,</p>	<p>Appendix C.3 of the City-wide 2022 DC Background Study and the 2019 Transportation 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"> ▪ City of Mississauga 2022-2025 Business Plan and 2022 Budget ▪ City of Mississauga 2016 MiWay Asset Management Plan <p>In particular, disposal activities are addressed through the transit and corporate asset management policies and are generally minimal.</p>
<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,</p>	<p>This information is not available and has not been provided.</p>
<p>iii. gives a breakdown of yearly revenues by source</p>	<p>Appendix C.3 of the City-wide DC Background Study and Appendix G of the 2019 Transportation 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"> ▪ City of Mississauga 2022-2025 Business Plan and 2022 Budget ▪ City of Mississauga 2016 MiWay Asset Management Plan

O.Reg. 82/98 Section	Comments and Relevant Sections of the 2022 Development Charges Background Study
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 City-wide DC Background Study and Appendix G of the 2019 Transportation 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"> ▪ <u>City of Mississauga 2022-2025 Business Plan and 2022 Budget</u>

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, 1997*.

i. Examination of Net Operating Impacts

Table C.3-5 summarizes the anticipated net operating impacts arising from the addition of 41 new buses over the ten-year planning period of 2022-2031. In total, it is anticipated that the City will incur approximately \$7.97 million in additional operating costs by 2031.

TABLE C.3-5

CITY OF MISSISSAUGA
COST OF GROWTH ANALYSIS TRANSIT
ESTIMATED NET OPERATING COST OF THE PROPOSED
2022-2031 DEVELOPMENT-RELATED CAPITAL PROGRAM
(in constant 2022 dollars)

Category	Cost Driver (in 2022 \$)			Additional Operating Costs at 2031	Source and Commentay (Note 1)
	\$	unit measure	Quantity		
Transit					
- Buses	\$135,800	per bus	41	\$5,567,800	See Note 3
- Meadowvale Sattelite Facility	\$0.01	per \$1.00 of infr.	\$240,000,000	\$2,400,000	Estimated, full operating impact to be completed.
TOTAL ESTIMATED OPERATING COSTS				\$7,967,800	

Notes:

1) The source of the operating costs assumptions are the City of Mississauga 2019 Budget and the service specific 2019-2022 Business Plans included in the 2019 Budget Document.

2) Post Period operating cost are only shown when a facility is to be fully open and operating by 2031 and a share of the development-related capital has been allocated to growth beyond 2031.

3) Transit incremental costs based on net (or tax levy) expenditures in the 2019 Budget and the current number of buses. This is more reflective of the trend going forward as the 2022 operating costs were impacted by COVID.

In accordance with the 2016 MiWay AMP, revenue from fares, fees and services accounted for 48 per cent of the operating budget. Additionally, 41 per cent of the budget was funded through property taxes, ten per cent from operating reserves and the remaining one per cent was funded from other revenue sources.

Consistent with current practices, the net funding difference is anticipated to be funded from other revenue sources such as property taxes.

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 ten-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 2022 DC Background Study are financially sustainable over their full life cycle.

Appendix D

Services Related to a Highway

Technical Appendix

Services Related to a Highway Technical Appendix

The City of Mississauga's Transportation and Works Department is responsible for the maintenance, design and construction of City-owned roads, bridges and sidewalks. The following two appendices make up the services related to a highway development charge:

D.1 Public Works

D.2 Roads and Related Infrastructure

Appendix D.1

Public Works Services

Public Works Services

The capital costs associated with Public Works Services “related to a highway” are accounted for in this section. Note that the capital costs associated with road construction are dealt with under the Roads and Related Infrastructure Service. The benefits of Public Works Service is deemed to be City-wide for the purpose of calculating the development charge.

Table 1 2012-2021 Historical Service Levels

The Public Works Services ten-year historical inventory of capital assets includes approximately 234,000 square feet of buildings, currently valued at \$144.80 million. The land associated with the buildings is 17.82 hectares and is valued at \$110.08 million. The Public Works fleet of 458 vehicles is valued at \$18.09 million. Standby equipment adds another \$15.57 million to the value of the inventory.

The current replacement value of the Public Works capital infrastructure is \$288.55 million. It has provided the City with a ten-year average service level of \$242.45 per capita and employment. This service level, multiplied by the ten-year forecast net population and employment growth, results in a maximum allowable funding envelope of \$23.5 million.

Table 1 provides a summary of the level of service and the calculation of the ten-year historical service level. The calculation of the maximum allowable funding envelope is summarized as follows:

Ten-Year Funding Envelope Calculation	
Ten-Year Average Service Level (2012 – 2021)	\$242.45
Net Pop. and Emp. Growth (2022 – 2031)	96,890
Maximum Allowable Funding Envelope	\$23,490,981

The existing facilities have been examined and consideration has been given to whether or not “excess capacity” exists within the City’s infrastructure that may be available to partially meet the future servicing requirements. It has been determined that no “uncommitted excess capacity” exists within the City’s Public Works infrastructure, and as such, no adjustments have been made to the service level calculations.

**Table 2 2022 – 2031 Development-Related Capital Program
and Calculation of the Unadjusted Development
Charges**

The development-related capital program for Public Works Services amounts to \$271.99 million. No grants or subsidies have been identified to fund the program. The program includes \$267.00 million in facility expansion projects—the construction of the Loreland Works Yard between 2024 and 2026 and the Mavis Yard Expansion and Renewal in 2031.

A total of \$85.55 million between these two projects is deemed to benefit the existing community:

- **Future Works Yard (Loreland)** – 5% based on the Yards Master Plan and identified replacement sites and facilities.
- **Mavis Yard Expansion Renewal – Design & Construction** – 43% based on the replacement share of existing office and storage space throughout the City.

The program also makes a provision for ongoing new vehicles and equipment (\$1.99 million) and increased equipment rentals for winter maintenance vehicles (\$3.00 million). These costs are considered to be entirely development-related and therefore have a 0% BTE.

Of the total development-related cost of \$186.44 million, \$11.72 million can be funded from existing Public Works development charge reserve funds

collected from prior growth. Another \$151.22 million represents that portion of the program that exceeds the maximum allowable funding envelope. This other development related share will be considered for recovery from other growth related funding tools and possibly under subsequent DC studies.

The 2022-2031 development-related costs eligible for development charge recovery amount to \$23.49 million, equivalent to the maximum allowable funding envelope. This amount is allocated 68 per cent against residential development, or \$15.88 million, and 32 per cent against non-residential development, or \$7.62 million, based on the ratio of forecast growth in population in new units and employment in new floor space over the next ten-years. This results in an unadjusted development charge of \$207.13 per capita and \$4.42 per square metre respectively.

Table 3 Cash Flow Analysis

After cash flow analysis, the residential calculated charge increases to \$215.21 per capita and the non-residential charge increases to \$4.51 per square metre. This reflects the timing of the capital program and timing of development charges revenues over the ten-years to 2031.

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

PUBLIC WORKS SERVICES SUMMARY						
10-year Hist.	2022 - 2031		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/emp	\$/capita	\$/emp
\$242.45	\$271,985,000	\$23,490,981	\$207.13	\$4.42	\$215.21	\$4.51

APPENDIX D.1

TABLE 1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS SERVICES

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq.ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Clarkson Yrd Bldg Works - Royal Windsor Drive 2167	26,544	26,544	26,544	26,544	26,544	26,544	26,544	26,544	26,544	26,544	\$710
Clarkson Yrd Salt Dome - Royal Windsor Drive 2167	7,341	7,341	7,341	7,341	7,341	7,341	7,341	7,341	7,341	7,341	\$500
Clarkson Yrd Operational Hub - Royal Windsor Drive 2167	452	452	452	452	452	452	452	452	452	452	\$500
Clarkson Yrd Sand Dome - Royal Windsor Drive 2167	7,858	7,858	7,858	7,858	7,858	7,858	7,858	7,858	7,858	7,858	\$500
Clarkson Depot Storage Building (East)- Royal Windsor Drive 2167	3,197	3,197	3,197	3,197	3,197	3,197	3,197	3,197	3,197	3,197	\$500
Clarkson Depot Storage Building (West) - Royal Windsor Drive 2167	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	\$500
Malton Yard Building Works - Fir Tree Drive 7100	26,544	26,544	26,544	26,544	26,544	26,544	26,544	26,544	26,544	26,544	\$710
Malton Yard Garage - Fir Tree Drive 7100	398	398	398	398	398	398	398	398	398	398	\$500
Malton Yard Salt Dome (South) - Fir Tree Drive 7100	7,858	7,858	7,858	7,858	7,858	7,858	7,858	7,858	7,858	7,858	\$500
Malton Yard Sand Dome (North) - Fir Tree Drive 7100	7,858	7,858	7,858	7,858	7,858	7,858	7,858	7,858	7,858	7,858	\$500
Malton Yard Operational Hub - Fir Tree Drive 7100	452	452	452	452	452	452	452	452	452	452	\$500
Malton Depot Storage (North) - Fir Tree Drive 7100	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	\$500
Malton Depot Storage (South) - Fir Tree Drive 7100	1,873	1,873	1,873	1,873	1,873	1,873	1,873	1,873	1,873	1,873	\$500
Mavis North Green House Shed - Mavis Road 3235	861	861	861	861	861	861	861	861	861	861	\$500
Mavis South Carpentry Shop Storage Bldg - Mavis Road 3185	721	721	721	721	721	721	721	721	721	721	\$500
Mavis South Carpentry Shop - Mavis Road 3185	2,056	2,056	2,056	2,056	2,056	2,056	2,056	2,056	2,056	2,056	\$500
Mavis South Works Main Building - Mavis Road 3185	57,044	57,044	57,044	57,044	57,044	57,044	57,044	57,044	57,044	57,044	\$710
Mavis South Works Modular Office - Mavis Road 3185	4,672	4,672	4,672	4,672	4,672	4,672	4,672	4,672	4,672	4,672	\$710
Mavis Yrd Engine Repair - Mavis Road 3185	2,217	2,217	2,217	2,217	2,217	2,217	2,217	2,217	2,217	2,217	\$500
Mavis Yrd Salt Dome - Mavis Road 3185	10,959	10,959	10,959	10,959	10,959	10,959	10,959	10,959	10,959	10,959	\$500
Mavis Yrd Sand Dome - Mavis Road 3185	7,902	7,902	7,902	7,902	7,902	7,902	7,902	7,902	7,902	7,902	\$500
Mavis Yrd Operational Hub - Mavis Road 3185	484	484	484	484	484	484	484	484	484	484	\$500
Mavis Yrd Storage Area - Mavis Road 3185	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	\$500
Mavis Yrd South Storage building - Mavis Road 3185	8,234	8,234	8,234	8,234	8,234	8,234	8,234	8,234	8,234	8,234	\$500
Mavis Yrd North Storage building - Mavis Road 3185	-	2,799	2,799	2,799	2,799	2,799	2,799	2,799	2,799	2,799	\$500
Meadowvale Depot Main Building - Millcreek Drive 6300	17,653	17,653	17,653	17,653	17,653	17,653	17,653	17,653	17,653	17,653	\$710
Meadowvale Yard Sand Dome - Mill Creek Drive 6300	7,793	7,793	7,793	7,793	7,793	7,793	7,793	7,793	7,793	7,793	\$500
Meadowvale Yard Operational Hub - Mill Creek Drive 6300	237	237	237	237	237	366	366	366	366	366	\$500
Meadowvale Yard Salt Dome - Mill Creek Drive 6300	7,793	7,793	7,793	7,793	7,793	7,793	7,793	7,793	7,793	7,793	\$500
Meadowvale Depot Storage - Millcreek Drive 6300	4,004	4,004	4,004	4,004	4,004	4,004	4,004	4,004	4,004	4,004	\$500
Total (sq.ft.)	231,045.0	233,844.0	233,844	233,844	233,844	233,973	233,973	233,973	233,973	233,973	
Total (\$000)	\$143,338.5	\$144,738.0	\$144,738.0	\$144,738.0	\$144,738.0	\$144,802.5	\$144,802.5	\$144,802.5	\$144,802.5	\$144,802.5	

**APPENDIX D.1
TABLE 1**

**CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS SERVICES**

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Clarkson Depot - Royal Windsor Drive 2167	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	\$6,177,500
Malton Depot (Works & Parks) - Fir Tree Drive 7100	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	\$6,177,500
Mavis Parks and Works Depot - Mavis Road 3185 & 3235	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	\$6,177,500
Meadowvale Depot (Works & Parks) - Mill Creek Drive 6300	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	\$6,177,500
Total (ha)	17.82	17.82	17.82	17.82	17.82	17.82	17.82	17.82	17.82	17.82	
Total (\$000)	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1	

FLEET Description	# of Fleet										UNIT COST (\$/vehicle)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Total Fleet	\$422	\$444	\$443	\$477	\$476	\$455	\$417	\$419	\$458	\$458	\$38,938
Total (#)	422	444	443	477	476	455	417	419	458	458	
Total (\$000)	\$17,556.9	\$18,215.9	\$17,975.8	\$18,612.6	\$18,411.9	\$19,091.8	\$17,794.8	\$17,404.3	\$18,093.9	\$18,093.9	

STANDBY EQUIPMENT Description	Total Value of Standby Equipment (\$)									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Articulated Loader Plows	\$1,357,384	\$1,475,417	\$1,475,417	\$1,475,417	\$1,475,417	\$1,475,417	\$1,290,990	\$1,290,990	\$1,290,990	\$1,290,990
Farm Tractor Plows	\$1,636,582	\$1,687,198	\$1,687,198	\$1,687,198	\$1,687,198	\$1,687,198	\$544,257	\$544,257	\$544,257	\$544,257
Graders	\$310,198	\$310,198	\$310,198	\$310,198	\$310,198	\$310,198	\$0	\$0	\$0	\$0
Loaders	\$300,329	\$300,329	\$300,329	\$300,329	\$300,329	\$300,329	\$600,657	\$600,657	\$600,657	\$600,657
Sidewalk Plows	\$2,148,184	\$2,261,246	\$2,261,246	\$2,261,246	\$2,261,246	\$2,261,246	\$2,543,901	\$2,543,901	\$2,543,901	\$2,543,901
Sidewalk Snow Blower	\$225,881	\$225,881	\$225,881	\$225,881	\$225,881	\$225,881	\$0	\$0	\$0	\$0
Single Axle Spreader/Plows	\$0	\$0	\$0	\$0	\$0	\$0	\$3,721,369	\$3,721,369	\$3,721,369	\$3,721,369
Snow Blowers	\$125,489	\$125,489	\$125,489	\$125,489	\$125,489	\$125,489	\$125,489	\$125,489	\$125,489	\$125,489
Tandem Axle Truck Plows	\$300,329	\$300,329	\$300,329	\$300,329	\$300,329	\$300,329	\$1,201,314	\$1,201,314	\$1,201,314	\$1,201,314
Tandem Axle - Dual Spinner	\$7,269,651	\$7,269,651	\$7,269,651	\$7,269,651	\$7,269,651	\$7,269,651	\$5,538,782	\$5,538,782	\$5,538,782	\$5,538,782
Total (\$000)	\$13,674.0	\$13,955.7	\$13,955.7	\$13,955.7	\$13,955.7	\$13,955.7	\$15,566.8	\$15,566.8	\$15,566.8	\$15,566.8

APPENDIX D.1
TABLE 1

CITY OF MISSISSAUGA
CALCULATION OF SERVICE LEVELS
PUBLIC WORKS SERVICES

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historic Population	715,067	716,694	718,325	719,960	721,599	729,753	737,999	746,338	754,771	763,300
Historic Employment	<u>438,045</u>	<u>441,752</u>	<u>445,702</u>	<u>449,890</u>	<u>454,310</u>	<u>456,553</u>	<u>458,807</u>	<u>461,075</u>	<u>463,357</u>	<u>465,650</u>
Total Historic Population & Employment	1,153,112	1,158,446	1,164,027	1,169,850	1,175,909	1,186,306	1,196,806	1,207,413	1,218,128	1,228,950

INVENTORY SUMMARY (\$000)

Buildings	\$143,338.5	\$144,738.0	\$144,738.0	\$144,738.0	\$144,738.0	\$144,802.5	\$144,802.5	\$144,802.5	\$144,802.5	\$144,802.5
Land	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1	\$110,083.1
Fleet	\$17,556.9	\$18,215.9	\$17,975.8	\$18,612.6	\$18,411.9	\$19,091.8	\$17,794.8	\$17,404.3	\$18,093.9	\$18,093.9
Standby Equipment	\$13,674.0	\$13,955.7	\$13,955.7	\$13,955.7	\$13,955.7	\$13,955.7	\$15,566.8	\$15,566.8	\$15,566.8	\$15,566.8
Total (\$000)	\$284,652.4	\$286,992.7	\$286,752.6	\$287,389.4	\$287,188.7	\$287,933.1	\$288,247.1	\$287,856.6	\$288,546.1	\$288,546.1

SERVICE LEVEL (\$/pop & emp)

Average
Service
Level

Buildings	\$124.31	\$124.94	\$124.34	\$123.72	\$123.09	\$122.06	\$120.99	\$119.93	\$118.87	\$117.83	\$122.01
Land	\$95.47	\$95.03	\$94.57	\$94.10	\$93.62	\$92.79	\$91.98	\$91.17	\$90.37	\$89.57	\$92.87
Fleet	\$15.23	\$15.72	\$15.44	\$15.91	\$15.66	\$16.09	\$14.87	\$14.41	\$14.85	\$14.72	\$15.29
Standby Equipment	\$11.86	\$12.05	\$11.99	\$11.93	\$11.87	\$11.76	\$13.01	\$12.89	\$12.78	\$12.67	\$12.28
Total (\$/pop & emp)	\$246.86	\$247.74	\$246.35	\$245.66	\$244.23	\$242.71	\$240.85	\$238.41	\$236.88	\$234.79	\$242.45

CITY OF MISSISSAUGA
CALCULATION OF MAXIMUM ALLOWABLE
PUBLIC WORKS SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2012 - 2021	\$242.45
Net Population & Employment Growth 2022 - 2031	96,890
Maximum Allowable Funding Envelope	\$23,490,981

APPENDIX D.1
TABLE D.1-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
PUBLIC WORKS SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
1.0 PUBLIC WORKS SERVICES										
1.1 Buildings and Land										
1.1.1 Future Works Yard (Loreland)	2025	\$ 77,000,000	\$ -	\$ 77,000,000	5%	\$ 3,850,000	\$ 73,150,000	\$ 9,404,216	\$ 21,990,981	\$ 41,754,804
1.1.2 Mavis Yard Expansion Renewal - Design & Construction	2031	\$ 190,000,000	\$ -	\$ 190,000,000	43%	\$ 81,700,000	\$ 108,300,000	\$ -	\$ -	\$ 108,300,000
Subtotal Buildings and Land		\$ 267,000,000	\$ -	\$ 267,000,000		\$ 85,550,000	\$ 181,450,000	\$ 9,404,216	\$ 21,990,981	\$ 150,054,804
1.2 Vehicles & Equipment										
1.2.1 New Vehicles & Equipment	2022	\$ 195,000	\$ -	\$ 195,000	0%	\$ -	\$ 195,000	\$ 195,000	\$ -	\$ -
1.2.2 New Vehicles & Equipment	2023	\$ 195,000	\$ -	\$ 195,000	0%	\$ -	\$ 195,000	\$ 195,000	\$ -	\$ -
1.2.3 New Vehicles & Equipment	2024	\$ 230,000	\$ -	\$ 230,000	0%	\$ -	\$ 230,000	\$ 230,000	\$ -	\$ -
1.2.4 New Vehicles & Equipment	2025	\$ 195,000	\$ -	\$ 195,000	0%	\$ -	\$ 195,000	\$ 195,000	\$ -	\$ -
1.2.5 New Vehicles & Equipment	2026	\$ 195,000	\$ -	\$ 195,000	0%	\$ -	\$ 195,000	\$ -	\$ -	\$ 195,000
1.2.6 New Vehicles & Equipment	2027	\$ 195,000	\$ -	\$ 195,000	0%	\$ -	\$ 195,000	\$ -	\$ -	\$ 195,000
1.2.7 New Vehicles & Equipment	2028	\$ 195,000	\$ -	\$ 195,000	0%	\$ -	\$ 195,000	\$ -	\$ -	\$ 195,000
1.2.8 New Vehicles & Equipment	2029	\$ 195,000	\$ -	\$ 195,000	0%	\$ -	\$ 195,000	\$ -	\$ -	\$ 195,000
1.2.9 New Vehicles & Equipment	2030	\$ 195,000	\$ -	\$ 195,000	0%	\$ -	\$ 195,000	\$ -	\$ -	\$ 195,000
1.2.10 New Vehicles & Equipment	2031	\$ 195,000	\$ -	\$ 195,000	0%	\$ -	\$ 195,000	\$ -	\$ -	\$ 195,000
Subtotal Vehicles & Equipment		\$ 1,985,000	\$ -	\$ 1,985,000		\$ -	\$ 1,985,000	\$ 815,000	\$ -	\$ 1,170,000

APPENDIX D.1
TABLE D.1-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
PUBLIC WORKS SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Development Related Costs		
					% BTE	Replacement & BTE Shares		Prior Growth	2022-2031	Other Dev. Related*
1.3 Winter Maintenance Vehicles										
1.3.1 Winter Maintenance Vehicles	Various	\$ 1,500,000	\$ -	\$ 1,500,000	0%	\$ -	\$ 1,500,000	\$ 750,000	\$ 750,000	\$ -
1.3.2 Winter Maintenance Vehicles (Contracted)	Various	\$ 1,500,000	\$ -	\$ 1,500,000	0%	\$ -	\$ 1,500,000	\$ 750,000	\$ 750,000	\$ -
Subtotal Winter Maintenance Vehicles		\$ 3,000,000	\$ -	\$ 3,000,000		\$ -	\$ 3,000,000	\$ 1,500,000	\$ 1,500,000	\$ -
TOTAL PUBLIC WORKS SERVICES		\$ 271,985,000	\$ -	\$ 271,985,000		\$ 85,550,000	\$ 186,435,000	\$ 11,719,216	\$ 23,490,981	\$ 151,224,804

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	67.6%	\$15,875,794
10-Year Growth in Population in New Units		76,646
Unadjusted Development Charge Per Capita		\$207.13
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	32.4%	\$7,615,186
10-Year Non-Res GFA Growth in New Space		1,721,850
Unadjusted Development Charge Per Employee		\$4.42

2022 - 2031 Net Funding Envelope	\$23,490,981
Reserve Fund Balance	\$11,719,216

APPENDIX D.1

TABLE D.1-3

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

PUBLIC WORKS SERVICES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$7,920.14	\$9,385.41	\$10,944.49	\$12,577.30	(\$8,785.03)	(\$7,742.96)	(\$6,462.94)	(\$5,052.50)	(\$3,503.26)	(\$1,805.07)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Public Works Services: Prior Growth	\$233.2	\$233.2	\$256.8	\$6,588.8	\$101.4	\$101.4	\$101.4	\$101.4	\$101.4	\$101.4	\$7,920.1
- Public Works Services: Non Inflated	\$101.4	\$101.4	\$101.4	\$14,963.4	\$101.4	\$101.4	\$101.4	\$101.4	\$101.4	\$101.4	\$15,875.8
- Public Works Services: Inflated	\$334.5	\$341.2	\$372.7	\$22,871.4	\$219.5	\$223.8	\$228.3	\$232.9	\$237.6	\$242.3	\$25,304.2
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	6,980	7,064	7,150	7,235	7,377	7,998	8,103	8,206	8,312	8,221	76,646
REVENUE											
- DC Receipts: Inflated	\$1,502.2	\$1,550.6	\$1,600.9	\$1,652.3	\$1,718.5	\$1,900.4	\$1,963.9	\$2,028.6	\$2,095.9	\$2,114.4	\$18,127.7
INTEREST											
- Interest on Opening Balance	\$277.2	\$328.5	\$383.1	\$440.2	(\$483.2)	(\$425.9)	(\$355.5)	(\$277.9)	(\$192.7)	(\$99.3)	(\$405.4)
- Interest on In-year Transactions	\$20.4	\$21.2	\$21.5	(\$583.5)	\$26.2	\$29.3	\$30.4	\$31.4	\$32.5	\$32.8	(\$337.8)
TOTAL REVENUE	\$1,799.8	\$1,900.3	\$2,005.5	\$1,509.0	\$1,261.5	\$1,503.9	\$1,638.8	\$1,782.1	\$1,935.7	\$2,047.9	\$17,384.5
CLOSING CASH BALANCE	\$9,385.4	\$10,944.5	\$12,577.3	(\$8,785.0)	(\$7,743.0)	(\$6,462.9)	(\$5,052.5)	(\$3,503.3)	(\$1,805.1)	\$0.5	

2022 Adjusted Charge Per Capita

\$215.21

Allocation of Capital Program

Residential Sector	67.6%
Non-Residential Sector	32.4%

Rates for 2022

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

APPENDIX D.1

TABLE D.1-3

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS SERVICES
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

PUBLIC WORKS SERVICES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$3,799.08	\$4,695.44	\$5,647.77	\$6,646.92	(\$3,369.49)	(\$2,617.54)	(\$2,176.86)	(\$1,696.81)	(\$1,174.61)	(\$607.80)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Public Works Services: Prior Growth	\$111.8	\$111.8	\$123.2	\$3,160.5	\$48.6	\$48.6	\$48.6	\$48.6	\$48.6	\$48.6	\$3,799.1
- Public Works Services: Non Inflated	\$48.6	\$48.6	\$48.6	\$7,177.6	\$48.6	\$48.6	\$48.6	\$48.6	\$48.6	\$48.6	\$7,615.2
- Public Works Services: Inflated	\$160.5	\$163.7	\$178.8	\$10,970.8	\$105.3	\$107.4	\$109.5	\$111.7	\$113.9	\$116.2	\$12,137.7
NEW NON-RESIDENTIAL DEVELOPMENT											
- Non-Residential GFA	201,937	203,929	205,967	208,110	210,257	136,957	137,622	138,335	139,000	139,736	1,721,850
REVENUE											
- DC Receipts: Inflated	\$910.7	\$938.1	\$966.4	\$996.0	\$1,026.4	\$682.0	\$699.0	\$716.7	\$734.5	\$753.2	\$8,423.0
INTEREST											
- Interest on Opening Balance	\$133.0	\$164.3	\$197.7	\$232.6	(\$185.3)	(\$144.0)	(\$119.7)	(\$93.3)	(\$64.6)	(\$33.4)	\$87.3
- Interest on In-year Transactions	\$13.1	\$13.6	\$13.8	(\$274.3)	\$16.1	\$10.1	\$10.3	\$10.6	\$10.9	\$11.1	(\$164.8)
TOTAL REVENUE	\$1,056.8	\$1,116.0	\$1,177.9	\$954.4	\$857.2	\$548.1	\$589.6	\$633.9	\$680.8	\$730.9	\$8,345.5
CLOSING CASH BALANCE	\$4,695.4	\$5,647.8	\$6,646.9	(\$3,369.5)	(\$2,617.5)	(\$2,176.9)	(\$1,696.8)	(\$1,174.6)	(\$607.8)	\$6.9	

2022 Adjusted Charge Per Sq.M.

\$4.51

Allocation of Capital Program

Residential Sector	67.6%
Non-Residential Sector	32.4%

Rates for 2022

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

Appendix D.2

Roads and Related Infrastructure

Technical Appendix

Roads and Related Infrastructure Technical Appendix

The City of Mississauga’s Transportation and Works Department is responsible for the maintenance, design and construction of City-owned roads, bridges and sidewalks.

This appendix provides a brief outline of the infrastructure included in the Roads and Related Infrastructure development charge. The development-related projects outlined in this appendix are required to service the demands of new development to 2041. The benefits of the services are considered to be City-wide for the purposes of calculating the development charge.

2022 Transportation Background Study

The 2022 Transportation Background Study¹ completed by HDR Inc. and City staff sets out the historical service level measures, as well as the cost, quantum, and timing of capital projects required to service future population and employment growth in the City to 2041. The 2022 Transportation Background Study provides a rationale for the benefit to existing (i.e. non-DC eligible) shares and also identifies project timing.

Table 1 2012-2021 Historical Service Levels

The Roads and Related Infrastructure inventory of capital assets is extensive at a total replacement cost of \$9.90 billion. This includes roads as well as traffic signals, bridges, culverts, noise barriers, sidewalks,

¹ A copy of the 2022 Transportation Background Study will be made available publicly on the City’s website.

streetlights, landscaping, grade separations, road right of ways and other related structures.

Table 1 identifies a ten-year average service level for the provision of Roads and Related Infrastructure of \$8,223.71 per capita and employment. Based on this average service level, the maximum allowable funding envelope is \$1.52 billion (\$8,223.71 per capita and employment multiplied by 185,370 increase in net population and employment from 2022 to 2041).

Table 1 provides a summary of the level of service and the calculation of the 19-year funding envelope from 2022 to 2041. The calculation of the maximum allowable funding envelope is summarized as follows:

19-Year Funding Envelope Calculation	
Ten-Year Average Service Level (2012 – 2021)	\$8,223.71
Net Pop. and Emp. Growth (2019 – 2041)	185,370
Maximum Allowable Funding Envelope	\$1,524,429,123

The existing facilities have been examined and consideration has been given to whether or not “excess capacity” exists within the City’s infrastructure that may be available to partially meet future servicing requirements. It has been determined that no “uncommitted excess capacity” exists within the City’s Roads and Related Infrastructure, and as such, no adjustments have been made to the service level calculations.

**Table 2 2022 – 2041 Development-Related Capital Program
and Calculation of the Unadjusted Development
Charges**

The total gross cost of the Roads and Related Infrastructure capital program is \$1.87 billion and provides for the undertaking of various road widenings and new road segments on the arterial and major collector road system. The gross cost of the improvements to the arterial roads system amounts to

\$949.08 million, while improvements to the major collector road system add another \$437.72 million to the capital program. Three rail grade separations are also included in the capital program at a cost of \$116.40 million.

The capital program also includes \$165.45 million in cycling infrastructure. Other related roads infrastructure include:

- Stand alone signalized intersection improvements (\$14.40 million);
- Signal phasing changes and traffic signal equipment enhancements (\$25.35 million);
- Transit signal priority infrastructure located within the roads right-of-way (\$8.00 million);
- Stand alone sidewalk costs (\$8.20 million);
- Stand alone noise walls (\$101.33 million);
- EA/TPAP Studies for Dundas and Lakeshore (\$7.50 million);
- Roads portion of development charges, official plan and transportation master plan studies (\$6.50 million);
- EA studies (\$12.40 million).

A portion of the Roads and Related Infrastructure capital program, \$300.23 million, will be funded through other recoveries. For the upgrades to the arterial roads and major collector roads systems, the recoveries are through developers' shares to be provided through the subdivision process. For the Goreway Drive grade separation project, half of the project costs will be shared with the City of Brampton (note: only the City's share is reflected in the capital program).

The Roads and Related Infrastructure program includes a portion that is considered to benefit the existing community. In totality, the benefit to

existing share amounts to \$231.19 million and is netted off of the DC eligible costs. A description of how the benefit to existing shares were determined is provided in the 2022 Transportation DC Background Study. The resulting DC eligible costs of the Roads and Related Infrastructure program are reduced to \$1.34 billion.

Of the DC eligible costs, \$53.28 million is available in the Roads and Related Infrastructure DC reserve fund balance to help offset the program and a further \$50.17 million has been identified as a post-2041 share. The result is a development charge recoverable share of the capital program of \$1.24 billion. The development-related cost has been allocated 72 per cent (\$890.29 million) to new residential development and 28 per cent (\$348.14 million) to new non-residential development. The allocation of costs is based on shares of population and employment growth over the planning period. This yields an unadjusted development charge of \$5,422.76 per capita and \$114.67 per square metre.

Table 3 Cash Flow Analysis

The long-term cash-flow analysis takes into consideration expenditure timing and revenue projections. The effect of the analysis is an increase in the residential development charge rates to \$5,676.85 per capita. The adjusted non-residential cash-flow amounts to \$127.00 per square metre of GFA on a uniform basis; to note, a differentiated charge is included in the rates tables.

The following table summarizes the calculation of the Roads and Related Infrastructure development charge:

ROADS AND RELATED INFRASTRUCTURE SUMMARY						
10-year Hist.	2022 - 2041		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/emp	\$/capita	\$/emp
\$8,223.71	\$1,873,295,100	\$1,238,428,152	\$5,422.76	\$114.67	\$5,676.85	\$127.00

APPENDIX D.2

TABLE 1

CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
ROADS AND RELATED INFRASTRUCTURE

Roads and Related Infrastructure Description	Total Value of Roads and Related Capital Assets									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Road Network	\$1,326,878,300	\$1,328,493,300	\$1,328,493,300	\$1,329,598,500	\$1,333,190,400	\$1,335,400,800	\$1,335,400,800	\$1,338,554,034	\$1,338,554,034	\$1,338,554,034
Traffic Signals	\$93,340,500	\$94,240,500	\$94,780,500	\$95,680,500	\$96,400,500	\$97,120,500	\$97,840,500	\$98,020,500	\$98,740,500	\$98,740,500
Bridges	\$512,976,810	\$512,976,810	\$512,976,810	\$512,976,810	\$512,976,810	\$512,976,810	\$602,569,640	\$602,569,640	\$604,589,840	\$604,589,840
Culverts	\$170,220,900	\$170,220,900	\$170,220,900	\$170,220,900	\$170,220,900	\$170,220,900	\$172,481,780	\$172,481,780	\$172,481,780	\$172,481,780
Noise Barriers	\$127,111,200	\$130,920,000	\$134,397,600	\$138,016,800	\$140,745,600	\$142,531,200	\$143,584,800	\$143,584,800	\$143,584,800	\$143,585,844
Sidewalks	\$67,156,000	\$67,568,000	\$67,980,000	\$68,392,000	\$68,598,000	\$69,113,000	\$69,422,000	\$69,647,879	\$70,058,334	\$70,405,238
Illumination	\$164,650,000	\$164,650,000	\$164,650,000	\$165,095,000	\$165,540,000	\$165,985,000	\$165,985,000	\$165,807,000	\$165,807,000	\$165,807,000
Landscaping/Tree Planting	\$44,400,000	\$44,400,000	\$44,400,000	\$44,520,000	\$44,640,000	\$44,760,000	\$44,760,000	\$44,712,000	\$44,712,000	\$44,712,000
Rail Grade Separations	\$465,600,000	\$465,600,000	\$465,600,000	\$465,600,000	\$465,600,000	\$465,600,000	\$465,600,000	\$543,200,000	\$543,200,000	\$543,200,000
Special Items	\$169,752,540	\$170,004,260	\$170,966,640	\$173,633,100	\$180,830,140	\$184,608,520	\$193,392,074	\$194,378,300	\$197,914,140	\$205,172,107
Zebra Striped Crosswalks	\$1,352,400	\$1,470,000	\$1,562,400	\$1,663,200	\$1,764,000	\$1,864,800	\$1,990,800	\$2,116,800	\$2,234,400	\$2,251,200
Property ROW	\$6,505,240,569	\$6,507,925,779	\$6,507,925,779	\$6,507,925,779	\$6,507,925,779	\$6,507,925,779	\$6,507,925,779	\$6,507,925,779	\$6,507,925,779	\$6,507,925,779
Total (\$000)	\$9,648,679.2	\$9,658,469.5	\$9,663,953.9	\$9,673,322.6	\$9,688,432.1	\$9,698,107.3	\$9,800,953.2	\$9,882,998.5	\$9,889,802.6	\$9,897,425.3

APPENDIX D.2

TABLE 1

CITY OF MISSISSAUGA CALCULATION OF SERVICE LEVELS ROADS AND RELATED INFRASTRUCTURE

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historic Population	715,067	716,694	718,325	719,960	721,599	729,753	737,999	746,338	754,771	763,300
Historic Employment	<u>438,045</u>	<u>441,752</u>	<u>445,702</u>	<u>449,890</u>	<u>454,310</u>	<u>456,553</u>	<u>458,807</u>	<u>461,075</u>	<u>463,357</u>	<u>465,650</u>
Total Historic Population & Employment	1,153,112	1,158,446	1,164,027	1,169,850	1,175,909	1,186,306	1,196,806	1,207,413	1,218,128	1,228,950

INVENTORY SUMMARY (\$000)

Roads and Related Infrastructure	\$9,648,679.2	\$9,658,469.5	\$9,663,953.9	\$9,673,322.6	\$9,688,432.1	\$9,698,107.3	\$9,800,953.2	\$9,882,998.5	\$9,889,802.6	\$9,897,425.3
Total (\$000)	\$9,648,679.2	\$9,658,469.5	\$9,663,953.9	\$9,673,322.6	\$9,688,432.1	\$9,698,107.3	\$9,800,953.2	\$9,882,998.5	\$9,889,802.6	\$9,897,425.3

SERVICE LEVEL (\$/pop & emp)

Average
Service
Level

Roads and Related Infrastructure	\$8,367.51	\$8,337.44	\$8,302.17	\$8,268.86	\$8,239.10	\$8,175.05	\$8,189.26	\$8,185.27	\$8,118.85	\$8,053.56	\$8,223.71
Total (\$/pop & emp)	\$8,367.51	\$8,337.44	\$8,302.17	\$8,268.86	\$8,239.10	\$8,175.05	\$8,189.26	\$8,185.27	\$8,118.85	\$8,053.56	\$8,223.71

CITY OF MISSISSAUGA CALCULATION OF MAXIMUM ALLOWABLE ROADS AND RELATED INFRASTRUCTURE

19-Year Funding Envelope Calculation	
10 Year Average Service Level 2012 - 2021	\$8,223.71
Net Population & Employment Growth 2022 - 2041	185,370
Maximum Allowable Funding Envelope	\$1,524,429,123

APPENDIX D.2

TABLE D.2-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED INFRASTRUCTURE

Name	From	To	Existing # of Lanes	Future # of Lanes	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
									BTE %	Replacement & BTE Shares		Prior Growth	2022-2041	Other Dev. Related*	
1.1 Arterial Roads System															
1.1.1	BURNHAMTHORPE RD. W.	NINTH LINE	LOYALIST DR.	2	4	2026 - 2028	\$ 11,838,000	\$ -	\$ 11,838,000	10%	\$ 1,183,800	\$ 10,654,200	\$ -	\$ 10,654,200	\$ -
1.1.2	BURNHAMTHORPE RD. E.	HURONTARIO ST.	CAWTHRA RD.	4	6	2037 - 2041	\$ 28,148,000	\$ -	\$ 28,148,000	20%	\$ 5,629,600	\$ 22,518,400	\$ -	\$ 22,518,400	\$ -
1.1.3	BURNHAMTHORPE RD. E.	CAWTHRA RD.	DIXIE RD.	4	6	2037 - 2041	\$ 15,105,000	\$ -	\$ 15,105,000	20%	\$ 3,021,000	\$ 12,084,000	\$ -	\$ 12,084,000	\$ -
1.1.4	BURNHAMTHORPE RD. E.	DIXIE RD.	ETOBICOKE CREEK	4	6	2037 - 2041	\$ 11,865,000	\$ -	\$ 11,865,000	20%	\$ 2,373,000	\$ 9,492,000	\$ -	\$ 9,492,000	\$ -
1.1.5	COURTNEYPARK DR. E. / HWY. 410 RAMPS (NB ON-RAMP AND SB OFF-RAMP)			0	3	2022 - 2023	\$ 9,562,000	\$ 4,630,000	\$ 4,932,000	0%	\$ -	\$ 4,932,000	\$ -	\$ 4,932,000	\$ -
1.1.6	COURTNEYPARK DR. E. & W.	MARITZ DR.	KENNEDY RD.	4	6	2032 - 2036	\$ 11,262,000	\$ -	\$ 11,262,000	20%	\$ 2,252,400	\$ 9,009,600	\$ -	\$ 9,009,600	\$ -
1.1.7	COURTNEYPARK DR. E.	KENNEDY RD.	DIXIE RD.	4	6	2030 - 2031	\$ 34,804,000	\$ -	\$ 34,804,000	20%	\$ 6,960,800	\$ 27,843,200	\$ -	\$ 27,843,200	\$ -
1.1.8	CREEKBANK RD.	MATHESON BLVD.	NORTH LIMIT OF CREEKBANK RD.	2	4	2032 - 2036	\$ 1,821,000	\$ -	\$ 1,821,000	10%	\$ 182,100	\$ 1,638,900	\$ -	\$ 1,638,900	\$ -
1.1.9	CREEKBANK RD.	NORTH LIMIT OF CREEKBANK RD.	SOUTH OF HWY. 401	0	4	2032 - 2036	\$ 1,408,000	\$ -	\$ 1,408,000	0%	\$ -	\$ 1,408,000	\$ -	\$ 1,408,000	\$ -
1.1.10	CREEKBANK RD.	SOUTH OF HWY. 401	BRITANNIA RD.	0	4	2032 - 2036	\$ 50,410,000	\$ -	\$ 50,410,000	5%	\$ 2,520,500	\$ 47,889,500	\$ -	\$ 47,889,500	\$ -
1.1.11	DUNDAS ST. BRT	CONFEDERATION PKWY	TORONTO BOUNDARY	4	6	2022 - 2026	\$ 463,599,000	\$ 144,166,000	\$ 319,433,000	20%	\$ 63,886,600	\$ 255,546,400	\$ -	\$ 255,546,400	\$ -
1.1.12	DUNDAS ST. BRT	RIDGEWAY DRIVE	CONFEDERATION PKWY	4	6	2032 - 2036	\$ 121,000,000	\$ 88,729,000	\$ 32,271,000	20%	\$ 6,454,200	\$ 25,816,800	\$ -	\$ 25,816,800	\$ -
1.1.13	LAKESHORE ROAD BRT	CAWTHRA RD.	ETOBICOKE CREEK	4	6	2022 - 2026	\$ 66,341,000	\$ 31,469,000	\$ 34,872,000	20%	\$ 6,974,400	\$ 27,897,600	\$ -	\$ 27,897,600	\$ -
1.1.14	MAVIS RD.	CPR CROSSING	CENTRAL PKWY. W.	5	6	2032 - 2036	\$ 8,416,000	\$ -	\$ 8,416,000	20%	\$ 1,683,200	\$ 6,732,800	\$ -	\$ 6,732,800	\$ -
1.1.15	MAVIS RD.	CENTRAL PKWY. W.	BURNHAMTHORPE RD. W.	4	6	2032 - 2036	\$ 3,309,000	\$ -	\$ 3,309,000	20%	\$ 661,800	\$ 2,647,200	\$ -	\$ 2,647,200	\$ -
1.1.16	NINTH LINE	EGLINTON RD. W.	BRITANNIA RD. W.	2	4	2023 - 2027	\$ 51,590,000	\$ -	\$ 51,590,000	10%	\$ 5,159,000	\$ 46,431,000	\$ -	\$ 46,431,000	\$ -
1.1.17	NINTH LINE	BRITANNIA RD. W.	DERRY RD. W.	2	4	2023 - 2027	\$ -	\$ -	\$ -	10%	\$ -	\$ -	\$ -	\$ -	\$ -
1.1.18	NINTH LINE	DERRY RD. W.	HWY. 401	2	4	2032 - 2036	\$ 11,429,000	\$ -	\$ 11,429,000	10%	\$ 1,142,900	\$ 10,286,100	\$ -	\$ 10,286,100	\$ -
1.1.19	WINSTON CHURCHILL BLVD.	DERRY RD. W.	BRITANNIA RD.	4	6	2037 - 2041	\$ 15,947,000	\$ -	\$ 15,947,000	20%	\$ 3,189,400	\$ 12,757,600	\$ -	\$ 12,757,600	\$ -
1.1.20	WINSTON CHURCHILL BLVD.	BRITANNIA RD. W.	ERIN CENTRE BLVD.	4	6	2037 - 2041	\$ 13,179,000	\$ -	\$ 13,179,000	20%	\$ 2,635,800	\$ 10,543,200	\$ -	\$ 10,543,200	\$ -
1.1.21	WINSTON CHURCHILL BLVD.	DUNDAS ST. W.	HWY. 403	4	6	2037 - 2041	\$ 18,043,000	\$ -	\$ 18,043,000	20%	\$ 3,608,600	\$ 14,434,400	\$ -	\$ 14,434,400	\$ -
Subtotal Arterial Roads System							\$ 949,076,000	\$ 268,994,000	\$ 680,082,000		\$ 119,519,100	\$ 560,562,900	\$ -	\$ 560,562,900	\$ -

APPENDIX D.2
TABLE D.2-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED INFRASTRUCTURE

Name	From	To	Existing # of Lanes	Future # of Lanes	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
									BTE %	Replacement & BTE Shares		Prior Growth	2022- 2041	Other Dev. Related*	
1.2 Major Collector Road System															
1.2.1	ARGENTIA RD. EXTENSION	TENTH LINE	HIGHWAY 407	0	2	2031 - 2031	\$ 30,000,000	\$ -	\$ 30,000,000	5%	\$ 1,500,000	\$ 28,500,000	\$ -	\$ 28,500,000	\$ -
1.2.2	BELGRAVE RD. RAMP EXT.	MAVIS RD.	NORTH LIMIT OF BELGRAVE RD.	0	4	2032 - 2036	\$ 8,684,000	\$ -	\$ 8,684,000	0%	\$ -	\$ 8,684,000	\$ -	\$ 8,684,000	\$ -
1.2.3	BELGRAVE RD.	NORTH LIMIT OF BELGRAVE RD.	CANTAY RD.	2	4	2032 - 2036	\$ 3,606,000	\$ -	\$ 3,606,000	10%	\$ 360,600	\$ 3,245,400	\$ -	\$ 3,245,400	\$ -
1.2.4	CENTRE VIEW DR.	DUKE OF YORK BLVD.	RATHBURN RD. W.	4	5	2032 - 2036	\$ 3,347,000	\$ -	\$ 3,347,000	20%	\$ 669,400	\$ 2,677,600	\$ -	\$ 2,677,600	\$ -
1.2.5	CENTRE VIEW DR. RAMP	CENTRE VIEW DR.	HWY. 403	0	1	2032 - 2036	\$ 20,755,000	\$ -	\$ 20,755,000	0%	\$ -	\$ 20,755,000	\$ -	\$ 20,755,000	\$ -
1.2.6	CITY CENTRE DR. FLYOVER	RATHBURN RD. W.	NORTHERN DISTRIBUTION RD.	0	4	2032 - 2036	\$ 19,754,000	\$ -	\$ 19,754,000	5%	\$ 987,700	\$ 18,766,300	\$ -	\$ 18,766,300	\$ -
1.2.7	CITY CENTRE DR. RAMP	CITY CENTRE DR.	NORTHERN DISTRIBUTION RD.	0	1	2032 - 2036	\$ 2,540,000	\$ -	\$ 2,540,000	5%	\$ 127,000	\$ 2,413,000	\$ -	\$ 2,413,000	\$ -
1.2.8	CONFEDERATION PKWY. RAMP	CONFEDERATION PKWY.	NORTHERN DISTRIBUTION RD.	0	1	2032 - 2036	\$ 2,540,000	\$ -	\$ 2,540,000	0%	\$ -	\$ 2,540,000	\$ -	\$ 2,540,000	\$ -
1.2.9	CREDITVIEW RD.	BANCROFT DR.	OLD CREDITVIEW RD.	2	4	2025 - 2029	\$ 36,330,000	\$ -	\$ 36,330,000	10%	\$ 3,633,000	\$ 32,697,000	\$ -	\$ 32,697,000	\$ -
1.2.10	CREDIT RIVER CROSSING	FRONT ST. N.	STAVEBANK RD.	0	2	2037 - 2041	\$ 16,518,000	\$ -	\$ 16,518,000	5%	\$ 825,900	\$ 15,692,100	\$ -	\$ 15,692,100	\$ -
1.2.11	CREEKBANK RD. - HWY. 401 WB	HWY. 401	ENTERPRISE RD.	0	2	2026 - 2028	\$ -	\$ -	\$ -	5%	\$ -	\$ -	\$ -	\$ -	\$ -
1.2.12	DREW RD.	TOMKEN RD.	DIXIE RD.	0	4	2037 - 2041	\$ 14,775,000	\$ -	\$ 14,775,000	5%	\$ 738,750	\$ 14,036,250	\$ -	\$ 14,036,250	\$ -
1.2.13	DREW RD.	TORBRAM RD.	660M EAST OF TORBRAM RD.	2	4	2032 - 2036	\$ 3,210,000	\$ -	\$ 3,210,000	10%	\$ 321,000	\$ 2,889,000	\$ -	\$ 2,889,000	\$ -
1.2.14	DREW RD.	660M EAST OF TORBRAM RD.	530M WEST OF AIRPORT RD.	0	4	2032 - 2036	\$ 4,269,000	\$ -	\$ 4,269,000	5%	\$ 213,450	\$ 4,055,550	\$ -	\$ 4,055,550	\$ -
1.2.15	DUKE OF YORK BLVD. FLYOVER	RATHBURN RD.W.	NORTHERN DISTRIBUTION RD.	0	4	2032 - 2036	\$ 20,059,000	\$ -	\$ 20,059,000	5%	\$ 1,002,950	\$ 19,056,050	\$ -	\$ 19,056,050	\$ -
1.2.16	DUKE OF YORK BLVD. RAMP	DUKE OF YORK BLVD.	NORTHERN DISTRIBUTION RD.	0	1	2032 - 2036	\$ 2,387,000	\$ -	\$ 2,387,000	5%	\$ 119,350	\$ 2,267,650	\$ -	\$ 2,267,650	\$ -
1.2.17	EDWARDS BLVD.	NORTH OF TOPFLIGHT DR.	HURONTARIO ST. / HWY. 407	0	2	2032 - 2036	\$ 11,600,000	\$ -	\$ 11,600,000	0%	\$ -	\$ 11,600,000	\$ -	\$ 11,600,000	\$ -
1.2.18	HWY. 403 WB OFF-RAMP	HWY. 403	NORTHERN DISTRIBUTION RD.	0	2	2032 - 2036	\$ 11,905,000	\$ -	\$ 11,905,000	0%	\$ -	\$ 11,905,000	\$ -	\$ 11,905,000	\$ -
1.2.19	KARIYA DR.	110 M SOUTH OF ELM DR.	CENTRAL PKWY. W.	0	2	2023 - 2024	\$ 16,301,000	\$ -	\$ 16,301,000	0%	\$ -	\$ 16,301,000	\$ -	\$ 16,301,000	\$ -
1.2.20	LAKEFRONT PROMENADE	RANGEVIEW STREET	STREET A (STREET D IN OP MAP)	0	2	2032 - 2036	\$ 1,712,000	\$ 1,369,600	\$ 342,400	0%	\$ -	\$ 342,400	\$ -	\$ 342,400	\$ -
1.2.21	NORTHERN DISTRIBUTION RD.	MAVIS RD.	HURONTARIO ST.	0	2	2032 - 2036	\$ 71,052,000	\$ -	\$ 71,052,000	5%	\$ 3,552,600	\$ 67,499,400	\$ -	\$ 67,499,400	\$ -
1.2.22	REDMOND RD.	BURNHAMTHORPE RD. W.	WEBB DR.	0	2	2032 - 2036	\$ 634,000	\$ 634,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
1.2.23	SHERIDAN PARK DR.	WEST LEG SPEAKMAN DR.	EAST LEG SPEAKMAN DR.	0	2	2025 - 2028	\$ 3,786,000	\$ -	\$ 3,786,000	0%	\$ -	\$ 3,786,000	\$ 3,786,000	\$ -	\$ -
1.2.24	SQUARE ONE DR. W.	CONFEDERATION PKWY.	RATHBURN RD. W.	0	2	2022 - 2024	\$ 40,512,000	\$ -	\$ 40,512,000	0%	\$ -	\$ 40,512,000	\$ 40,512,000	\$ -	\$ -
1.2.25	SQUARE ONE DR. E.	HURONTARIO ST.	RATHBURN RD. E.	0	2	2032 - 2036	\$ 26,327,000	\$ -	\$ 26,327,000	0%	\$ -	\$ 26,327,000	\$ -	\$ 26,327,000	\$ -
1.2.26	STREET A (STREET D IN OP MAP)	LAKEFRONT PROMENADE	STREET H (HYDRO RD. IN OP MAP)	0	4	2032 - 2036	\$ 2,276,000	\$ 1,820,858	\$ 455,142	0%	\$ -	\$ 455,142	\$ -	\$ 455,142	\$ -
1.2.27	STREET H (HYDRO RD. IN OP MAP)	RANGEVIEW STREET	STREET A (STREET D IN OP)	0	4	2032 - 2036	\$ 1,894,000	\$ 1,515,256	\$ 378,744	0%	\$ -	\$ 378,744	\$ -	\$ 378,744	\$ -
1.2.28	TENTH LINE	BRITANNIA RD. W.	DERRY RD. W.	2	4	2037 - 2041	\$ 15,769,000	\$ -	\$ 15,769,000	10%	\$ 1,576,900	\$ 14,192,100	\$ -	\$ 14,192,100	\$ -
1.2.29	TENTH LINE	DERRY RD. W.	RAILWAY TRACKS	2	4	2037 - 2041	\$ 7,081,000	\$ -	\$ 7,081,000	10%	\$ 708,100	\$ 6,372,900	\$ -	\$ 6,372,900	\$ -
1.2.30	TENTH LINE	RAILWAY TRACKS	ARGENTIA RD.	2	4	2037 - 2041	\$ 1,169,000	\$ -	\$ 1,169,000	10%	\$ 116,900	\$ 1,052,100	\$ -	\$ 1,052,100	\$ -
1.2.31	THE EXCHANGE	CITY CENTRE DR.	WEBB DR.	0	2	2022 - 2023	\$ 12,480,000	\$ -	\$ 12,480,000	0%	\$ -	\$ 12,480,000	\$ 8,983,208	\$ 3,496,792	\$ -
1.2.32	WEBB DR.	CONFEDERATION PKWY.	DUKE OF YORK BLVD.	2	2	2023 - 2024	\$ 2,051,000	\$ -	\$ 2,051,000	100%	\$ 2,051,000	\$ -	\$ -	\$ -	\$ -
1.2.33	WEBB DR.	125 M EAST OF DUKE OF YORK BLVD	KARIYA DR.	0	2	2032 - 2036	\$ 16,717,000	\$ -	\$ 16,717,000	0%	\$ -	\$ 16,717,000	\$ -	\$ 16,717,000	\$ -
1.2.34	WHITTLE RD.	BRITANNIA RD. E.	MATHESON BLVD. E.	2	4	2032 - 2036	\$ 5,682,000	\$ -	\$ 5,682,000	10%	\$ 568,200	\$ 5,113,800	\$ -	\$ 5,113,800	\$ -
Subtotal Major Collector Road System							\$ 437,722,000	\$ 5,339,714	\$ 432,382,286		\$ 19,072,800	\$ 413,309,486	\$ 53,281,208	\$ 360,028,278	\$ -

APPENDIX D.2
TABLE D.2-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED INFRASTRUCTURE

Name	From	To	Existing # of Lanes	Future # of Lanes	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
									BTE %	Replacement & BTE Shares		Prior Growth	2022-2041	Other Dev. Related*
1.3 Rail Grade Separations														
1.3.1 Goreway Drive Grade Separation Phase 1 of 3					2023 - 2035	\$ 38,800,000	\$ 25,900,000	\$ 12,900,000	22.5%	\$ 2,902,500	\$ 9,997,500	\$ -	\$ 6,557,344	\$ 3,440,156
1.3.2 Drew Road (CNR)					2032 - 2036	\$ 38,800,000	\$ -	\$ 38,800,000	0.0%	\$ -	\$ 38,800,000	\$ -	\$ 25,448,857	\$ 13,351,143
1.3.3 Ninth Line					2032 - 2036	\$ 38,800,000	\$ -	\$ 38,800,000	2.5%	\$ 970,000	\$ 37,830,000	\$ -	\$ 24,812,636	\$ 13,017,364
Subtotal Rail Grade Separations						\$ 116,400,000	\$ 25,900,000	\$ 90,500,000		\$ 3,872,500	\$ 86,627,500	\$ -	\$ 56,818,837	\$ 29,808,663
1.4 Bicycle Facilities														
1.4.1 Provision for New Cycling Infrastructure					2022 - 2022	\$ 19,075,182	\$ -	\$ 19,075,182	23%	\$ 4,387,292	\$ 14,687,890	\$ -	\$ 14,687,890	\$ -
1.4.2 Provision for New Cycling Infrastructure					2023 - 2023	\$ 10,631,422	\$ -	\$ 10,631,422	23%	\$ 2,445,227	\$ 8,186,195	\$ -	\$ 8,186,195	\$ -
1.4.3 Provision for New Cycling Infrastructure					2024 - 2024	\$ 7,951,922	\$ -	\$ 7,951,922	23%	\$ 1,828,942	\$ 6,122,980	\$ -	\$ 6,122,980	\$ -
1.4.4 Provision for New Cycling Infrastructure					2025 - 2025	\$ 7,275,352	\$ -	\$ 7,275,352	23%	\$ 1,673,331	\$ 5,602,021	\$ -	\$ 5,602,021	\$ -
1.4.5 Provision for New Cycling Infrastructure					2026 - 2026	\$ 5,104,032	\$ -	\$ 5,104,032	23%	\$ 1,173,927	\$ 3,930,104	\$ -	\$ 3,930,104	\$ -
1.4.6 Provision for New Cycling Infrastructure					2027 - 2027	\$ 6,434,572	\$ -	\$ 6,434,572	23%	\$ 1,479,951	\$ 4,954,620	\$ -	\$ 4,954,620	\$ -
1.4.7 Provision for New Cycling Infrastructure					2028 - 2028	\$ 4,997,132	\$ -	\$ 4,997,132	23%	\$ 1,149,340	\$ 3,847,791	\$ -	\$ 3,847,791	\$ -
1.4.8 Provision for New Cycling Infrastructure					2029 - 2029	\$ 6,130,892	\$ -	\$ 6,130,892	23%	\$ 1,410,105	\$ 4,720,787	\$ -	\$ 4,720,787	\$ -
1.4.9 Provision for New Cycling Infrastructure					2030 - 2030	\$ 6,056,272	\$ -	\$ 6,056,272	23%	\$ 1,392,942	\$ 4,663,329	\$ -	\$ 4,663,329	\$ -
1.4.10 Provision for New Cycling Infrastructure					2031 - 2031	\$ 6,483,952	\$ -	\$ 6,483,952	23%	\$ 1,491,309	\$ 4,992,643	\$ -	\$ 4,992,643	\$ -
1.4.11 Provision for New Cycling Infrastructure					2032 - 2032	\$ 5,659,352	\$ -	\$ 5,659,352	23%	\$ 1,301,651	\$ 4,357,701	\$ -	\$ 4,357,701	\$ -
1.4.12 Provision for New Cycling Infrastructure					2033 - 2033	\$ 7,046,692	\$ -	\$ 7,046,692	23%	\$ 1,620,739	\$ 5,425,953	\$ -	\$ 5,425,953	\$ -
1.4.13 Provision for New Cycling Infrastructure					2034 - 2034	\$ 5,393,312	\$ -	\$ 5,393,312	23%	\$ 1,240,462	\$ 4,152,850	\$ -	\$ 4,152,850	\$ -
1.4.14 Provision for New Cycling Infrastructure					2035 - 2035	\$ 6,629,292	\$ -	\$ 6,629,292	23%	\$ 1,524,737	\$ 5,104,555	\$ -	\$ 5,104,555	\$ -
1.4.15 Provision for New Cycling Infrastructure					2036 - 2036	\$ 5,478,232	\$ -	\$ 5,478,232	23%	\$ 1,259,993	\$ 4,218,238	\$ -	\$ 4,218,238	\$ -
1.4.16 Provision for New Cycling Infrastructure					2037 - 2037	\$ 5,752,342	\$ -	\$ 5,752,342	23%	\$ 1,323,039	\$ 4,429,303	\$ -	\$ 4,429,303	\$ -
1.4.17 Provision for New Cycling Infrastructure					2038 - 2038	\$ 5,755,062	\$ -	\$ 5,755,062	23%	\$ 1,323,664	\$ 4,431,397	\$ -	\$ 4,431,397	\$ -
1.4.18 Provision for New Cycling Infrastructure					2039 - 2039	\$ 5,851,102	\$ -	\$ 5,851,102	23%	\$ 1,345,753	\$ 4,505,348	\$ -	\$ 4,505,348	\$ -
1.4.19 Provision for New Cycling Infrastructure					2040 - 2040	\$ 4,439,222	\$ -	\$ 4,439,222	23%	\$ 1,021,021	\$ 3,418,201	\$ -	\$ 3,418,201	\$ -
1.4.20 Provision for New Cycling Infrastructure					2041 - 2041	\$ 6,869,782	\$ -	\$ 6,869,782	23%	\$ 1,580,050	\$ 5,289,732	\$ -	\$ 5,289,732	\$ -
1.4.21 Provision for New Cycling Infrastructure					2042 - 2042	\$ 6,894,022	\$ -	\$ 6,894,022	23%	\$ 1,585,625	\$ 5,308,397	\$ -	\$ -	\$ 5,308,397
1.4.22 Provision for New Cycling Infrastructure					2043 - 2043	\$ 6,764,822	\$ -	\$ 6,764,822	23%	\$ 1,555,909	\$ 5,208,913	\$ -	\$ -	\$ 5,208,913
1.4.23 Provision for New Cycling Infrastructure					2044 - 2044	\$ 6,806,212	\$ -	\$ 6,806,212	23%	\$ 1,565,429	\$ 5,240,783	\$ -	\$ -	\$ 5,240,783
1.4.24 Provision for New Cycling Infrastructure					2045 - 2045	\$ 5,973,932	\$ -	\$ 5,973,932	23%	\$ 1,374,004	\$ 4,599,927	\$ -	\$ -	\$ 4,599,927
Subtotal Bicycle Facilities						\$ 165,454,100	\$ -	\$ 165,454,100		\$ 38,054,443	\$ 127,399,657	\$ -	\$ 107,041,637	\$ 20,358,020

APPENDIX D.2
TABLE D.2-2

CITY OF MISSISSAUGA
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED INFRASTRUCTURE

Name			From	To	Existing # of Lanes	Future # of Lanes	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
				BTE %							Replacement & BTE Shares	Prior Growth		2022-2041	Other Dev. Related*	
1.5 Other Roads and Related Infrastructure																
1.5.1	STANDALONE INTERSECTION IMPROVEMENTS						2022 - 2041	\$ 5,969,000	\$ -	\$ 5,969,000	0%	\$ -	\$ 5,969,000	\$ -	\$ 5,969,000	\$ -
1.5.2	STAND ALONE SIGNALIZED INTERSECTION IMPROVEMENTS						2022 - 2041	\$ 14,400,000	\$ -	\$ 14,400,000	0%	\$ -	\$ 14,400,000	\$ -	\$ 14,400,000	\$ -
1.5.3	SIGNAL PHASING CHANGES, TRAFFIC SIGNAL EQUP. ENHANCEMENTS, AND ITS						2022 - 2041	\$ 25,350,000	\$ -	\$ 25,350,000	0%	\$ -	\$ 25,350,000	\$ -	\$ 25,350,000	\$ -
1.5.4	TRANSIT SIGNAL PRIORITY						2022 - 2041	\$ 8,000,000	\$ -	\$ 8,000,000	0%	\$ -	\$ 8,000,000	\$ -	\$ 8,000,000	\$ -
1.5.5	TRANSIT PRIORITY MEASURES (INFRASTRUCTURE) FOR PRIORITY BUS CORRIDORS						2027 - 2041	\$ 15,000,000	\$ -	\$ 15,000,000	0%	\$ -	\$ 15,000,000	\$ -	\$ 15,000,000	\$ -
1.5.6	STAND ALONE SIDEWALK COSTS						2022 - 2041	\$ 8,196,000	\$ -	\$ 8,196,000	0%	\$ -	\$ 8,196,000	\$ -	\$ 8,196,000	\$ -
1.5.7	NOISE WALLS						2022 - 2041	\$ 101,333,000	\$ -	\$ 101,333,000	50%	\$ 50,666,500	\$ 50,666,500	\$ -	\$ 50,666,500	\$ -
1.5.8	DC, OP and TMP STUDIES						2022 - 2028	\$ 6,500,000	\$ -	\$ 6,500,000	0%	\$ -	\$ 6,500,000	\$ -	\$ 6,500,000	\$ -
1.5.9	EA STUDIES (1.5% OF ROADS AND RAIL GRADE SEPARATIONS)						2022 - 2041	\$ 12,395,000	\$ -	\$ 12,395,000	0%	\$ -	\$ 12,395,000	\$ -	\$ 12,395,000	\$ -
1.5.10	EA / TPAP STUDIES FOR DUNDAS AND LAKESHORE						2022 - 2023	\$ 7,500,000	\$ -	\$ 7,500,000	0%	\$ -	\$ 7,500,000	\$ -	\$ 7,500,000	\$ -
Subtotal Other Roads and Related Infrastructure								\$ 204,643,000	\$ -	\$ 204,643,000		\$ 50,666,500	\$ 153,976,500	\$ -	\$ 153,976,500	\$ -
TOTAL ROADS AND RELATED INFRASTRUCTURE								\$ 1,873,295,100	\$ 300,233,714	\$ 1,573,061,386		\$ 231,185,343	\$ 1,341,876,043	\$ 53,281,208	\$ 1,238,428,152	\$ 50,166,683

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation			
Residential Share of 2022 - 2041 DC Eligible Costs	71.9%	\$890,286,984	
2022 - 2041 Growth in Population in New Units		164,176	
Unadjusted Development Charge Per Capita		\$5,422.76	
Non-Residential Development Charge Calculation			
Non-Residential Share of 2022 - 2041 DC Eligible Costs	28.1%	\$348,141,168	
2022 - 2041 Non-Residential GFA Growth in New Space		3,036,030	
Unadjusted Non-Residential Development Charge Per Square Metre		\$114.67	

2022 - 2041 Net Funding Envelope	\$1,524,429,123
Reserve Fund Balance	\$53,281,208

**APPENDIX D
TABLE D.2-3**

**CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS AND RELATED INFRASTRUCTURE
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

ROADS	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE (\$000)	\$38,303.0	\$3,158.0	(\$42,065.9)	(\$78,940.7)	(\$106,494.1)	(\$136,633.3)	(\$120,567.7)	(\$93,902.6)	(\$60,595.7)	(\$30,247.7)	(\$23,386.7)
2022 - 2041 RESIDENTIAL FUNDING REQUIREMENTS											
Roads: Prior Growth	\$12,936.8	\$12,936.8	\$9,707.8	\$680.4	\$680.4	\$680.4	\$680.4	\$0.0	\$0.0	\$0.0	\$0.0
Roads: Non Inflated	\$62,196.8	\$70,420.4	\$63,211.7	\$61,679.0	\$63,030.2	\$23,732.8	\$16,261.5	\$13,668.5	\$18,934.1	\$39,659.1	\$63,827.3
Roads: Inflated	\$75,133.6	\$85,024.3	\$75,865.5	\$66,176.4	\$68,962.4	\$26,954.2	\$19,079.3	\$15,700.8	\$22,184.3	\$47,396.2	\$77,805.2
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	6,980	7,064	7,150	7,235	7,377	7,998	8,103	8,206	8,312	8,221	8,559
REVENUE											
- DC Receipts: Inflated	\$39,624.4	\$40,903.3	\$42,229.3	\$43,585.9	\$45,330.2	\$50,129.1	\$51,802.9	\$53,510.6	\$55,285.9	\$55,774.2	\$59,228.7
INTEREST											
- Interest on Opening Balance	\$1,340.6	\$110.5	(\$2,313.6)	(\$4,341.7)	(\$5,857.2)	(\$7,514.8)	(\$6,631.2)	(\$5,164.6)	(\$3,332.8)	(\$1,663.6)	(\$1,286.3)
- Interest on In-year Transactions	(\$976.5)	(\$1,213.3)	(\$925.0)	(\$621.2)	(\$649.9)	\$405.6	\$572.7	\$661.7	\$579.3	\$146.6	(\$510.9)
TOTAL REVENUE	\$39,988.5	\$39,800.5	\$38,990.7	\$38,623.0	\$38,823.2	\$43,019.8	\$45,744.4	\$49,007.7	\$52,532.4	\$54,257.2	\$57,431.6
CLOSING CASH BALANCE	\$3,158.0	(\$42,065.9)	(\$78,940.7)	(\$106,494.1)	(\$136,633.3)	(\$120,567.7)	(\$93,902.6)	(\$60,595.7)	(\$30,247.7)	(\$23,386.7)	(\$43,760.3)

APPENDIX D

TABLE D.2-3

CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS AND RELATED INFRASTRUCTURE
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

ROADS	2033	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE (\$000)	(\$43,760.3)	(\$65,790.5)	(\$87,388.8)	(\$110,553.7)	(\$132,996.2)	(\$111,934.0)	(\$88,331.3)	(\$62,045.5)	(\$31,664.4)	
2022 - 2041 RESIDENTIAL FUNDING REQUIREMENTS										
Roads: Non: Inflated	\$64,595.3	\$63,680.1	\$64,364.2	\$63,364.5	\$27,542.7	\$27,544.2	\$27,597.4	\$26,815.9	\$28,161.3	\$890,287.0
Roads: Inflated	\$80,316.1	\$80,761.7	\$83,262.0	\$83,608.1	\$37,068.9	\$37,812.3	\$38,643.0	\$38,299.7	\$41,025.7	\$1,101,079.7
NEW RESIDENTIAL DEVELOPMENT										
- Population Growth in New Units	8,673	8,787	8,905	9,036	8,502	8,605	8,712	8,820	8,931	164,176
REVENUE										
- DC Receipts: Inflated	\$61,217.9	\$63,263.0	\$65,394.9	\$67,684.0	\$64,957.8	\$67,059.6	\$69,251.3	\$71,512.0	\$73,860.2	\$1,141,605.5
INTEREST										
- Interest on Opening Balance	(\$2,406.8)	(\$3,618.5)	(\$4,806.4)	(\$6,080.5)	(\$7,314.8)	(\$6,156.4)	(\$4,858.2)	(\$3,412.5)	(\$1,741.5)	(\$77,050.3)
- Interest on In-year Transactions	(\$525.2)	(\$481.2)	(\$491.3)	(\$437.9)	\$488.1	\$511.8	\$535.6	\$581.2	\$574.6	(\$1,775.3)
TOTAL REVENUE	\$58,285.9	\$59,163.4	\$60,097.1	\$61,165.6	\$58,131.0	\$61,415.1	\$64,928.8	\$68,680.7	\$72,693.3	\$1,062,779.8
CLOSING CASH BALANCE	(\$65,790.5)	(\$87,388.8)	(\$110,553.7)	(\$132,996.2)	(\$111,934.0)	(\$88,331.3)	(\$62,045.5)	(\$31,664.4)	\$3.2	

2022 Adjusted Charge Per Capita \$ **5,676.85**

Allocation of Capital Program

Residential Sector	71.9%
Non-Residential Sector	28.1%

Rates for 2022

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

**APPENDIX D
TABLE D.2-3**

**CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
INDUSTRIAL AND NON-INDUSTRIAL NON-RESIDENTIAL DEVELOPMENT CHARGE - SQUARE METRE
(in \$000)**

ROADS	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE (\$000)	\$14,978.2	\$9,179.6	(\$53.5)	(\$5,162.0)	(\$5,854.1)	(\$6,876.8)	(\$478.0)	\$9,852.9	\$22,364.0	\$33,202.2	\$34,879.6
2022 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS											
Roads: Prior Growth	\$5,058.8	\$5,058.8	\$3,796.2	\$266.1	\$266.1	\$266.1	\$266.1	\$0.0	\$0.0	\$0.0	\$0.0
Roads: Non Inflated	\$24,321.7	\$27,537.5	\$24,718.6	\$24,119.2	\$24,647.6	\$9,280.6	\$6,358.9	\$5,345.0	\$7,404.1	\$15,508.4	\$24,959.3
Roads: Inflated	\$29,380.5	\$33,248.2	\$29,666.7	\$25,877.8	\$26,967.3	\$10,540.3	\$7,460.8	\$6,139.7	\$8,675.0	\$18,534.0	\$30,425.2
NEW RESIDENTIAL DEVELOPMENT											
- Non-Industrial GFA	120,537	122,529	124,567	126,710	128,857	75,907	76,572	77,285	77,950	78,686	77,395
- Industrial GFA (Weighted at 0.766)	62,352	62,352	62,352	62,352	62,352	46,764	46,764	46,764	46,764	46,764	46,764
Total Non-Residential GFA	182,889	184,881	186,919	189,062	191,209	122,671	123,336	124,049	124,714	125,450	124,159
REVENUE											
- DC Receipts: Inflated	\$23,227.0	\$23,949.5	\$24,697.8	\$25,480.6	\$26,285.3	\$17,200.8	\$17,639.9	\$18,096.7	\$18,557.6	\$19,040.4	\$19,221.4
INTEREST											
- Interest on Opening Balance	\$524.2	\$321.3	(\$2.9)	(\$283.9)	(\$322.0)	(\$378.2)	(\$26.3)	\$344.9	\$782.7	\$1,162.1	\$1,220.8
- Interest on In-year Transactions	(\$169.2)	(\$255.7)	(\$136.6)	(\$10.9)	(\$18.8)	\$116.6	\$178.1	\$209.2	\$172.9	\$8.9	(\$308.1)
TOTAL REVENUE	\$23,582.0	\$24,015.1	\$24,558.2	\$25,185.7	\$25,944.6	\$16,939.1	\$17,791.7	\$18,650.8	\$19,513.3	\$20,211.4	\$20,134.1
CLOSING CASH BALANCE	\$9,179.6	(\$53.5)	(\$5,162.0)	(\$5,854.1)	(\$6,876.8)	(\$478.0)	\$9,852.9	\$22,364.0	\$33,202.2	\$34,879.6	\$24,588.4

**APPENDIX D
TABLE D.2-3**

**CITY OF MISSISSAUGA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
INDUSTRIAL AND NON-INDUSTRIAL NON-RESIDENTIAL DEVELOPMENT CHARGE - SQUARE METRE
(in \$000)**

ROADS	2033	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE (\$000)	\$24,588.4	\$13,437.9	\$2,237.4	(\$9,831.8)	(\$22,111.3)	(\$18,590.7)	(\$14,659.4)	(\$10,309.6)	(\$5,033.2)	
2022 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
Roads: Non: Inflated	\$25,259.6	\$24,901.7	\$25,169.2	\$24,778.3	\$10,770.4	\$10,771.0	\$10,791.8	\$10,486.2	\$11,012.3	\$348,141.2
Roads: Inflated	\$31,407.1	\$31,581.4	\$32,559.1	\$32,694.4	\$14,495.6	\$14,786.3	\$15,111.1	\$14,976.8	\$16,042.8	\$430,570.3
NEW RESIDENTIAL DEVELOPMENT										
- Non-Industrial GFA	78,102	78,792	79,457	80,164	80,866	81,560	82,294	83,053	83,747	1,815,030
- Industrial GFA (Weighted at 0.766)	46,764	46,764	46,764	46,764	31,176	31,176	31,176	31,176	31,176	935,286
Total Non-Residential GFA	124,866	125,556	126,221	126,928	112,042	112,736	113,470	114,229	114,923	2,750,316
REVENUE										
- DC Receipts: Inflated	\$19,717.5	\$20,222.9	\$20,736.7	\$21,269.9	\$19,150.8	\$19,654.9	\$20,178.5	\$20,719.7	\$21,262.5	\$416,310.3
INTEREST										
- Interest on Opening Balance	\$860.6	\$470.3	\$78.3	(\$540.8)	(\$1,216.1)	(\$1,022.5)	(\$806.3)	(\$567.0)	(\$276.8)	\$322.4
- Interest on In-year Transactions	(\$321.5)	(\$312.4)	(\$325.1)	(\$314.2)	\$81.5	\$85.2	\$88.7	\$100.5	\$91.3	(\$1,039.5)
TOTAL REVENUE	\$20,256.6	\$20,380.9	\$20,489.8	\$20,414.9	\$18,016.2	\$18,717.6	\$19,460.9	\$20,253.2	\$21,077.0	\$415,593.1
CLOSING CASH BALANCE	\$13,437.9	\$2,237.4	(\$9,831.8)	(\$22,111.3)	(\$18,590.7)	(\$14,659.4)	(\$10,309.6)	(\$5,033.2)	\$1.0	

2022 Adjusted Charge Per Sq.M.	\$	127.00
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2022 DC Study		
Non-Industrial Charge Per Sq.M.	\$	127.00
Industrial Charge per Sq.M.	0.7660	\$ 97.28

Weighting (Non-Indus / Indus)	1.31
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Allocation of Capital Program	
Residential Sector	71.9%
Non-Residential Sector	28.1%
Rates for 2022	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix E

Stormwater Management

Technical Appendix

Stormwater Management Technical Appendix

This appendix provides a brief outline of the infrastructure included in the Stormwater Management development charge. The development-related projects outlined in this appendix are required to service the demands of new development up to 2041. The works included for recovery are erosion control, conveyance, stormwater management, storm sewer oversizing and related studies. The benefits of the services are considered to be City-wide for the purposes of calculating the development charge.

Continuing with the practice established in 1991, the Stormwater Management development charges is calculated as a uniform charge on a per net hectare basis for chargeable vacant or redevelopment of land.

Notably, the City has introduced a Stormwater user rate (referred to as the “Stormwater Charge”) which is used to fund stormwater related infrastructure and operating costs. The capital costs and operating costs funded by the user rates are not included for recovery under the development charges calculation.

A. A Stormwater Management Background Study has been Prepared

A separate background study has been prepared for the purposes of the Stormwater Management development charges entitled the 2022 Development Charges Background Study: Stormwater Drainage Component (herein referred to as the “Stormwater Drainage Component Study”). The document was developed by KSGS Engineering in collaboration with the City’s Environmental Services Section and Open Data department. The

development forecast of vacant land was prepared by Hemson with input from City staff.

The 2022 Stormwater Drainage Component Study includes a discussion of the methodology used to determine the eligible capital projects and provides details on project timing, costing and allocation of benefit (i.e. DC eligible and ineligible shares).

The Stormwater Management development charge has been reduced from the City's previous DC background studies. Additional details on the Stormwater Management capital program and calculation methodology is provided in the 2022 Development Charges Background Study: Stormwater Drainage Component¹.

It is noted that the City will be reviewing stormwater needs in the context of the ongoing update to the City's development forecast to 2051 with specific reference to location of development and the areas of further and greater levels of intensification; future SWM development-related infrastructure needs might be great resulting in higher stormwater DC rates.

B. Development Forecast of Vacant Land

The Stormwater Management development charge is calculated per net hectare of chargeable vacant land. To determine the amount of chargeable vacant land, Hemson, in collaboration with the City's Environmental Services Section and Open Data sources, prepared an inventory of all vacant residential, non-residential, mixed use lands and lands available for redevelopment that are eligible to be recovered through development charges. In order to determine the redevelopment potential of sites, an assumption of 2.5 per cent has been applied to the occupied lands throughout the identified watersheds. Although the redevelopment potential

¹ A copy of the 2022 Development Charges Background Study: Stormwater Drainage Component report is made available publically on the City's website.

of individual sites vary, the 2.5 per cent assumption is intended to represent a City-wide average.

The resulting total future net developable area is 1,606 hectares after adjusting for the redevelopment potential of occupied lands. This land will be subject to the Stormwater Management development charge.

It should be noted that the future net developable area identified in this appendix has increased from the City's 2019 DC Background Study. This is the result of the addition about 32 hectares of recovered floodplain land within the Little Etobicoke Creek watershed based on proposed mitigation works.

C. Historical Service Level

Table E-1 displays the ten-year historical inventory for all Stormwater Management infrastructure based on the available Tangible Capital Asset data. To note, data was available for a limited number of recent years and data before 2018 has been extrapolated. The City's existing almost 2,500 kilometres of storm sewer pipes were valued at \$4.73 billion in 2021. There are currently 81 stormwater management facilities in the City that provide for a combined value of \$160.44 million. Lastly, included in the inventory are watercourses of approximately 150 kilometers valued at \$425.72 million.

The total value of all Stormwater Management infrastructure is approximately \$5.32 billion. This results in a ten-year historical average service level of \$4,363.27 per population and employment. The historical service level, multiplied by the long-term net population and employment in growth of 185,370, results in a maximum allowable funding envelope of \$808.82 million.

D. 2022 to 2041 Development-Related Capital Program and Calculation of the Unadjusted Development Charges

Table E-2 outlines the detailed projects that are included in the Stormwater Management development charge calculation. Additional details on cost estimates are included in the Stormwater Drainage Component Study.

The capital program provides for \$212.56 million in down stream erosion works, \$33.22 million in conveyance works, \$149.50 million for stormwater management ponds, \$29.54 million for storm sewer oversizing and \$3.52 million for background studies. In total, development-related capital expenditures are estimated at \$428.34 million.

The calculation of the discounted development-related net capital cost for Stormwater Management is shown on Table E-2. Of the development-related capital program, approximately \$363.56 million has been identified as providing benefit to the existing community. The total capital program amounts to \$64.78 million. No costs have been identified as a post-period benefit, as such no reduction is made to the DC eligible costs. A further \$54.74 million can be funded by development charges and lot levies on hand, leaving a balance of \$10.04 million to be included in the development charge calculation. As there is no legislated discount for Stormwater Management, the remaining \$10.04 million is included in the development charge calculation.

The Stormwater Management development charge will be collected as a uniform charge on a per net hectare of development basis from both non-residential and residential development. The \$10.04 million is divided by the net vacant land of 1,606 hectares, resulting in a per hectare charge of \$6,252. A cash flow analysis has not been undertaken as the timing of the development of the vacant land is difficult to predict.

The following is a summary of the Stormwater Management calculated development charge:

STORMWATER MANAGEMENT SUMMARY			
10-year Hist.	2022 - 2041		Calculated
Service Level	Development-Related Capital Program		Development Charge
per pop & emp	Total	Net DC Recoverable	per net hectare
\$4,363.27	\$428,339,252	\$10,040,476	\$6,252

**APPENDIX E
TABLE 1**

**CITY OF MISSISSAUGA
INVENTORY OF CAPITAL ASSETS
STORMWATER MANAGEMENT**

STORM SEWER Type of Storm Sewer	# of Kilometres										UNIT COST (\$/km)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
All Storm Sewer Types	2,358	2,371	2,383	2,396	2,409	2,421	2,434	2,446	2,459	2,472	\$1,915,100
Total (km)	2,358	2,371	2,383	2,396	2,409	2,421	2,434	2,446	2,459	2,472	
Total (\$000)	\$4,516,276.4	\$4,540,386.1	\$4,564,629.9	\$4,589,007.8	\$4,613,500.5	\$4,637,246.4	\$4,661,126.3	\$4,685,121.2	\$4,709,230.9	\$4,733,474.7	

STORMWATER MANAGEMENT FACILITIES Type of Facility	# of SWM Facilities										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
All Stormwater Management Facilities	61	61	61	62	62	62	64	80	81	81	\$1,970,630
Total (#)	61	61	61	62	62	62	64	80	81	81	
Total (\$000)	\$119,604.3	\$120,242.8	\$120,884.8	\$121,530.4	\$122,179.1	\$122,179.1	\$126,120.3	\$157,650.4	\$159,621.0	\$160,442.8	

WATERCOURSES City Owned/Maintained	# of Kilometres										UNIT COST (\$/km)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Estimated length	144	145	145	146	147	148	148	149	150	151	\$2,823,600
Total (km)	144	145	145	146	147	148	148	149	150	151	
Total (\$000)	\$406,186.0	\$408,354.4	\$410,534.8	\$412,727.3	\$414,930.2	\$417,065.8	\$419,213.6	\$421,371.6	\$423,540.0	\$425,720.4	

APPENDIX E
TABLE 1

CITY OF MISSISSAUGA
CALCULATION OF SERVICE LEVELS
STORMWATER MANAGEMENT FACILITIES

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historic Population	715,067	716,694	718,325	719,960	721,599	729,753	737,999	746,338	754,771	763,300
Historic Employment	438,045	441,752	445,702	449,890	454,310	456,553	458,807	461,075	463,357	465,650
Total Historic Population & Employment	1,153,112	1,158,446	1,164,027	1,169,850	1,175,909	1,186,306	1,196,806	1,207,413	1,218,128	1,228,950

INVENTORY SUMMARY (\$000)

Storm Sewer	\$4,516,276.4	\$4,540,386.1	\$4,564,629.9	\$4,589,007.8	\$4,613,500.5	\$4,637,246.4	\$4,661,126.3	\$4,685,121.2	\$4,709,230.9	\$4,733,474.7
Stormwater Management Facilities	\$119,604.3	\$120,242.8	\$120,884.8	\$121,530.4	\$122,179.1	\$122,179.1	\$126,120.3	\$157,650.4	\$159,621.0	\$160,442.8
Watercourses	\$406,186.0	\$408,354.4	\$410,534.8	\$412,727.3	\$414,930.2	\$417,065.8	\$419,213.6	\$421,371.6	\$423,540.0	\$425,720.4
Total (\$000)	\$5,042,066.7	\$5,068,983.3	\$5,096,049.6	\$5,123,265.5	\$5,150,609.7	\$5,176,491.3	\$5,206,460.2	\$5,264,143.2	\$5,292,391.9	\$5,319,637.9

SERVICE LEVEL (\$/pop & emp)

Average
Service
Level

Storm Sewer	\$3,916.60	\$3,919.38	\$3,921.41	\$3,922.73	\$3,923.35	\$3,908.98	\$3,894.64	\$3,880.30	\$3,865.96	\$3,851.64	\$3,900.50
Stormwater Management Facilities	\$103.72	\$103.80	\$103.85	\$103.89	\$103.90	\$102.99	\$105.38	\$130.57	\$131.04	\$130.55	\$111.97
Watercourses	\$352.25	\$352.50	\$352.68	\$352.80	\$352.86	\$351.57	\$350.28	\$348.99	\$347.70	\$346.41	\$350.80
Total (\$/pop & emp)	\$4,372.57	\$4,375.68	\$4,377.95	\$4,379.42	\$4,380.11	\$4,363.54	\$4,350.30	\$4,359.85	\$4,344.69	\$4,328.60	\$4,363.27

CITY OF MISSISSAUGA
CALCULATION OF MAXIMUM ALLOWABLE
STORMWATER MANAGEMENT FACILITIES

19-Year Funding Envelope Calculation	
10 Year Average Service Level 2012 - 2021	\$4,363.27
Net Population & Employment Growth 2022 - 2041	185,370
Maximum Allowable Funding Envelope	\$808,819,360

APPENDIX E

TABLE E-2

CITY OF MISSISSAUGA
SUMMARY OF DEVELOPMENT CHARGES PER NET HECTARE
STORMWATER MANAGEMENT

Net Developable Area (hectares)	1,606
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Summary of SWM Infrastructure	Development-Related Capital Forecast (2022 - 2041)					
	Total Gross Cost (\$000)	Less: Adjustments				Total Net Capital Costs After Discount (\$000)
		Developer Contributions (\$000)	Non-Growth Share (\$000)	Post Period Allocation (\$000)	DC Reserves/ Section 14/ Other (\$000)	
STORMWATER MANAGEMENT						
Down Stream Erosion Control Works	\$212,562	\$0.00	\$201,950	\$0.00	\$0.00	\$10,613
Conveyance Works	\$33,215	\$0.00	\$23,775	\$0.00	\$0.00	\$9,440
Stormwater Mangement Ponds	\$149,498	\$0.00	\$117,572	\$0.00	\$0.00	\$31,926
Storm Sewer Oversizing	\$29,543	\$0.00	\$17,243	\$0.00	\$0.00	\$12,300
Background Studies & Monitoring	\$3,520	\$0.00	\$3,021	\$0.00	\$0.00	\$499
DC Reserves/Section 14 Levies/Other	\$0	\$0.00	\$0	\$0.00	\$54,737	(\$54,737)
TOTAL STORMWATER MANAGEMENT	\$428,339	\$0.00	\$363,561	\$0.00	\$54,737.29	\$10,040
Development Charge Per Net Hectare (\$)						\$6,252

Appendix F

Reserve Fund Balances

Development Charges Reserve Fund Balances

The *DCA* requires that a reserve fund be established for each service for which development charges are collected. Table F-1 presents the reserve fund balances that are available to help fund the development-related net capital costs identified in this study. The opening balances of the development charges reserve funds as at December 31, 2021. Of note, Parking Services DC reserves are included in the list however as it is no longer an eligible DC service under the *DCA*, the funds are not applied to a capital program. All other available reserve fund balances are therefore accounted for in this study.

As shown on Table F-1, the December 31, 2021 total reserve fund balance was in a positive position of \$165.93 million.

The application of each of the balances in each of the reserve funds is discussed in the appendix section related to each service. 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.

TABLE F-1
CITY OF MISSISSAUGA

DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT
YEAR ENDING DECEMBER 31, 2021

Service	Uncommitted Reserve Funds
By-Law Enforcement	(\$3,544,749)
Development-Related Studies	(\$101,537)
Library Services	\$7,021,133
Fire Services	(\$6,605,403)
Recreation & Parks Development	\$48,043,362
LAC Debt	\$0
Transit Services	\$13,309,101
Public Works Services	\$11,719,216
Roads And Related Infrastructure	\$53,281,208
Stormwater Management	\$35,034,860
Parking Services*	\$7,774,499
Total	\$165,931,688

* DCs for Parking are not calculated as part of this DC Study but will continue to be utilized as permitted under the legislation.

Appendix G

Cost of Growth – All Services Excluding Transit

Cost of Growth Analysis – All Services Excluding Transit

Asset Management Plan

The *DCA* requires that municipalities complete an Asset Management Plan before passing a development charges by-law. A key function of the Asset Management Plan, as required by the legislation, is to demonstrate that all assets funded under the development charges by-law are financially sustainable over their full life cycle.

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 G-1 and Table G-2. Although all capital assets considered in the study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. 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 (see below for additional details). 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.

Table G-1 – Summary of Municipal Assets Considered City-wide for General Services (Excluding Transit)

Service and Amenities	Estimated Useful Life
By-Law Enforcement <ul style="list-style-type: none"> ▪ Recovery of past expenditures 	Not applicable
Development-Related Studies <ul style="list-style-type: none"> ▪ Development-related studies, strategic waterfront, growth management studies etc. 	Not infrastructure
Library <ul style="list-style-type: none"> ▪ Buildings ▪ Material and equipment ▪ Studies 	40 years 10 years Not infrastructure
Fire Services <ul style="list-style-type: none"> ▪ Buildings ▪ Vehicles ▪ Equipment ▪ Studies 	40 years 20 years 8 years Not infrastructure

Service and Amenities	Estimated Useful Life
Recreation & Parks Development <ul style="list-style-type: none"> Recovery of Hershey Centre Debt Recreation Facilities Park Amenities Fleet Studies & Design 	Not applicable 40 years 20 years 12 years Not infrastructure
Living Arts Centre Debt <ul style="list-style-type: none"> Living Arts Centre Debt 	Not infrastructure

Table G-2 – Summary of Municipal Assets Considered for Engineered Services

Capital Project Description	Estimated Useful Life
Public Works <ul style="list-style-type: none"> Buildings Vehicles & Equipment Studies 	40 years 12 years Not infrastructure
Roads and Related <ul style="list-style-type: none"> Arterial Roads Major Collector Roads Rail Grade Separation Bicycle Facilities Stand Alone Intersection Improvements Signal Phasing Changes, Traffic Signal Equip. Enhancements, and ITS Transit Signal Priority Stand Alone Sidewalk Costs Stand Alone Noise Walls Studies 	50 years 50 years 50 years 20 years 50 years 20 years 50 years 40 years 40 years Not infrastructure

Capital Project Description	Estimated Useful Life
Stormwater	
• Down Stream Erosion Control Works	50 years
• Conveyance Works	50 years
• Stormwater Management Ponds	80 years
• Storm Sewer Oversizing	80 years
• Background Studies & Monitoring	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 City staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated for both the general and engineered services, excluding transit related infrastructure. Provisions for infrastructure replacement are initially calculated for each asset based on their useful life and the anticipated cost of replacement. The aggregate of all individual provisions form the required annual capital provision. In calculating the annual provisions, a number of assumptions are made to account for inflation (2.0 per cent) and interest (3.5 per cent).

Consistent with the requirements of the *DCA*, assets that are proposed to be funded under the development charges by-law have been included in the analysis. As a result, the total calculated annual 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 benefit-to-existing and post-period benefit have also been calculated.

Table G-3 and G-4 provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2022-2031 and 2022-2041 DC recoverable portion. The year 2032 and 2042 have been included to calculate the annual contribution for the 2022-2031 and 2022-2041 periods as the expenditures in 2031 and 2041 will not trigger asset management contributions until 2032 and 2042, respectively. As shown in Table G-3, by 2032, the City will need to fund an additional \$21.01 million per annum in order to properly fund the full life cycle costs of the new assets related to the general services supported under the development charges by-law.

Table G-4 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 G-4, the annual provision in 2042 amounts to \$33.99 million.

Table G-3 – Calculated Annual Provision by 2032 for General Services

	2022 - 2031		Calculated AMP Annual	
General Services	Capital Program		Provision by 2032	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
By-Law Enforcement	\$3,482,000	\$0	\$0	\$0
Development-Related Studies	\$8,127,000	\$3,900,000	\$0	\$0
Library Services	\$36,783,000	\$46,324,000	\$967,000	\$1,091,000
Fire Services	\$41,390,000	\$50,741,000	\$1,092,000	\$1,572,000
Recreation & Parks Development	\$379,695,000	\$172,063,000	\$17,809,000	\$4,883,000
Lac Debt	\$685,000	\$0	\$0	\$0
Serv. Rel. to a Hwy: Public Works Services	\$34,985,000	\$237,000,000	\$1,142,000	\$7,068,000
Total	\$505,147,000	\$510,028,000	\$21,010,000	\$14,614,000

Table G-4 – Calculated Annual Provision for 2042 for Engineered Services

	2022 - 2041		Calculated AMP Annual	
Engineering Services	Capital Program		Provision by 2042	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Serv. Rel. to a Hwy: Roads And Related Infrastructure	\$1,291,709,000	\$555,147,000	\$33,095,000	\$13,426,000
Stormwater Management	\$10,040,000	\$363,561,000	\$895,000	\$5,996,000
Total	\$1,301,749,000	\$918,708,000	\$33,990,000	\$19,422,000

Financial Sustainability of the Program

Future Revenue Growth

The calculated annual funding provision should be considered within the context of the City's projected growth. Over the next ten years (to 2031) the City is projected to increase by approximately 32,670 households, which represents a 13 per cent increase over the existing base. In addition, the City will also add nearly 42,090 new employees that will result in approximately 1.72 million square metres of additional non-residential building space.

By 2041, there will be an increase of nearly 70,660 new dwelling units and 3.04 million square metres of non-residential building space. This growth will have the effect of increasing the overall assessment base and additional user fee and charges 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 the future replacement of these assets.

Long-Term Capital and Operating Impact Analysis

As shown in Table G-5, by 2031, the City's net operating costs are estimated to increase by \$23.46 million for property tax supported services. Increases in net operating costs will be experienced as new facilities such as community centres are opened. Table G-6 shows that by 2041, the City's net operating costs for Services Related to a Highway of Roads and Related Infrastructure and Public Works will increase by \$10.80 million. Operating

and maintenance costs will also increase as additions to the City's road network are made.

Table G-7 summarizes the components of the development-related capital forecast that will require funding from non-DC sources. In total, \$860.73 million will need to be financed from non-DC sources over the 2022-2031 and 2022-2041 planning period. In addition, \$336.73 million in interim DC financing related to post-period shares of projects may be required or these costs may be recovered from other growth funding tools. 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 of \$860.73 million is related to replacement of existing City facilities with newer and larger facilities that will benefit the existing community. 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

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 the identified general and engineered services infrastructure over the ten-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.

APPENDIX G
TABLE G-5

CITY OF MISSISSAUGA
COST OF GROWTH ANALYSIS ALL SERVICES EXCLUDING TRANSIT
ESTIMATED NET OPERATING COST OF THE PROPOSED
2022-2031 DEVELOPMENT-RELATED CAPITAL PROGRAM
(in constant 2022 dollars)

Category	Cost Driver (in 2022 \$)			Additional Operating Costs at 2031	Source and Commentay (1)
	\$	unit measure	Quantity		
By-Law Enforcement				\$0	
- None	\$0	N/A		\$0	- Recovery of past debt, no additional operating costs
Development-Related Studies				\$0	
- None	\$0	N/A		\$0	- No additional operating costs arising from undertaking studies
Library Services				\$2,082,400	
- Expanded Library Service	\$38	per capita	54,800	\$2,082,400	Source: Mississauga Library 2022-2025 Business Plan and 2022 Budget.
					- Page H-10 identifies operating costs per capita based on capital plan.
Fire Services				\$16,614,000	Source: Fire & Emergency Services 2022-2025 Business Plan and 2022 Budget.
- Station 126	\$2,769,000	per station	1	\$2,769,000	- Fully in-period funded.
- Station 127	\$2,769,000	per station	1	\$2,769,000	- Fully in-period funded.
- Stations 123, 124, 125 and 128	\$2,769,000	per station	4	\$11,076,000	- All four stations proposed to be tax funded
Recreation and Park Development				\$4,767,600	Source: Recreation 2022-2025 Business Plan and 2022 Budget
- Expanded indoor recreation facilities	\$37	per capita	54,800	\$2,027,600	See Note 3
- Expanded developed parkland	\$50	per capita	54,800	\$2,740,000	See Note 3
Living Art Centre				\$0	
- None	\$0	N/A		\$0	- Recovery of past debt, no additional operating costs
TOTAL ESTIMATED OPERATING COSTS				\$23,464,000	

Notes:

- 1) The source of the operating costs assumptions are the City of Mississauga 2022 Budget and the service specific 2022-2025 Business Plans.
- 2) Post Period operating cost are only shown when a facility is to be fully open and operating by 2031 and a share of the development-related capital has been allocated to growth beyond 2031.
- 3) Recreation incremental costs based on net (or tax levy) expenditures forecast for 2022 and the forecast 2022 population:

	2022 Net Cost	2022 Population	\$/Capita
Indoor Recreation Facilities	\$28,342,000	769,022	\$37
Parks Operations	\$38,494,000	769,022	\$50

APPENDIX G
TABLE G-6

CITY OF MISSISSAUGA
COST OF GROWTH ANALYSIS ALL SERVICES EXCLUDING TRANSIT
ESTIMATED NET OPERATING COST OF THE PROPOSED
2022-2041 DEVELOPMENT-RELATED CAPITAL PROGRAM
(in constant 2022 dollars)

Category	Cost Driver (in 2022 \$)			Additional Operating Costs at 2041	Source and Commentay (Note 1)
	\$	unit meaure	Quantity		
Roads, Public Works Building & Fleet				\$10,799,100	Source: Roads 2022-2025 Business Plan and 2022 Budget
- Operating cost of additional infrastructure	\$90	per capita	119,990	\$10,799,100	See Note 3
TOTAL ESTIMATED OPERATING COSTS				\$10,799,100	

Notes:

1) The source of the operating costs assumptions are the City of Mississauga 2022 Budget and the service specific 2022-2025 Business Plans.

2) Post Period operating cost are only shown when a facility is to be fully open and operating by 2041 and a share of the development-related capital has been allocated to growth beyond 2041.

3) Roads budget includes road maintenance, winter controls, buildings & fleet, and City parking operations - the incremental costs based on net (or tax levy) expenditures forecast for 2022 and the forecast 2022 population:

	2022 Net Cost	2022 Population	\$/Capita
Roads and Related	\$69,007,000	769,022	\$90

**APPENDIX G
TABLE G-7**

**CITY OF MISSISSAUGA
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES**

10-yr Services	Development-Related Capital Program (2022 - 2031)				
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Prior Growth (\$000)	Other Dev. Related* (\$000)	Total DC Eligible Costs for Recovery (\$000)
1 BY-LAW ENFORCEMENT	\$3,544.7	\$0.0	\$0.0	\$0.0	\$3,544.7
2 DEVELOPMENT-RELATED STUDIES	\$11,951.5	\$3,900.0	\$0.0	\$0.0	\$8,051.5
3 LIBRARY SERVICES	\$74,531.3	\$32,410.3	\$7,021.1	\$4,919.8	\$30,180.0
4 FIRE SERVICES	\$41,369.4	\$0.0	\$0.0	\$0.0	\$41,369.4
5 RECREATION & PARKS DEVELOPMENT	\$432,343.9	\$41,792.5	\$48,043.4	\$7,152.9	\$335,355.2
6 LIVING ARTS CENTRE DEBT	\$669.7	\$0.0	\$0.0	\$0.0	\$669.7
7 TRANSIT SERVICES	\$364,175.8	\$102,331.1	\$0.0	\$123,263.0	\$138,581.7
8 PUBLIC WORKS SERVICES	\$271,985.0	\$85,550.0	\$11,719.2	\$151,224.8	\$23,491.0
TOTAL 10-YR SERVICES	\$1,200,571.5	\$265,983.9	\$66,783.7	\$286,560.6	\$581,243.3

20-yr Services	Development-Related Capital Program (2022 - 2041)				
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Prior Growth (\$000)	Other Dev. Related* (\$000)	Total DC Eligible Costs for Recovery (\$000)
1 ROADS AND RELATED INFRASTRUCTURE	\$1,573,061.4	\$231,185.3	\$53,281.2	\$50,166.7	\$1,238,428.2
2 STORMWATER MANAGEMENT	\$428,339.3	\$363,561.5	\$54,737.3	\$0.0	\$10,040.5
TOTAL 20-YR SERVICES	\$2,001,400.6	\$594,746.8	\$108,018.5	\$50,166.7	\$1,248,468.6

TOTAL GENERAL AND ENGINEERED SERVICES	\$3,201,972.1	\$860,730.8	\$174,802.2	\$336,727.3	\$1,829,711.9
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Appendix H
2022 Draft By-Law
(Available Under Separate Cover)