

**DEVELOPMENT CHARGES
BACKGROUND STUDY**

Township of Georgian Bay

HEMSON Consulting Ltd

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EXECUTIVE SUMMARY

The following summarizes the process and findings of the Township of Georgian Bay's 2019 Development Charges Background Study.

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

1. Legislative Context

The Township of Georgian Bay 2019 Development Charges (DC) Background Study is presented as part of the process to lead to the approval of a new DC by-law in compliance with the *Development Charges Act, 1997 (DCA)*. The study is prepared in accordance with the *DCA* and associated Regulations, including the amendments that came into force on January 1, 2016.

2. Key Steps in Determining Future Development-Related Projects

In accordance with the *DCA* and associated regulation, several key steps are required to calculate development charges. This includes preparing a development forecast, establishing historical service levels, determining the increase in need for services arising from development and appropriate shares of costs, attribution to development types (i.e. residential and non-residential) and the final adjustment to the calculated rate of a cash flow analysis.

3. DC Eligible and Ineligible Costs

Development charges are intended to be pay for the initial round of capital costs needed to service new development over an identified planning period. This is based on the overlaying principle that "growth pays for growth". However, the *DCA* and associated regulation includes several statutory adjustments and deductions that prevent these costs from fully being recovered by growth. Such adjustments include, but are not limited to: ineligible costs, including operating and maintenance costs; ineligible services, including, tourism facilities, parkland acquisition, etc.; statutory ten per cent discount for "soft" or general services; deductions for costs that exceed historical service level caps; and statutory exemptions for specific uses (i.e. industrial expansions).

4. The Development-Related Capital Forecast is Subject to Change

It is recommended that Council adopt the development-related capital forecast developed for the purposes of the 2019 DC Background Study. However, it is recognized that the DC Study is a point-in-time analysis and there may be changes to project timing, scope and costs through the Township's normal annual budget process.

B. DEVELOPMENT FORECAST

The table below provides a summary of the anticipated residential and non-residential growth over the 2019-2028 planning period. The forecast is based on the District of Muskoka's *2019 Growth Strategy: Forecast & Growth Allocation Report* and includes both seasonal and permanent population and households. The development forecast is further discussed in Appendix A.

Development Forecast	2018 Estimate	2019 - 2028	
		Growth	Total at 2028
Residential			
Total Households	5,850	444	6,294
Total Population	19,734	1,272	21,006
<i>Population in New Dwellings</i>		1,359	
Non-Residential			
Employment	850	77	927
Non-Residential Building Space (sq.m.)		3,465	

C. CALCULATED DEVELOPMENT CHARGES

The table below provides the Township-wide development charges for residential and non-residential development based on the aforementioned forecasts.

Service	Residential Charge By Unit Type					Non-Residential
	Singles & Semis	Rows & Other Multiples	Apartments - Large	Apartments - Small	Park Model Trailers	Charge per Square Metre
Total Charge	\$4,759	\$2,778	\$2,254	\$1,502	\$2,254	\$21.76

D. LONG-TERM CAPITAL AND OPERATING COSTS

On overview of the long-term capital and operating costs for the capital facilities and infrastructure to be included in the DC by-law is provided in the study. This examination is required as one of the provisions of the *DCA*. Additional details on the long-term capital and operating impact analysis is found in Appendix D. By 2028, the Township's net annual operating costs are estimated to increase by about \$173,250.

E. ASSET MANAGEMENT PLAN

A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle.

By 2028, the Township will need to fund an additional \$115,000 per annum in order to properly fund the full life cycle costs of the new assets for each service supported under the 2019 Development Charges By-Law.

F. MODIFICATIONS TO THE TOWNSHIP'S DEVELOPMENT CHARGES BY-LAW ARE PROPOSED

The Township is proposing to modify the current development charges by-laws. The proposed draft by-laws will be made available, under separate cover, a minimum of two weeks in advance of the statutory public meeting.

I INTRODUCTION

This Township of Georgian Bay 2019 Development Charges Background Study is presented as part of a process to lead to the approval of a new development charge by-law in compliance with the *Development Charges Act, 1997 (DCA)*. As the Township of Georgian Bay experiences residential and non-residential growth that will increase the demand on all municipal services, the Township wishes to implement development charges to fund capital projects related to growth so that development continues to be serviced in a fiscally responsible manner.

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

- A forecast of the amount, type and location of housing units, population and non-residential development anticipated in the Township;
- The average capital service levels provided in the Township 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 Township to provide for the expected development, including the determination of the growth and non-development-related components of the capital projects;
- An asset management plan that demonstrates that all assets are financially sustainable over their full life cycle; and
- An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-laws would relate.

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

The *DCA* provides for a period of public review and comment regarding the proposed development charges. This process includes considering and responding to comments

received by members of the public about the calculated charges. Following completion of this process, in accordance with the *DCA* and Council's review of this study, it is intended that Council will pass new development charges by-law for the Township.

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

Section II designates the services for which the development charges are calculated and briefly reviews the methodology that has been used in this background study.

Section III presents a summary of the forecast residential and non-residential development that is expected to occur within the Township over the 2019-2028 period.

Section IV summarizes the ten-year historical average capital service levels that have been attained in the Township, which form the basis for the development charge calculations.

In Section V, the development-related capital forecast that has been developed by various Township departments is reviewed.

Section VI summarizes the calculation of applicable development charges and the resulting proposed development charges by class and type of development.

Section VII provides a comparison of existing development charge rates in the Township with the rates proposed in this study.

Section VIII provides an examination of the long-term capital and operating costs for each service included in the development charge calculation.

Section IX presents an Asset Management Plan for the Township, demonstrating financial sustainability of assets over the life cycle of the 2019 Development Charges By-law and satisfying the requirements of the amendment to the *Development Charges Act*.

Section X provides a review of development charges administrative matters as well as consideration for area rating and the Township's local service policies.

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

Several key steps are required in calculating a 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 Township of Georgian Bay's unique circumstances. The approach to the proposed development charges is focussed on providing a reasonable alignment of development-related costs with the development that necessitates them. This study calculates charges on a Township-wide basis which is consistent with the Township's 2014 Development Charges Background Study.

A. TOWNSHIP-WIDE DEVELOPMENT CHARGES ARE PROPOSED

The *DCA* provides municipalities with flexibility to define services that will be included in the development charges by-laws, provided that its other provisions, as well as those of O. Reg. 82/98, are met. The *DCA* also requires that the by-laws designate the areas within which DCs shall be imposed. The development charges may apply to all lands in a municipality or to other designated development areas as specified in the by-laws.

For both general and engineered services, a range of capital infrastructure is available throughout the Township, and all Georgian Bay residents and employees have access to this infrastructure. As new development occurs, new infrastructure will be needed in order to maintain overall service levels in the Township. A widely accepted method of sharing the development-related capital costs for such Township services is to apportion them over all anticipated population and employment growth.

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

- Library
- Parks and Recreation
- Fire Protection
- Public Works
- Roads and Related Infrastructure
- General Government

TABLE 2
TOWNSHIP OF GEORGIAN BAY
SUMMARY OF AVERAGE HISTORICAL SERVICE LEVELS 2009 - 2018

Service	2009 - 2018 Service Level Indicator
1.0 LIBRARY	\$141.98 per capita
Buildings	\$98.67 per capita
Land	\$7.82 per capita
Materials	\$30.68 per capita
Furniture And Equipment	\$4.81 per capita
2.0 PARKS AND RECREATION	\$950.73 per capita
Recreation Facilities	\$909.69 per capita
Park Development	\$41.04 per capita
3.0 FIRE PROTECTION	\$377.74 per capita & employment
Buildings	\$114.47 per capita & employment
Land	\$31.91 per capita & employment
Furniture & Equipment	\$29.57 per capita & employment
Vehicles	\$201.79 per capita & employment
4.0 PUBLIC WORKS	\$330.29 per capita & employment
Buildings	\$116.59 per capita & employment
Land	\$48.32 per capita & employment
Fleet & Equipment	\$165.38 per capita & employment
5.0 ROADS AND RELATED INFRASTRUCTURE	\$3,141.62 per capita & employment
Roads	\$3,141.62 per capita & employment

These services form a reasonable basis in which to plan and administer the Township-wide development charges. It is noted that the analysis of each of these services examines the individual capital facilities and equipment that constitute it. The resulting development charges for these services would be imposed against all development anywhere in the Township.

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

Several key steps are required in calculating development charges for future development-related projects. These are summarized in Figure 1 and discussed further in the following sections.

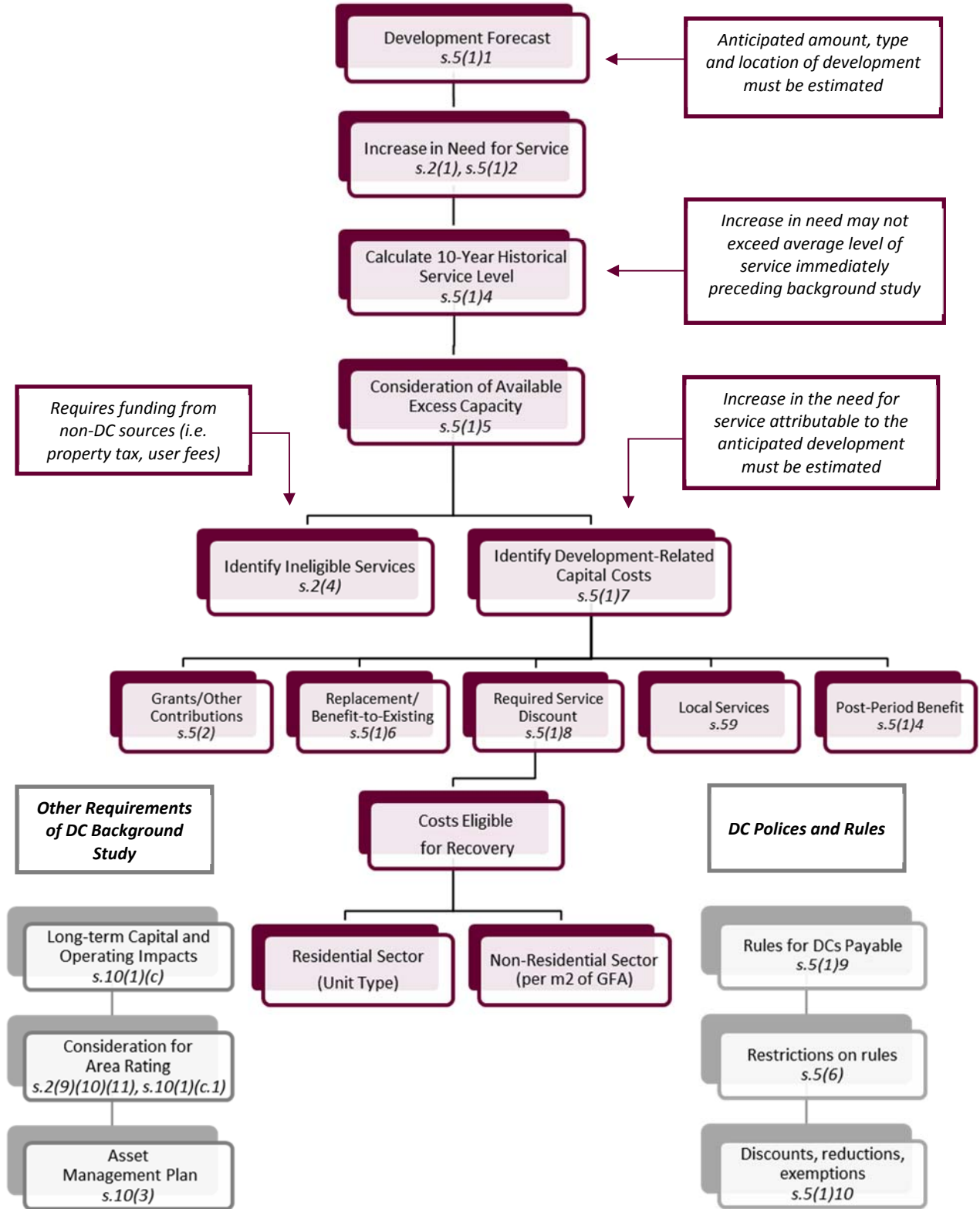


Figure 1: Overview of Development Charges Calculation

1. Development Forecast

The first step in the methodology requires a development forecast to be prepared for the ten-year study period from 2019-2028. The forecast of future residential and non-residential development by location used in this study is based on growth anticipated to occur within the Township's boundaries. The forecast is based on the Township's allocations within the District of Muskoka's *2019 Growth Strategy: Forecast & Growth Allocation Report*.

For the residential portion of the forecast, the total Census change in population determines the need for additional facilities and provides the foundation for the development-related capital forecast.

The non-residential portion of the forecast estimates the gross floor area (GFA) of building space to be developed over the 10-year period of 2019-2028. The forecast is based on the projected increase in employment levels and the anticipated amount of new building space required to accommodate it. A floor space per worker assumption is used to convert the employment forecast into gross floor areas for the purposes of the development charges study.

2. Service Categories and Historical Service Levels

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

... must not include an increase that would result in the level of service exceeding the average level of that service provided in the municipality over the 10-year period immediately preceding the preparation of the background study...(s. 5. (1) 4.)

Historical ten-year average service levels thus form the basis for development charges. A review of Township's capital service levels for buildings, land, vehicles, and so on has therefore been prepared as a reference for the calculation so that the portion of future capital projects that may be included in the development charge can be determined. The historical service levels used in this study have been calculated based on the period 2009-2018.

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

A development-related capital forecast has been prepared by the Township's departments as part of the present study. 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 capital forecast provides another cornerstone upon which development charges are based. The *DCA* requires that the increase in the need for service attributable to the anticipated development may include an increase:

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

S. 5. (1) 4. and s. 5. (2). require 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 Township. 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 Township from non-development charges sources. The amount of Township funding for such non-growth shares of projects is also identified as part of the preparation of the development-related capital forecast.

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

Finally, in calculating development charges, the development-related net capital costs must be reduced by ten per cent for all services except protection services, such as fire, and engineered services, such as roads and related infrastructure (*DCA*, s. 5. (1) 8.). The ten per cent discount is applied to the other services (e.g. parks and recreation, library) and the resulting Township funding responsibility from non-development charge sources is identified.

4. Attribution to Types of Development

The next step in the determination of development charges is the allocation of the development-related net capital costs between the residential and the non-residential sectors. In the Township of Georgian Bay, the allocation is based on the consideration of projected changes in population in new units and employment over the planning period.

The residential component of the development charge is applied to different housing types based on average occupancy factors. The non-residential component is applied on the basis of gross building space in square metres.

5. Final Adjustment

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

III DEVELOPMENT FORECAST

The *Development Charges Act (DCA)* requires the Township 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 Township to prepare a reasonable development-related capital program.

The forecast is primarily based on the allocations for the Township of Georgian Bay specified within the District of Muskoka’s *2019 Growth Strategy: Forecast & Growth Allocation Report*. The forecast includes both seasonal and permanent population and households. A ten-year development forecast, from mid-year 2019 to mid-year 2028, has been used for all the development charges eligible services in the Township.

Georgian Bay’s 2018 population, including both seasonal and permanent residents, is estimated at 19,734. Total place of work employment, excluding work at home employment, is estimated at 850. The Township’s population is forecast to grow by 1,272 in the ten-year planning period from 2019 to 2028. The population in new households forecast is higher at 1,359 due to the declining occupancy levels in existing housing units. Employment is expected to grow by 77 over the ten-year forecast period, which will generate an additional 3,465 square metres of new non-residential building space.

Table 1 provides a summary of the residential and non-residential development forecasts used in this analysis.

TABLE 1

**TOWNSHIP OF GEORGIAN BAY
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL
DEVELOPMENT FORECAST**

Development Forecast	2018 Estimate	2019 - 2028	
		Growth	Total at 2028
Residential			
Total Households	5,850	444	6,294
Total Population	19,734	1,272	21,006
<i>Population in New Dwellings</i>		1,359	
Non-Residential			
Employment	850	77	927
Non-Residential Building Space (sq.m.)		3,465	

IV 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. The legislative requirement is met by documenting historical service levels for the preceding ten-years; in this case, for the period 2009 to 2018. Typically, service levels are measured as a ratio of inputs per capita (or per population and employment).

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

Table 2 summarizes service levels for all general Township-wide services included in the development charge calculation. Appendix B provides detailed historical inventory data upon which the calculation of service levels is based.

TABLE 2
TOWNSHIP OF GEORGIAN BAY
SUMMARY OF AVERAGE HISTORICAL SERVICE LEVELS 2009 - 2018

Service	2009 - 2018 Service Level Indicator
1.0 LIBRARY	\$141.98 per capita
Buildings	\$98.67 per capita
Land	\$7.82 per capita
Materials	\$30.68 per capita
Furniture And Equipment	\$4.81 per capita
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Recreation Facilities	\$909.69 per capita
Park Development	\$41.04 per capita
3.0 FIRE PROTECTION	\$377.74 per capita & employment
Buildings	\$114.47 per capita & employment
Land	\$31.91 per capita & employment
Furniture & Equipment	\$29.57 per capita & employment
Vehicles	\$201.79 per capita & employment
4.0 PUBLIC WORKS	\$330.29 per capita & employment
Buildings	\$116.59 per capita & employment
Land	\$48.32 per capita & employment
Fleet & Equipment	\$165.38 per capita & employment
5.0 ROADS AND RELATED INFRASTRUCTURE	\$3,141.62 per capita & employment
Roads	\$3,141.62 per capita & employment

V DEVELOPMENT-RELATED CAPITAL PROGRAM

The *DCA* requires the Council of a municipality to express its intent to provide future capital facilities at the level incorporated in the development charges calculation. As noted above in Section II, *Ontario Regulation 82/98*, s. 3 states that:

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

A. THE DEVELOPMENT-RELATED CAPITAL PROGRAM IS PROVIDED FOR COUNCIL'S APPROVAL

Based on the development forecasts summarized in Section III and detailed in Appendix A, Township staff, in collaboration with the consultants, developed a development-related capital program setting out those projects that are required to service anticipated growth. For all services the capital plan covers the ten-year period from 2019-2028.

One of the recommendations contained in this background study is for Council to adopt the development-related capital program 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 Township. It is acknowledged that changes to the forecast presented here may occur through the Township's normal capital budget process.

B. THE DEVELOPMENT-RELATED CAPITAL PROGRAM FOR ALL SERVICES

A summary of the Development-Related Capital Program for all services is presented in Table 3.

TABLE 3

**TOWNSHIP OF GEORGIAN BAY
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR GENERAL AND ROADS SERVICES 2019 - 2028
(in \$000)**

Service	Gross Cost	Grants/ Subsidies	Municipal Cost	Total Net Capital Program										
				2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
1.0 LIBRARY	\$88.5	\$0.0	\$88.5	\$39.0	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5
1.1 Collection Materials	\$55.0	\$0.0	\$55.0	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5
1.2 Buildings, Land and Furnishings	\$33.5	\$0.0	\$33.5	\$33.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.0 PARKS AND RECREATION	\$100.0	\$0.0	\$100.0	\$0.0	\$0.0	\$100.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.1 Recreation Facilities	\$100.0	\$0.0	\$100.0	\$0.0	\$0.0	\$100.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3.0 FIRE PROTECTION	\$1,296.0	\$0.0	\$1,296.0	\$41.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$1,215.0	\$5.0	\$5.0	\$5.0	\$5.0
3.1 Buildings, Land & Furnishings	\$560.0	\$0.0	\$560.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$560.0	\$0.0	\$0.0	\$0.0	\$0.0
3.2 Vehicles	\$686.0	\$0.0	\$686.0	\$36.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$650.0	\$0.0	\$0.0	\$0.0	\$0.0
3.3 Equipment	\$50.0	\$0.0	\$50.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0
4.0 PUBLIC WORKS	\$90.0	\$0.0	\$90.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0
4.1 Fleet and Equipment	\$90.0	\$0.0	\$90.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0
5.0 ROADS AND RELATED INFRASTRUCTURE	\$5,929.4	\$3,045.0	\$2,884.4	\$1,925.9	\$106.5	\$106.5	\$106.5	\$106.5	\$106.5	\$106.5	\$106.5	\$106.5	\$106.5	\$106.5
5.1 Roadway Capital Works	\$3,779.4	\$2,000.0	\$1,779.4	\$1,779.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.2 Development-Related Studies	\$60.0	\$0.0	\$60.0	\$42.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0
5.3 Active Transportation Projects	\$2,090.0	\$1,045.0	\$1,045.0	\$104.5	\$104.5	\$104.5	\$104.5	\$104.5	\$104.5	\$104.5	\$104.5	\$104.5	\$104.5	\$104.5
6.0 GENERAL GOVERNMENT	\$2,557.6	\$1,861.8	\$695.8	\$520.8	\$16.0	\$16.0	\$16.0	\$16.0	\$16.0	\$47.0	\$16.0	\$16.0	\$16.0	\$16.0
6.1 Development-Related Studies	\$2,557.6	\$1,861.8	\$695.8	\$520.8	\$16.0	\$16.0	\$16.0	\$16.0	\$16.0	\$47.0	\$16.0	\$16.0	\$16.0	\$16.0
TOTAL - 10 YEAR GENERAL SERVICES	\$10,061.5	\$4,906.8	\$5,154.7	\$2,535.7	\$142.0	\$242.0	\$142.0	\$142.0	\$142.0	\$1,383.0	\$142.0	\$142.0	\$142.0	\$142.0

The table provides a total for all services analysed over the ten-year period, 2019-2028. Further details on the capital plans for each individual service category are available in Appendix B.

The development-related capital program estimates a total gross cost of \$10.06 million. Approximately \$4.91 million in grants and subsidies has been identified. These include Federal and Provincial grants as well as the District of Muskoka's share of specific projects included in the capital program. The Township of Georgian Bay's share of the capital program is \$5.15 million.

This capital program incorporates those projects identified to be related to development anticipated in the next 10 years. It is not implied that all of these costs are to be recovered from new development by way of development charges (see Section VI for the method and determination of net capital costs attributable to growth). Portions of this capital program may relate to providing servicing for growth which has occurred prior to 2019 (for which development charge reserve fund balances exist), for replacement of existing capital facilities, or for growth anticipated to occur beyond the 2019-2028 planning period. In addition, the amounts shown in Table 3 have not yet been reduced by ten per cent for various "soft" services as mandated by s.5(1)8. of the *DCA*.

Of the \$5.15 million in ten-year net development-related capital costs, \$2.88 million (56 per cent) is related to the provision of Roads and Related Infrastructure services. The capital program includes continued recoveries for completed road widening and improvement projects as well as active transportation projects development-related studies.

Fire Protection is the next largest component at \$1.30 million, or 25 per cent, of the total capital program. The program contains the expansion of the Port Severn Fire Hall as well as new vehicles and equipment.

The General Government capital program totals \$695,800 or approximately 14 per cent of the total capital program. The program contains continued recoveries for planning studies undertaken for Honey Harbour, Mactier, and Port Severn, future development charges studies, and other growth-related planning studies.

The other services comprising the remaining 5 per cent of the capital program include: Parks and Recreation at \$100,000, Public Works at \$90,000, and Library at \$88,500.

VI DEVELOPMENT CHARGES ARE CALCULATED IN ACCORDANCE WITH THE *DCA*

This section summarizes the calculation of development charges for each service category and the resulting total development charge by type of development. Furthermore, the calculation of the “unadjusted” per capita (residential) and per square metre (non-residential) is presented. Adjustments are made to these amounts resulting from a cash flow analysis that takes into account interest earnings and borrowing costs.

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, only one development charge rate is proposed. The proposed non-residential charge is based on gross floor area (GFA) of building space.

It is noted that the calculation of the Township-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 or reductions 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 offset, however, by increases in other portions of the calculated charge.

A. UNADJUSTED DEVELOPMENT CHARGE CALCULATION

A summary of the “unadjusted” residential and non-residential development charges for all services is presented in Table 4. Further details of the calculation for each individual service category are available in Appendix B.

The capital forecast for 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 4 shows that \$1.61 million of the capital forecast relates to replacement of existing capital facilities or to shares of projects that provide benefit to the existing community. These portions of capital costs will have to be funded from property taxes or other non-development charge revenue sources.

TABLE 4

**TOWNSHIP OF GEORGIAN BAY
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
CAPITAL PROGRAM FOR ALL SERVICES**

Population Growth to 2028 in New Units	1,359
Employment Growth to 2028 in Square Metres	3,465

Service	Development-Related Capital Program								Residential Share		Non-Residential Share	
	Gross Municipal Cost	Grants and Subsidies	Net Municipal Cost	Replacement & Benefit to Existing	Required Service Discount	Available DC Reserves	Post-Period Benefit	Total DC Eligible Costs for Recovery	%	(\$000)	%	(\$000)
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)				
1.0 LIBRARY	\$88.5	\$0.0	\$88.5	\$0.0	\$5.5	\$0.0	\$0.0	\$83.0	100%	\$83.0	0%	\$0.00
Unadjusted Development Charge Per Capita										\$61.05		
Unadjusted Development Charge Per Sq.M												\$0.00
2.0 PARKS AND RECREATION	\$100.0	\$0.0	\$100.0	\$0.0	\$10.0	\$78.0	\$0.0	\$12.0	100%	\$12.0	0%	\$0.00
Unadjusted Development Charge Per Capita										\$8.84		
Unadjusted Development Charge Per Sq.M												\$0.00
3.0 FIRE PROTECTION	\$1,296.0	\$0.0	\$1,296.0	\$18.0	\$0.0	\$293.0	\$475.4	\$509.6	95%	\$484.1	5%	\$25.48
Unadjusted Development Charge Per Capita										\$356.19		
Unadjusted Development Charge Per Sq.M												\$7.35
4.0 PUBLIC WORKS	\$90.0	\$0.0	\$90.0	\$0.0	\$0.0	\$90.0	\$0.0	\$0.0	95%	\$0.0	5%	\$0.00
Unadjusted Development Charge Per Capita										\$0.00		
Unadjusted Development Charge Per Sq.M												\$0.00
5.0 ROADS AND RELATED INFRASTRUCTURE												
5.1 & 5.2 Projects	\$3,839.4	\$2,000.0	\$1,839.4	\$899.7	\$0.0	\$454.6	\$0.0	\$485.1	95%	\$460.9	5%	\$24.26
5.3 Projects	\$2,090.0	\$1,045.0	\$1,045.0	\$522.5	\$0.0	\$0.0	\$0.0	\$522.5	100%	\$522.5	0%	\$0.00
Total	\$5,929.4	\$3,045.0	\$2,884.4	\$1,422.2	\$0.0	\$454.6	\$0.0	\$1,007.6		\$983.4		\$24.3
Unadjusted Development Charge Per Capita										\$723.55		
Unadjusted Development Charge Per Sq.M												\$7.00
6.0 GENERAL GOVERNMENT	\$2,557.6	\$1,861.8	\$695.8	\$165.8	\$53.0	\$75.8	\$0.0	\$401.2	95%	\$381.2	5%	\$20.06
Unadjusted Development Charge Per Capita										\$280.45		
Unadjusted Development Charge Per Sq.M												\$5.79
TOTAL 10 YEAR GENERAL SERVICES	\$10,061.5	\$4,906.8	\$5,154.7	\$1,606.0	\$68.5	\$991.4	\$475.4	\$2,013.4		\$1,943.6		\$69.8
Unadjusted Development Charge Per Capita										\$1,430.08		
Unadjusted Development Charge Per Sq.M												\$20.14

An additional share of \$991,400 has been identified as prior growth 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, \$475,400, is attributable to growth beyond the 2028 period (and can therefore only be recovered under future development charges studies).

The *DCA*, s.5(1)8 requires that development-related net capital costs for “soft” services be reduced by ten per cent in calculating the applicable development charge. The discount does not apply to Fire Protection, Public Works, and Roads and Related Infrastructure. The ten per cent share of development-related net capital costs not included in the development charge calculations must be funded from non-development charge sources. In total, about \$68,500 is identified as the required ten per cent reduction.

The discounted net development-related capital cost for all services is \$2.01 million. This amount is allocated between the residential and non-residential sectors to derive the unadjusted development charges. Library, Parks and Recreation, and active transportations projects within the Roads and Related Infrastructure capital program are deemed to benefit residential development only, while the other services are allocated between both sectors based on shares of population and employment growth. Approximately \$1.94 million, or 97 per cent, of the development charges net discounted capital program is deemed to benefit residential development. When this amount is divided by the ten-year population growth in new units (1,359), an unadjusted charge of \$1,430.08 per capita is derived. The non-residential share of the general services capital program totals \$69,800, or 3 per cent, and when this amount is divided by the ten-year forecast of non-residential space growth (3,465 sq.m.), an unadjusted charge of \$20.14 per square metre is derived.

B. ADJUSTED TOWNSHIP-WIDE RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGE RATES

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

Tables 5 and 6 summarize the results of the adjustment for the residential and non-residential components of the Township-wide rates, respectively. As shown on Table

5, the adjusted total per capita rate increases from \$1,430 to \$1,502 after the cash flow analysis.

The residential Township-wide development charges are proposed to vary by dwelling unit type to reflect their different occupancy factors and resulting demand for services. The proposed residential charge ranges from \$1,502 for small apartments to \$4,759 for single-family and semi-detached units. The proposed charge for rows (and other multiple units) is \$2,778 and the charge for large apartments and park model trailers is \$2,254.

TABLE 5
TOWNSHIP OF GEORGIAN BAY
TOWNSHIP-WIDE DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Unadjusted Charge Per Capita	Adjusted Charge Per Capita	Residential Charge By Unit Type (1)				
			Singles & Semis	Rows & Other Multiples	Apartments - Large	Apartments - Small	Park Model Trailers
Library	\$61.05	\$65	\$206	\$120	\$98	\$65	\$98
Parks And Recreation	\$8.84	\$10	\$32	\$19	\$15	\$10	\$15
Fire Protection	\$356.19	\$357	\$1,131	\$660	\$536	\$357	\$536
Public Works	\$0.00	\$0	\$0	\$0	\$0	\$0	\$0
Roads And Related Infrastructure	\$723.55	\$772	\$2,446	\$1,428	\$1,158	\$772	\$1,158
General Government	\$280.45	\$298	\$944	\$551	\$447	\$298	\$447
TOTAL CHARGE PER UNIT	\$1,430	\$1,502	\$4,759	\$2,778	\$2,254	\$1,502	\$2,254
(1) Based on Persons Per Unit Of:			3.17	1.85	1.50	1.00	1.50

As shown in Table 6 shows, the adjusted rate for non-residential development increases from \$20.14 to \$21.76 per square metre after the cash flow analysis.

TABLE 6

**TOWNSHIP OF GEORGIAN BAY
TOWNSHIP-WIDE DEVELOPMENT CHARGES
NON-RESIDENTIAL DEVELOPMENT CHARGES PER SQUARE METRE**

Service	Non-Residential Charge	
	Unadjusted Charge per Square Metre	Adjusted Charge per Square Metre
Library	\$0.00	\$0.00
Parks And Recreation	\$0.00	\$0.00
Fire Protection	\$7.35	\$7.37
Public Works	\$0.00	\$0.00
Roads And Related Infrastructure	\$7.00	\$8.07
General Government	\$5.79	\$6.32
TOTAL CHARGE PER SQUARE METRE	\$20.14	\$21.76

VII COMPARISON OF PROPOSED AND EXISTING DEVELOPMENT CHARGES

Tables 7 and 8 present a comparison of total proposed Township-wide development charges for a single-detached housing unit and non-residential uses respectively with the Township's existing charges (as of January 1, 2019).

Table 7 shows that the proposed charge per single-detached unit of \$4,796 represents a slight reduction of \$37 from the present development charge, or approximately 1 per cent.

Table 8 shows that the proposed charge of \$21.76 per square metre represents an increase of \$9.92 per square metre, or 84 per cent over the existing rate of \$11.84.

TABLE 7

**TOWNSHIP OF GEORGIAN BAY
COMPARISON OF CURRENT AND CALCULATED
RESIDENTIAL DEVELOPMENT CHARGES**

Service	Residential Charge / SDU		Difference in Charge	
	Current	Calculated		
Library	\$0	\$206	\$206	N/A
Parks And Recreation	\$0	\$32	\$32	N/A
Fire Protection	\$285	\$1,131	\$846	297%
Public Works	\$1,077	\$0	(\$1,077)	-100%
Roads And Related Infrastructure	\$2,756	\$2,446	(\$310)	-11%
General Government	\$678	\$944	\$266	39%
TOTAL CHARGE PER UNIT	\$4,796	\$4,759	(\$37)	-1%

TABLE 8

**TOWNSHIP OF GEORGIAN BAY
COMPARISON OF CURRENT AND CALCULATED
NON-RESIDENTIAL DEVELOPMENT CHARGES**

Service	Non-Residential (\$/Square Metre)			
	Current Non-Residential Charge	Calculated Non-Residential Charge	Difference in Charge	
Library	\$0.00	\$0.00	\$0.00	0%
Parks And Recreation	\$0.00	\$0.00	\$0.00	0%
Fire Protection	\$0.65	\$7.37	\$6.72	1034%
Public Works	\$2.69	\$0.00	(\$2.69)	-100%
Roads And Related Infrastructure	\$6.89	\$8.07	\$1.18	17%
General Government	\$1.61	\$6.32	\$4.71	293%
TOTAL CHARGE PER SQUARE METRE	\$11.84	\$21.76	\$9.92	84%

VIII LONG-TERM CAPITAL AND OPERATING COSTS

This section provides a brief examination of the long-term capital and operating costs for the capital facilities and infrastructure to be included in the development charges by-law. This examination is required as one of the features of the *Development Charges Act, 1997*.

A. NET OPERATING COSTS FOR THE TOWNSHIP'S SERVICES ARE ESTIMATED TO INCREASE OVER THE FORECAST PERIOD

Table 9 summarizes the estimated increase in net operating costs that the Township will experience for additions associated with the planned capital program. These estimates are based on average costs derived from a review of recent budgets and other municipal comparators (additional details are included in Appendix D).

As shown in Table 9, by 2028, the Township's net operating costs are estimated to increase by \$173,250 per year. Significant increases in net operating costs will be experienced as new facilities such as the proposed expanded Port Severn Fire Hall are opened. Operating and maintenance costs will also increase as additions to the Township's road network, fleet, and recreation facilities are undertaken.

B. LONG-TERM CAPITAL FINANCING FROM NON-DEVELOPMENT CHARGE SOURCES TOTALS \$1.67 MILLION

Table 9 also summarizes the components of the development-related capital program that will require funding from non-development charge sources as discussed above in Section VI. In total \$1.67 million will need to be financed from non-development charge sources over the next ten years. In addition, \$475,400 in interim financing may be required for projects related to growth in the post-2028 period. Because the by-laws must be revisited at least every five years, however, it is difficult to determine the quantum of interim financing that may be required.

TABLE 9

**TOWNSHIP OF GEORGIAN BAY
SUMMARY OF LONG TERM CAPITAL AND
OPERATING COST IMPACTS
(in thousands of constant dollars)**

	Additional Operating Costs at 2028 (1)		
	DC Funded		Total Annual
	2019-2028	Post 2028	Increase
Library	\$0.0	\$0.0	\$0.0
Parks and Recreation	\$10,000.0	\$0.0	\$10,000.0
Fire Protection	\$69,821.8	\$16,978.2	\$86,800.0
Public Works	\$9,000.0	\$0.0	\$9,000.0
Roads And Related Infrastructure	\$67,450.0	\$0.0	\$67,450.0
Public Works	\$0.0	\$0.0	\$0.0
CUMULATIVE NET OPERATING IMPACTS	\$156,271.8	\$16,978.2	\$173,250.0

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Long-term Capital Impact (1)											
Total Net Cost	\$2,535.7	\$142.0	\$242.0	\$142.0	\$142.0	\$1,383.0	\$142.0	\$142.0	\$142.0	\$142.0	\$5,154.7
Net Cost From Development Charges	\$813.0	\$75.1	\$87.1	\$75.1	\$75.1	\$587.6	\$75.1	\$75.1	\$75.1	\$75.1	\$2,013.4
Prior Growth Share from DC Reserve Balances (2)	\$559.9	\$11.5	\$89.5	\$11.5	\$11.5	\$261.5	\$11.5	\$11.5	\$11.5	\$11.5	\$991.4
Portion for Post-2028 Development (3)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$475.4	\$0.0	\$0.0	\$0.0	\$0.0	\$475.4
Funding From Non-DC Sources											
Discount Portion	\$36.1	\$2.2	\$12.2	\$2.2	\$2.2	\$5.3	\$2.2	\$2.2	\$2.2	\$2.2	\$68.5
Replacement	\$1,126.7	\$53.3	\$53.3	\$53.3	\$53.3	\$53.3	\$53.3	\$53.3	\$53.3	\$53.3	\$1,606.0
FUNDING FROM NON-DC SOURCES	\$1,162.8	\$55.4	\$65.4	\$55.4	\$55.4	\$58.5	\$55.4	\$55.4	\$55.4	\$55.4	\$1,674.5

Notes:

(1) See Appendix D

(2) Existing development charge reserve fund balances collected from growth prior to 2019 are applied to fund initial projects in development-related capital forecast

(3) Post 2028 development-related net capital costs may be eligible for development charge funding in future DC by-laws

IX ASSET MANAGEMENT PLAN

The *Development Charges Act* now requires that municipalities complete an Asset Management Plan before the passing of a development charges by-law. A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle. Further details relating to the Asset Management Plan are discussed in Appendix E.

A. ANNUAL CAPITAL PROVISIONS WILL REACH \$115,000 BY 2028

Table 10 summarizes the annual capital provisions required to replace the capital infrastructure proposed to be funded under the development charges by-law. This estimate is based on information obtained from the Township's Asset Management Plan and discussions with municipal staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset.

Table 10 illustrates that, by 2028, the Township will need to fund an additional \$115,000 per annum in order to properly fund the full life cycle costs of the new assets supported under this development charges by-law. The calculated life cycle funding requirement of \$115,000 equates to approximately 1.6 per cent of the Township's 2017 total own source revenues of \$7.41 million.

The calculated annual funding provision should be considered within the context of the Township's projected growth; over the next 10 years (to 2028) the Township is projecting an increase of approximately 444 total occupied dwellings units as well as 77 new employees. This growth will have the effect of increasing the overall assessment base to offset the capital asset provisions required to replace the infrastructure proposed to be funded under the development charges by-law.

The calculated annual provisions identified are considered to be financially sustainable as it is expected that the increased capital asset management requirements can be absorbed by the tax and user base over the long-term.

TABLE 10

**TOWNSHIP OF GEORGIAN BAY
SUMMARY OF CALCULATED ANNUAL PROVISIONS**

Service	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Library	\$ -	\$ -	\$ 1,000	\$ 2,000	\$ 2,000	\$ 3,000	\$ 3,000	\$ 4,000	\$ 4,000	\$ 5,000
Parks And Recreation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fire Protection	\$ -	\$ 2,000	\$ 3,000	\$ 3,000	\$ 4,000	\$ 4,000	\$ 56,000	\$ 56,000	\$ 57,000	\$ 57,000
Public Works	\$ -	\$ 1,000	\$ 2,000	\$ 3,000	\$ 4,000	\$ 5,000	\$ 6,000	\$ 7,000	\$ 8,000	\$ 9,000
Roads And Related Infrastructure	\$ -	\$ 20,000	\$ 23,000	\$ 26,000	\$ 29,000	\$ 31,000	\$ 34,000	\$ 37,000	\$ 40,000	\$ 44,000
General Government	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ 23,000	\$ 29,000	\$ 34,000	\$ 39,000	\$ 43,000	\$ 99,000	\$ 104,000	\$ 109,000	\$ 115,000

X DEVELOPMENT CHARGES ADMINISTRATION AND CONSIDERATIONS

A. DEVELOPMENT CHARGES ADMINISTRATION

Many of the administrative requirements of the *DCA* will be similar to those presently followed by the Township in terms of collection practices. However, changes will likely be required in the use of and reporting on the new development charges. In this regard:

- It is recommended that the present practices regarding collection of development charges and by-law administration continue to the extent possible;
- As required under the *DCA*, the Township should codify any rules regarding application of the by-laws and any exemptions within the development charges by-laws proposed for adoption;
- It is recommended that the Township continue to report policies consistent with the requirements of the *DCA*;
- It is recommended that Council adopt the development-related capital forecast included in this background study, subject to annual review through the Township's normal capital budget process.

B. TOWNSHIP-WIDE VS. AREA-SPECIFIC DEVELOPMENT CHARGES

1. Consideration for 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 Township's 2019 DC update, the appropriateness of implementing area-specific development charges for the various Township services was examined.

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

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

- Is the use of area-specific charges appropriate for some or all services?

- Are there any data limitations with calculating an area-specific development charge?

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

2. Consistent with Historical Practices, Township-wide DCs are Proposed

Based on discussions with staff, and the analysis of the delivery of services, it is proposed that the Township continue to calculate and collect DCs on a uniform, Township-wide basis. The following table provides a description of the servicing needs for general and engineered services.

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

APPENDIX A

DEVELOPMENT FORECAST

APPENDIX A

DEVELOPMENT FORECAST

This appendix summarizes the development forecasts used to prepare the 2019 Development Charges Background Study for the Township of Georgian Bay.

The *Development Charges Act (DCA)* requires the Township to estimate “the anticipated amount, type and location of development” for which development charges may be imposed. The forecast must cover both residential and non-residential development and be specific enough with regards to the quantum, type, location and timing of such development to allow the Township to prepare a reasonable development-related capital program.

The development forecasts are based on the District of Muskoka’s *2019 Growth Strategy: Forecast & Growth Allocation Report* completed by Hemson Consulting on February 8, 2019. The *Growth Strategy Report* provides details on the forecast methodology and key assumptions.

The forecast results are presented below in the following tables:

Historical Development

Table 1	Population and Occupied Dwellings Summary
Table 2	Place of Work Employment Summary
Table 3	Households by Period of Construction Showing Household Size

Forecast Development

Table 4	Population and Household Growth
Table 5	Population, Household & Employment Growth Summary
Table 6	Occupied Households by Unit Type
Table 7	Growth in Households by Unit Type
Table 8	Population in New Households by Unit Type
Table 9	Place of Work Employment and Non-Residential Space

A. KEY ASSUMPTIONS, DEFINITIONS, AND HISTORICAL TRENDS

Historical population and employment set out in this appendix are used to determine the average service levels attained in the Township over the last ten years (2009-2018).

Population figures shown in the development forecast represent mid-year estimates. Population figures account for:

- the population recorded in the Census (“Census population”). This definition does not include the Census net under-coverage (4.99 per cent of the Census population in Muskoka) which represents those who were missed or double-counted by the Census;
- seasonal residents who typically maintain a primary place of residence outside the Township.

Similarly, the forecasts of households and housing units account for both permanently occupied households and households that are occupied only part of the year, usually the summer months.

Historical data indicates the population of Georgian Bay increased from 17,775 in 2008 to 19,734 in 2018—an increase of 1,959 people of which the majority (81 per cent) were seasonal residents. Total private dwellings increased from 5,302 to 5,850 over the same period, of which 66 per cent were seasonal dwellings (see Table 1).

“Place of Work Employment” figures in the forecasts record where people work rather than their place of residence. It includes employment with a regular or 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.

Place of work data indicates that employment in Georgian Bay has remained stable over the last ten years, at about 850 jobs (see Table 2).

Table 3 provides details on historical occupancy patterns for permanently occupied dwelling units in the Township. In order to provide an appropriate sample size, information on occupancy patterns has been collated with the adjoining Township of Muskoka Lakes. The overall average occupancy level in the Townships for single and

semi-detached units is 2.20 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 Townships in the period 2006 to 2016 is 2.31. The average PPU for recently constructed row housing is 1.70. No information for apartment units is available.

B. DEVELOPMENT FORECAST SUMMARY

A ten-year development forecast, from 2019 to 2028, has been used for all the development charge eligible services in the Township.

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* as well as the *population in new housing units* is required.

- The *population growth*¹ 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 that occupy new housing 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 m² of Gross Floor Area (GFA). As with the residential forecast, the non-residential forecast requires both a projection of *employment growth* as well as a projection of the *employment growth associated with new floorspace* in the Township.

1. Residential Forecast

The residential development forecast incorporates anticipated growth in population and private dwellings (permanent and seasonal) by type. As shown in Table 4, the Township's total population is forecast to grow from 19,734 in 2018 to 21,006 in 2028, with the majority of growth (73 per cent) being seasonal residents. Of the forecast ten-year growth of 444 private dwellings, 58 per cent are anticipated to be seasonal units.

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

In keeping with past trends, the vast majority of new housing, including all seasonal housing, is anticipated to be constructed as single detached dwelling units (see Tables 6 and 7). Population growth in the new units is estimated by applying the following PPUs to the housing unit forecast: 3.17 for single and semi-detached units; 1.85 for rows; 1.33 for apartments. Assumptions for apartment units are based on District-wide data and assume a 1:1 ratio of new small to large apartments in the Township.

The PPU assumptions are weighted based on the assumed occupancy and unit mix of permanent and seasonal dwellings. The calculation is shown in the table below:

	Permanent Units		Seasonal Units		All Units		Pop. In New Units
	# of Units	PPU	# of Units	PPU	# of Units	PPU	
Singles/Semis	151	2.31	258	3.67	409	3.17	1,296
Rows	30	1.85	-	-	30	1.85	56
Apartments	6	1.33	-	-	6	1.33	8
	A	B (Table 3)	C	D	$E = A + C$	$F = G / E$	$G = (A*B) + (C*D)$

The total forecast population in new housing units over the 2019 to 2028 period is 1,359 (see Table 8).

2. Non-Residential Forecast

Employment in the Township, after being relatively static for the last ten years, is anticipated to grow slowly between 2019 and 2028—a total of 77 new jobs, mostly retail, education, healthcare, local government and other jobs that primarily serve the local population, are anticipated over the period (see Table 5).

An assumed floor space per worker (FSW) is applied to the employment forecast in order to project growth in new non-residential space in the Township. The FSW used is 45 m² per employee. No additional building space is required to accommodate growth in work at home employment.

The overall growth in new non-residential building space across the Township between 2019 and 2028 is 3,465 m² (Table 9).

APPENDIX A - TABLE 1
TOWNSHIP OF GEORGIAN BAY
HISTORICAL POPULATION AND OCCUPIED DWELLINGS SUMMARY

Mid-Year	Year-Round Population (1)	Annual Growth	Seasonal Population	Annual Growth	Total Population	Annual Growth	Year-Round Occupied Dwellings	Annual Growth	Av. Household Size (PPU)	Seasonal Dwellings	Annual Growth	Av. Household Size (PPU)	Total Private Dwellings	Annual Growth	Av. Household Size (PPU)
2006	2,340		15,097		17,437		1,020		2.29	4,159		3.63	5,179		3.37
2007	2,368	28	15,237	140	17,605	168	1,035	15	2.29	4,205	46	3.62	5,240	61	3.36
2008	2,396	28	15,379	142	17,775	170	1,050	15	2.28	4,252	47	3.62	5,302	62	3.35
2009	2,424	28	15,522	143	17,946	171	1,066	16	2.27	4,299	47	3.61	5,365	63	3.35
2010	2,453	29	15,666	144	18,119	173	1,082	16	2.27	4,347	48	3.60	5,429	64	3.34
2011	2,482	29	15,811	145	18,293	174	1,098	16	2.26	4,395	48	3.60	5,493	64	3.33
2012	2,525	43	15,958	147	18,483	190	1,118	20	2.26	4,445	50	3.59	5,563	70	3.32
2013	2,569	44	16,148	190	18,717	234	1,138	20	2.26	4,471	26	3.61	5,609	46	3.34
2014	2,614	45	16,340	192	18,954	237	1,158	20	2.26	4,497	26	3.63	5,655	46	3.35
2015	2,660	46	16,535	195	19,195	241	1,179	21	2.26	4,523	26	3.66	5,702	47	3.37
2016	2,707	47	16,732	197	19,439	244	1,200	21	2.26	4,549	26	3.68	5,749	47	3.38
2017	2,742	35	16,844	112	19,586	147	1,219	19	2.25	4,580	31	3.68	5,799	50	3.38
2018	2,777	35	16,957	113	19,734	148	1,238	19	2.24	4,612	32	3.68	5,850	51	3.37
Growth 2009-2018		381		1,578		1,959		188			360			548	

Source: Statistics Canada, Census of Canada

(1) Based on permanent Census population excluding Census net undercoverage, estimated at 4.99%

**APPENDIX A - TABLE 2
TOWNSHIP OF GEORGIAN BAY
HISTORICAL PLACE OF WORK EMPLOYMENT SUMMARY**

Mid-Year	Place of Work Employment (1)	Annual Growth	Activity Rate (2)	Work at Home	Annual Growth	Total w/ Work At Home	Annual Growth
2006	880		37.6%	145		1,025	
2007	870	-10	36.7%	145	0	1,015	-10
2008	860	-10	35.9%	145	0	1,005	-10
2009	850	-10	35.1%	145	0	995	-10
2010	840	-10	34.2%	145	0	985	-10
2011	831	-9	33.5%	145	0	976	-9
2012	832	1	33.0%	145	0	977	1
2013	833	1	32.4%	145	0	978	1
2014	834	1	31.9%	145	0	979	1
2015	835	1	31.4%	145	0	980	1
2016	837	2	30.9%	145	0	982	2
2017	842	5	30.7%	150	5	992	10
2018	850	8	30.6%	152	2	1,002	10
Growth 2009-2018		-10			7		-3

Source: Statistics Canada, Census of Canada

(1) Includes no fixed place of work employment, but excludes work at home employment.

**APPENDIX A - TABLE 3
TOWNSHIP OF GEORGIAN BAY
HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE: TOWNSHIPS OF GEORGIAN BAY AND MUSKOKA LAKES**

Dwelling Unit Type	Period of Construction										Period of Construction Summaries		
	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	Pre 2006	2006-2016	Total
Singles and Semis													
Household Population	1,190	1,200	965	1,360	1,240	655	510	590	530	395	7,710	925	8,635
Households	580	590	480	650	515	255	205	245	235	165	3,520	400	3,920
Household Size	2.05	2.03	2.01	2.09	2.41	2.57	2.49	2.41	2.26	2.39	2.19	2.31	2.20
Rows													
Household Population	0	0	0	0	0	0	0	0	0	85	0	85	85
Households	0	0	0	0	0	10	0	0	0	50	10	50	60
Household Size	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.70	n/a	1.70	1.42
Apartments: Small													
Household Population	0	0	0	0	0	0	0	0	0	0	0	0	0
Households	0	0	0	0	20	10	0	0	0	0	30	0	30
Household Size	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Apartments: Large													
Household Population	0	0	0	0	0	0	0	0	0	0	0	0	0
Households	30	10	0	10	0	20	0	0	0	10	70	10	80
Household Size	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Apartments - Total													
Household Population	0	0	0	0	0	0	0	0	0	0	0	0	0
Households	30	10	0	10	20	30	0	0	0	10	100	10	110
Household Size	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
All Units													
Household Population	1,190	1,200	965	1,360	1,240	655	510	590	530	480	7,710	1,010	8,720
Households	610	600	480	660	535	295	205	245	235	225	3,630	460	4,090
Household Size	1.95	2.00	2.01	2.06	2.32	2.22	2.49	2.41	2.26	2.13	2.12	2.20	2.13

Source: Census Special Run, Townships of Georgian Bay and Muskoka Lakes combined

APPENDIX A - TABLE 4
TOWNSHIP OF GEORGIAN BAY
FORECAST POPULATION AND HOUSEHOLD GROWTH

Mid-Year	Year-Round Population	Annual Growth	Seasonal Population	Annual Growth	Total Population	Annual Growth	Year-Round Occupied Dwellings	Annual Growth	Av. Household Size (PPU)	Seasonal Dwellings	Annual Growth	Av. Household Size (PPU)	Total Private Dwellings	Annual Growth	Av. Household Size (PPU)
2016	2,707		16,732		19,439		1,200		2.26	4,549		3.68	5,749		3.38
2017	2,742	35	16,844	112	19,586	147	1,219	19	2.25	4,580	31	3.68	5,799	50	3.38
2018	2,777	35	16,957	113	19,734	148	1,238	19	2.24	4,612	32	3.68	5,850	51	3.37
2019	2,813	36	17,070	113	19,883	149	1,257	19	2.24	4,644	32	3.68	5,901	51	3.37
2020	2,849	36	17,184	114	20,033	150	1,276	19	2.23	4,676	32	3.67	5,952	51	3.37
2021	2,886	37	17,299	115	20,185	152	1,296	20	2.23	4,708	32	3.67	6,004	52	3.36
2022	2,919	33	17,384	85	20,303	118	1,314	18	2.22	4,732	24	3.67	6,046	42	3.36
2023	2,952	33	17,470	86	20,422	119	1,332	18	2.22	4,756	24	3.67	6,088	42	3.35
2024	2,986	34	17,556	86	20,542	120	1,350	18	2.21	4,780	24	3.67	6,130	42	3.35
2025	3,020	34	17,643	87	20,663	121	1,369	19	2.21	4,804	24	3.67	6,173	43	3.35
2026	3,054	34	17,730	87	20,784	121	1,388	19	2.20	4,828	24	3.67	6,216	43	3.34
2027	3,090	36	17,805	75	20,895	111	1,406	18	2.20	4,849	21	3.67	6,255	39	3.34
2028	3,126	36	17,880	75	21,006	111	1,424	18	2.20	4,870	21	3.67	6,294	39	3.34
Growth 2019-2028		349		923		1,272		186			258			444	

Source: Hemson Consulting 2019

APPENDIX A - TABLE 5
TOWNSHIP OF GEORGIAN BAY
FORECAST POPULATION, HOUSEHOLD AND EMPLOYMENT GROWTH SUMMARY

Mid-Year	Total Population	Annual Growth	Total Private Dwellings	Annual Growth	Av. Household Size (PPU)	Place of Work Employment	Annual Growth	Activity Rate
2016	19,439		5,749		3.38	834		4.3%
2017	19,586	147	5,799	50	3.38	842	8	4.3%
2018	19,734	148	5,850	51	3.37	850	8	4.3%
2019	19,883	149	5,901	51	3.37	858	8	4.3%
2020	20,033	150	5,952	51	3.37	866	8	4.3%
2021	20,185	152	6,004	52	3.36	877	11	4.3%
2022	20,303	118	6,046	42	3.36	884	7	4.4%
2023	20,422	119	6,088	42	3.35	891	7	4.4%
2024	20,542	120	6,130	42	3.35	898	7	4.4%
2025	20,663	121	6,173	43	3.35	905	7	4.4%
2026	20,784	121	6,216	43	3.34	912	7	4.4%
2027	20,895	111	6,255	39	3.34	919	7	4.4%
2028	21,006	111	6,294	39	3.34	927	8	4.4%
Growth 2019-2028		1,272		444			77	

Source: Hemson Consulting 2019

APPENDIX A - TABLE 6
TOWNSHIP OF GEORGIAN BAY
FORECAST OF OCCUPIED HOUSEHOLDS BY UNIT TYPE

Mid-Year	Total Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2016	5,674	35	40	5,749	99%	1%	1%	100%
2017	5,721	38	40	5,799	99%	1%	1%	100%
2018	5,768	41	40	5,849	99%	1%	1%	100%
2019	5,816	44	40	5,900	99%	1%	1%	100%
2020	5,864	47	40	5,951	99%	1%	1%	100%
2021	5,912	50	42	6,004	98%	1%	1%	100%
2022	5,950	53	43	6,046	98%	1%	1%	100%
2023	5,989	56	44	6,089	98%	1%	1%	100%
2024	6,028	59	45	6,132	98%	1%	1%	100%
2025	6,067	62	46	6,175	98%	1%	1%	100%
2026	6,106	65	46	6,217	98%	1%	1%	100%
2027	6,141	68	46	6,255	98%	1%	1%	100%
2028	6,177	71	46	6,294	98%	1%	1%	100%

Source: Hemson Consulting 2019

APPENDIX A - TABLE 7
TOWNSHIP OF GEORGIAN BAY
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
2017	47	3	0	50	94%	6%	0%	100%
2018	47	3	0	50	94%	6%	0%	100%
2019	48	3	0	51	94%	6%	0%	100%
2020	48	3	0	51	94%	6%	0%	100%
2021	48	3	2	53	91%	6%	4%	100%
2022	38	3	1	42	90%	7%	2%	100%
2023	39	3	1	43	91%	7%	2%	100%
2024	39	3	1	43	91%	7%	2%	100%
2025	39	3	1	43	91%	7%	2%	100%
2026	39	3	0	42	93%	7%	0%	100%
2027	35	3	0	38	92%	8%	0%	100%
2028	36	3	0	39	92%	8%	0%	100%
Growth 2019-2028	409	30	6	445	92%	7%	1%	100%

Source: Hemson Consulting 2019

APPENDIX A - TABLE 8
TOWNSHIP OF GEORGIAN BAY
FORECAST POPULATION IN NEW HOUSEHOLDS BY UNIT TYPE

Mid-Year	Singles/Semis	Rows & Other Multiples	Apartments	Total	Singles/Semis	Rows & Other Multiples	Apartments	Population in New Dwellings
2107	3.17	1.85	1.33	3.09	149	6	0	154
2018	3.17	1.85	1.33	3.09	149	6	0	154
2019	3.17	1.85	1.33	3.09	152	6	0	158
2020	3.17	1.85	1.33	3.09	152	6	0	158
2021	3.17	1.85	1.33	3.02	152	6	3	160
2022	3.17	1.85	1.33	3.03	120	6	1	127
2023	3.17	1.85	1.33	3.03	124	6	1	130
2024	3.17	1.85	1.33	3.03	124	6	1	130
2025	3.17	1.85	1.33	3.03	124	6	1	130
2026	3.17	1.85	1.33	3.07	124	6	0	129
2027	3.17	1.85	1.33	3.06	111	6	0	116
2028	3.17	1.85	1.33	3.07	114	6	0	120
Growth 2019-2028	3.17	1.85	1.33	3.05	1,296	56	8	1,359

Source: Hemson Consulting 2019

**APPENDIX A - TABLE 9
TOWNSHIP OF GEORGIAN BAY
FORECAST PLACE OF WORK EMPLOYMENT
AND NON-RESIDENTIAL SPACE**

Employment Density	
Place of Work Employment	45.0 m ² per employee
Work at Home Employment	0.0 m ² per employee

Mid-Year	Place of Work Employment	Annual Growth	Space (sq.m. GFA)	Work at Home Total Emp	Annual Growth	Space (sq.m. GFA)	Total with Work at Home	Annual Growth	Space (sq.m. GFA)
2016	834			148			982		
2017	842	8	360	150	2	0	992	10	360
2018	850	8	360	152	2	0	1,002	10	360
2019	858	8	360	154	2	0	1,012	10	360
2020	866	8	360	156	2	0	1,022	10	360
2021	877	11	495	158	2	0	1,035	13	495
2022	884	7	315	160	2	0	1,044	9	315
2023	891	7	315	162	2	0	1,053	9	315
2024	898	7	315	164	2	0	1,062	9	315
2025	905	7	315	166	2	0	1,071	9	315
2026	912	7	315	167	1	0	1,079	8	315
2027	919	7	315	169	2	0	1,088	9	315
2028	927	8	360	171	2	0	1,098	10	360
Growth 2019-2028		77	3,465		19	0		96	3,465

Source: Hemson Consulting 2019

APPENDIX B

DEVELOPMENT CHARGES CALCULATIONS TECHNICAL APPENDIX

APPENDIX B

DEVELOPMENT CHARGES CALCULATIONS TECHNICAL APPENDIX INTRODUCTION AND OVERVIEW

The following appendices provide the detailed analysis undertaken to establish the development charge rates for each service in the Township of Georgian Bay. Six services have been analysed as part of the development charges study:

Appendix B.1	Library
Appendix B.2	Parks and Recreation
Appendix B.3	Fire Protection
Appendix B.4	Public Works
Appendix B.5	Roads and Related Infrastructure
Appendix B.6	General Government

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

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 presents the data used to determine the ten-year historical service level. The *DCA* and *Ontario Regulation 82/98* require that development charges be set at a level no higher than the average service level provided in the municipality over the 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 2009-2018.

O. Reg. 82/98 requires that when defining and determining historical service levels, both the quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet. The qualitative aspect is introduced by considering the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of cost per square foot to replace or

construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be funded by new growth reflect not only the quantity (number and size) but also the quality (replacement value or cost) of service provided by the municipality in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by Township staff. This information is generally based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure.

The final page of Table 1 shows the calculation of the maximum allowable development charge revenue that can be raised for each service. The “maximum allowable” development charge revenue is calculated by taking the ten-year historical service level (expressed as \$/capita or \$/population and employment) multiplied by the forecast increase in population (or population plus employment) over the planning period. The resulting figure is the value of capital infrastructure that would have to be acquired in order to maintain the average ten-year historical service level.

There is also a requirement in the *DCA* to consider “excess capacity” within the Township’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 capacity from new development, it is considered “committed excess capacity” under the *DCA*, and the associated capital cost is eligible for recovery. Should uncommitted excess capacity exist, it is determined whether or not this capacity will be available to service new development and, if so, deductions to maximum allowable funding envelope are required.

**TABLE 2 2019-2028 DEVELOPMENT-RELATED CAPITAL PROGRAM &
CALCULATION OF THE UNADJUSTED DEVELOPMENT CHARGES**

The *DCA* requires that Council express its intent to provide capital facilities to support future growth. Based on the development forecasts presented in Appendix A, Hemson Consulting in collaboration with Township staff has developed a development-related capital program which sets out the projects required to service anticipated growth for the ten-year period from 2019-2028.

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

“replacement” shares and the legislated “ten per cent reduction” for any eligible services.

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

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

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

The remaining portion of the net capital program represents the development-related cost that may be included in the development charge. As required, this amount is equal to or less than the maximum allowable capital amount as calculated on the final page of Table 1. The result is the discounted development-related net capital cost that is eligible for recovery against development over the planning period from 2019 to 2028.

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” is used to distinguish the development charge that is calculated prior to cash flow financing considerations. The cash flow analysis is shown in Table 3.

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 services with the exception of Library and Parks and Recreation the development-related costs have been apportioned as 95 per cent residential and 5 per cent non-residential. This apportionment is based on the anticipated shares of population and employment growth over the ten-year forecast period.

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

The residential discounted development-related net capital costs are then divided by the forecast population growth in new units. This gives the unadjusted residential development charge per capita. The non-residential development-related net capital costs are divided by the forecast increase in non-residential gross floor area (GFA). This yields a charge per square metre of new non-residential 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 accounted for in the calculation as allowed under the *DCA*. Based on the development forecast, the analysis calculates the development charge 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 opening balance for all services is set at zero as the existing reserve fund balances are applied to the earliest occurring projects in the capital program for each service as a prior growth share. The cash flow analysis is designed so that the closing cash balance at the end of the planning period is as close to nil as possible.

In order to determine appropriate development charge rates reflecting borrowing and earnings necessary to support the net development-related funding requirement, assumptions are used for the inflation rate and interest rate. An inflation rate of 2.0 per cent is used for the funding requirements. An interest rate of 5.5 per cent is used for borrowing on the funds and an interest rate of 3.5 per cent is applied to positive balances.

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

APPENDIX B.1

LIBRARY

APPENDIX B.1

LIBRARY

The Georgian Bay Public Library operates three library branches located in Honey Harbour, MacTier, and Port Severn.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 displays the ten-year historical inventory for buildings, land, resource materials, and furniture and equipment (excluding personal computers). The total building area totals 4,285 sq.ft. and has a replacement value of \$1.93 million. There are 0.46 hectares of land associated with the buildings valued at \$178,700. Collection materials are valued at \$624,700 and furniture and equipment is valued at \$90,700.

The 2018 full replacement value of the inventory of capital assets for Library services totals \$2.82 million and the ten-year historical average service level is \$141.98 per capita. The historical service level, multiplied by the ten-year forecast growth in population growth (1,272) results in a ten-year maximum allowable funding envelope of \$180,599. After the ten per cent legislated service discount, the discounted maximum allowable funding envelope is \$162,539.

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

The 2019-2028 development-related capital program for Library services includes \$55,000 in material acquisitions over the planning period in order to maintain the historical service level with anticipated future development. The capital program also includes recovery of the existing negative reserve fund balance of \$33,467.

The total ten-year development-related capital program for Library is \$88,467. No senior government grants or subsidies are anticipated to offset the cost of the program, and no replacement shares have been identified.

After taking into account the required ten per cent reduction of \$5,500, \$82,967 in development-related costs remain. This amount is within the maximum allowable funding envelope and is brought forward to the development charges calculation.

Of the total \$82,967, 100 per cent is allocated to residential development. This yields an unadjusted development charge rate of \$61.05 per capita.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the calculated charge increases to \$65 per capita. This is a reflection of the anticipated timing of capital costs and development over the 10-year planning period.

LIBRARY SUMMARY						
10-year Hist.	2019 - 2028		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$141.98	\$88,467	\$82,967	\$61.05	\$0.00	\$65	\$0.00

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APPENDIX B.1
TABLE 1

TOWNSHIP OF GEORGIAN BAY
INVENTORY OF CAPITAL ASSETS
LIBRARY
LIBRARY

BUILDINGS Branch Name	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Honey Harbour	1,253	1,253	1,253	1,253	1,253	1,253	1,253	1,253	1,253	1,253	1,253	\$450
MacTier Branch	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	\$450
Community Services Building	-	-	-	216	432	432	432	432	432	432	432	\$450
Total (sq.ft.)	3,853	3,853	3,853	4,069	4,285	4,285	4,285	4,285	4,285	4,285	4,285	
Total (\$000)	\$1,733.9	\$1,733.9	\$1,733.9	\$1,831.1	\$1,928.3	\$1,928.3	\$1,928.3	\$1,928.3	\$1,928.3	\$1,928.3	\$1,928.3	

LAND Branch Name	# of Hectares										UNIT COST (\$/ha)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Honey Harbour	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$390,000
MacTier Branch	0.06	0.06	0.06	0.06	0.26	0.26	0.26	0.26	0.26	0.26	0.26	\$390,000
Total (ha)	0.26	0.26	0.26	0.26	0.46	0.46	0.46	0.46	0.46	0.46	0.46	
Total (\$000)	\$102.6	\$102.6	\$102.6	\$102.6	\$178.7	\$178.7	\$178.7	\$178.7	\$178.7	\$178.7	\$178.7	

MATERIALS Type of Collection	# of Collection Materials										UNIT COST (\$/item)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
All collection materials(Volumes)	18,382	18,347	18,723	18,466	18,821	19,221	19,621	20,005	20,423	20,823		\$30
Total (#)	18,382	18,347	18,723	18,466	18,821	19,221	19,621	20,005	20,423	20,823		
Total (\$000)	\$551.5	\$550.4	\$561.7	\$554.0	\$564.6	\$576.6	\$588.6	\$600.2	\$612.7	\$624.7		

FURNITURE AND EQUIPMENT Branch Name	Total Value of Furniture and Equipment (\$)										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Systems	\$10,800	\$10,800	\$490	\$490	\$490	\$490	\$490	\$490	\$490	\$490	\$490
Public Access Terminals	\$25,900	\$25,900	\$25,900	\$25,900	\$25,900	\$25,900	\$25,900	\$25,900	\$25,900	\$25,900	\$25,900
All other furniture and equipment included in building costs	\$57,800	\$57,800	\$57,800	\$61,000	\$64,300	\$64,300	\$64,300	\$64,300	\$64,300	\$64,300	\$64,300
Total (\$000)	\$94.5	\$94.5	\$84.2	\$87.4	\$90.7	\$90.7	\$90.7	\$90.7	\$90.7	\$90.7	\$90.7

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APPENDIX B.1
TABLE 1

TOWNSHIP OF GEORGIAN BAY
CALCULATION OF SERVICE LEVELS
LIBRARY
LIBRARY

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	17,946	18,119	18,293	18,483	18,717	18,954	19,195	19,439	19,586	19,734

INVENTORY SUMMARY (\$000)

Buildings	\$1,733.9	\$1,733.9	\$1,733.9	\$1,831.1	\$1,928.3	\$1,928.3	\$1,928.3	\$1,928.3	\$1,928.3	\$1,928.3
Land	\$102.6	\$102.6	\$102.6	\$102.6	\$178.7	\$178.7	\$178.7	\$178.7	\$178.7	\$178.7
Materials	\$551.5	\$550.4	\$561.7	\$554.0	\$564.6	\$576.6	\$588.6	\$600.2	\$612.7	\$624.7
Furniture And Equipment	\$94.5	\$94.5	\$84.2	\$87.4	\$90.7	\$90.7	\$90.7	\$90.7	\$90.7	\$90.7
Total (\$000)	\$2,482.4	\$2,481.4	\$2,482.3	\$2,575.0	\$2,762.3	\$2,774.3	\$2,786.3	\$2,797.8	\$2,810.4	\$2,822.4

SERVICE LEVEL (\$/capita)											Average Service Level
Buildings	\$96.61	\$95.69	\$94.78	\$99.07	\$103.02	\$101.73	\$100.46	\$99.19	\$98.45	\$97.71	\$98.67
Land	\$5.72	\$5.66	\$5.61	\$5.55	\$9.55	\$9.43	\$9.31	\$9.19	\$9.13	\$9.06	\$7.82
Materials	\$30.73	\$30.38	\$30.71	\$29.97	\$30.17	\$30.42	\$30.67	\$30.87	\$31.28	\$31.66	\$30.68
Furniture And Equipment	\$5.27	\$5.22	\$4.60	\$4.73	\$4.85	\$4.78	\$4.72	\$4.67	\$4.63	\$4.60	\$4.81
Total (\$/capita)	\$138.33	\$136.95	\$135.70	\$139.32	\$147.58	\$146.37	\$145.16	\$143.93	\$143.49	\$143.02	\$141.98

TOWNSHIP OF GEORGIAN BAY
CALCULATION OF MAXIMUM ALLOWABLE
LIBRARY

10-Year Funding Envelope Calculation	
10-Year Average Service Level 2009 - 2018	\$141.98
Net Population Growth 2019 - 2028	1,272
Maximum Allowable Funding Envelope	\$180,599
Less: 10% Legislated Reduction	\$18,060
Discounted Maximum Allowable Funding Envelope	\$162,539

TOWNSHIP OF GEORGIAN BAY
DEVELOPMENT-RELATED CAPITAL PROGRAM
LIBRARY

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	10% Reduction		Prior Growth	2019-2028	Post 2028
1.0 LIBRARY										
1.1 Collection Materials										
1.1.1 Additional Material Acquisitions	Various	\$ 55,000	\$ -	\$ 55,000	\$ -	\$ 5,500	\$ 49,500	\$ -	\$ 49,500	\$ -
Subtotal Collection Materials		\$ 55,000	\$ -	\$ 55,000	\$ -	\$ 5,500	\$ 49,500	\$ -	\$ 49,500	\$ -
1.2 Recovery of Negative Reserve Fund Balance										
1.2.1 Balance as at December 31, 2018	2019	\$ 33,467	\$ -	\$ 33,467	\$ -	\$ -	\$ 33,467	\$ -	\$ 33,467	\$ -
Subtotal Recovery of Negative Reserve Fund Balance		\$ 33,467	\$ -	\$ 33,467	\$ -	\$ -	\$ 33,467	\$ -	\$ 33,467	\$ -
TOTAL LIBRARY		\$ 88,467	\$ -	\$ 88,467	\$ -	\$ 5,500	\$ 82,967	\$ -	\$ 82,967	\$ -

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 Development-Related Capital Program	100%	\$82,967
10-Year Growth in Population in New Units		1,359
Unadjusted Development Charge Per Capita		\$61.05
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 Development-Related Capital Program	0%	\$0
10-Year Growth in Square Metres		3,465
Unadjusted Development Charge Per Square Metre		\$0.00

2019 - 2028 Net Funding Envelope	\$162,539
Reserve Fund Balance Balance as at December 31, 2018	(\$33,467)

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APPENDIX B.1
TABLE 3

**TOWNSHIP OF GEORGIAN BAY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
LIBRARY
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

LIBRARY	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$29.0)	(\$25.1)	(\$20.8)	(\$18.3)	(\$15.4)	(\$12.3)	(\$8.9)	(\$5.4)	(\$2.6)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Community Services: Non Inflated	\$38.4	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$83.0
- Community Services: Inflated	\$38.4	\$5.0	\$5.1	\$5.3	\$5.4	\$5.5	\$5.6	\$5.7	\$5.8	\$5.9	\$87.7
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	158	158	160	127	130	130	130	129	116	120	1,359
REVENUE											
- DC Receipts: Inflated	\$10.2	\$10.4	\$10.8	\$8.8	\$9.2	\$9.4	\$9.5	\$9.6	\$8.9	\$9.3	\$96.1
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1.6)	(\$1.4)	(\$1.1)	(\$1.0)	(\$0.8)	(\$0.7)	(\$0.5)	(\$0.3)	(\$0.1)	(\$7.6)
- Interest on In-year Transactions	(\$0.8)	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.1)
TOTAL REVENUE	\$9.4	\$8.9	\$9.5	\$7.7	\$8.3	\$8.6	\$8.9	\$9.2	\$8.7	\$9.2	\$88.4
CLOSING CASH BALANCE	(\$29.0)	(\$25.1)	(\$20.8)	(\$18.3)	(\$15.4)	(\$12.3)	(\$8.9)	(\$5.4)	(\$2.6)	\$0.7	

2019 Adjusted Charge Per Capita	\$65
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Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.2

PARKS AND RECREATION

APPENDIX B.2

PARKS AND RECREATION

The Township of Georgian Bay's Recreation and Culture department operates two community centres as well as over 19 hectares of developed parkland.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 displays the ten-year historical inventory for buildings, land, equipment and developed parkland. The Township operates two community centres, including an arena, as well as two storage facilities and a park facilities building. The total gross floor area of these buildings is 39,656 sq.ft. with a replacement value of \$11.62 million. Land associated with the buildings totals 3.17 hectares and is valued at \$1.24 million. The Township also has a number of vehicles and equipment for Parks and Recreation purposes, valued at a total of \$4.68 million. Finally, the Township maintains 19.41 hectares of developed parkland at a total value of \$776,400, excluding the value of land.

The 2018 full replacement value of the inventory of capital assets for Parks and Recreation services totals \$18.31 million and the ten-year historical average service level is \$950.73 per capita. The historical service level, multiplied by the ten-year forecast growth in population growth (1,272) results in a ten-year maximum allowable funding envelope of \$1.21 million. After the ten per cent legislated service discount, the discounted maximum allowable funding envelope is approximately \$1.09 million.

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

The 2019-2028 development-related capital program for Parks and Recreation services includes growth-related improvements to the Baxter Community Centre and Parking Lot at a total cost of \$100,000. After the ten per cent service discount, \$90,000 in total DC eligible costs remain. This will first be funded through the \$77,991 in existing Parks and Recreation DC reserve fund balance, leaving \$12,009 to be brought forward to the development charges calculation.

Of the total \$12,009, 100 per cent is allocated to residential development. This yields an unadjusted development charge rate of \$8.84 per capita.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the calculated charge increases to \$10 per capita. This is a reflection of the anticipated timing of capital costs and development over the ten-year planning period.

PARKS AND RECREATION SUMMARY						
10-year Hist.	2019 - 2028		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$950.73	\$100,000	\$12,009	\$8.84	\$0.00	\$10	\$0.00

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APPENDIX B.2
TABLE 1

TOWNSHIP OF GEORGIAN BAY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
RECREATION FACILITIES

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Storage - Cemetery Rd.	384	384	384	384	384	384	384	384	384	384	384	\$60
Storage - Honey Harbour	480	480	480	480	480	480	480	480	480	480	480	\$60
Baxter Community Centre	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	\$250
Mactier Community Centre/Arena	28,520	28,520	28,520	28,520	28,520	28,520	28,520	28,520	28,520	28,520	28,520	\$300
Port Severn Park Facilities Bldg	0	2,220	2,220	2,220	2,220	2,220	2,220	2,220	2,220	2,220	2,220	\$450
Total (sq.ft.)	37,436	39,656	39,656	39,656	39,656	39,656	39,656	39,656	39,656	39,656	39,656	
Total (\$000)	\$10,620.8	\$11,619.8	\$11,619.8	\$11,619.8	\$11,619.8	\$11,619.8	\$11,619.8	\$11,619.8	\$11,619.8	\$11,619.8	\$11,619.8	

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Storage - Cemetery Rd.	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	\$390,000
Baxter Community Centre	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	\$390,000
Mactier Community Centre/Arena	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	\$390,000
Total (ha)	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	
Total (\$000)	\$1,236.8	\$1,236.8	\$1,236.8	\$1,236.8	\$1,236.8	\$1,236.8	\$1,236.8	\$1,236.8	\$1,236.8	\$1,236.8	\$1,236.8	

**APPENDIX B.2
TABLE 1**

**TOWNSHIP OF GEORGIAN BAY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
RECREATION FACILITIES**

PARK FLEET, AMENITIES, AND EQUIPMENT	# of Fleet, Amenities, and Equipment										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Ice Resurfacer	1	1	1	1	1	1	1	1	1	1	\$92,000
Playing Fields (Baxter & Mactier)	2	2	2	2	2	2	2	2	2	2	\$45,000
Lighting of Fields	2	2	2	2	2	2	2	2	2	2	\$67,000
Bleachers	2	2	2	2	2	2	2	2	2	2	\$11,000
Schoolhouse Trail (km's)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	\$86,000
Schoolhouse Trail Bridge	1	1	1	1	1	1	1	1	1	1	\$81,000
Outdoor Ice Surface Lit	2	2	2	2	2	2	2	2	2	2	\$216,000
Change House - Honey Harbour	1	1	1	1	1	1	1	1	1	1	\$1,000
Outdoor Ice Resurfacer	0	0	0	0	0	0	0	0	0	0	\$22,000
Beach	2	3	3	3	3	3	3	3	3	3	\$30,000
Play Structures	3	4	4	4	4	4	4	4	4	4	\$125,000
Park Washrooms	4	4	4	4	4	4	4	4	4	4	\$59,000
Docking Facilities	4	5	5	5	5	5	5	5	5	5	\$30,000
Access Points	10	10	10	10	10	10	10	10	10	10	\$15,000
Snowmobile Bridge	1	1	1	1	1	1	1	1	1	1	\$134,000
Compressor	2	2	2	2	2	2	2	2	2	2	\$12,000
Splash Pad - Port Severn Park	\$0	\$1	\$1	\$1	\$1	\$1	1	1	1	1	\$269,000
Picnic Pavillion - Port Severn Park	\$0	\$1	\$1	\$1	\$1	\$1	1	1	1	1	\$167,000
Port Severn Park Landscaping, Lighting and Electrical	\$0	\$1	\$1	\$1	\$1	\$1	1	1	1	1	\$1,708,000
Picnic Pavillion MacTier	\$0	\$0	\$0	\$0	\$0	\$0	1	1	1	1	\$50,000
Boat Launch Port Severn Park	\$0	\$0	\$0	\$0	\$0	\$0	1	1	1	1	\$50,000
Total (#)	41	47	47	47	47	47	49	49	49	49	
Total (\$000)	\$2,252.0	\$4,581.0	\$4,581.0	\$4,581.0	\$4,581.0	\$4,581.0	\$4,681.0	\$4,681.0	\$4,681.0	\$4,681.0	

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APPENDIX B.2
TABLE 1

TOWNSHIP OF GEORGIAN BAY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK DEVELOPMENT

PARKLAND Park Name	# of Hectares of Developed Area										UNIT COST (\$/ha)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Developed Parkland	18.51	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	\$40,000
Total (ha)	18.51	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	
Total (\$000)	\$740.4	\$776.4	\$776.4	\$776.4	\$776.4	\$776.4	\$776.4	\$776.4	\$776.4	\$776.4	

Note. Does not include land associated with municipal facilities.

**APPENDIX B.2
TABLE 1**

**TOWNSHIP OF GEORGIAN BAY
CALCULATION OF SERVICE LEVELS
PARKS AND RECREATION COMBINED**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	17,946	18,119	18,293	18,483	18,717	18,954	19,195	19,439	19,586	19,734

INVENTORY SUMMARY (\$000)

Recreation Facilities	\$14,109.6	\$17,437.6	\$17,437.6	\$17,437.6	\$17,437.6	\$17,437.6	\$17,537.6	\$17,537.6	\$17,537.6	\$17,537.6
Park Development	\$740.4	\$776.4	\$776.4	\$776.4	\$776.4	\$776.4	\$776.4	\$776.4	\$776.4	\$776.4
Total (\$000)	\$14,850.0	\$18,214.0	\$18,214.0	\$18,214.0	\$18,214.0	\$18,214.0	\$18,314.0	\$18,314.0	\$18,314.0	\$18,314.0

SERVICE LEVEL (\$/capita)											Average Service Level
Recreation Facilities	\$786.23	\$962.39	\$953.24	\$943.44	\$931.65	\$920.00	\$913.66	\$902.19	\$895.42	\$888.70	\$909.69
Park Development	\$41.26	\$42.85	\$42.44	\$42.01	\$41.48	\$40.96	\$40.45	\$39.94	\$39.64	\$39.34	\$41.04
Total (\$/capita)	\$827.48	\$1,005.24	\$995.68	\$985.45	\$973.13	\$960.96	\$954.10	\$942.13	\$935.06	\$928.04	\$950.73

**TOWNSHIP OF GEORGIAN BAY
CALCULATION OF MAXIMUM ALLOWABLE
PARKS AND RECREATION COMBINED**

10-Year Funding Envelope Calculation	
10-Year Average Service Level 2009 - 2018	\$950.73
Net Population Growth 2019 - 2028	1,272
Maximum Allowable Funding Envelope	\$1,209,329
Less: 10% Legislated Reduction	\$120,933
Discounted Maximum Allowable Funding Envelope	\$1,088,396

TOWNSHIP OF GEORGIAN BAY
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS AND RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	10% Reduction		Prior Growth	2019-2028	Post 2028
2.0 PARKS AND RECREATION										
2.1 Recreation Facilities										
2.1.1 Improvements to Baxter Community Centre and Parking Lot	2021	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 10,000	\$ 90,000	\$ 77,991	\$ 12,009	\$ -
Subtotal Recreation Facilities		\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 10,000	\$ 90,000	\$ 77,991	\$ 12,009	\$ -
TOTAL PARKS AND RECREATION		\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 10,000	\$ 90,000	\$ 77,991	\$ 12,009	\$ -

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 Development-Related Capital Program	100%	\$12,009
10-Year Growth in Population in New Units		1,359
Unadjusted Development Charge Per Capita		\$8.84
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 Development-Related Capital Program	0%	\$0
10-Year Growth in Square Metres		3,465
Unadjusted Development Charge Per Square Metre		\$0.00

2019 - 2028 Net Funding Envelope	\$1,088,396
Reserve Fund Balance	
Balance as at December 31, 2018	\$77,991

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APPENDIX B.2
TABLE 3

**TOWNSHIP OF GEORGIAN BAY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PARKS AND RECREATION
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PARKS AND RECREATION	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	\$1.6	\$3.3	(\$7.7)	(\$6.7)	(\$5.6)	(\$4.5)	(\$3.2)	(\$1.9)	(\$0.5)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Community Services: Non Inflated	\$0.0	\$0.0	\$12.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$12.0
- Community Services: Inflated	\$0.0	\$0.0	\$12.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$12.5
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	158	158	160	127	130	130	130	129	116	120	1,359
REVENUE											
- DC Receipts: Inflated	\$1.6	\$1.6	\$1.7	\$1.4	\$1.4	\$1.4	\$1.5	\$1.5	\$1.4	\$1.4	\$14.9
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.1	\$0.1	(\$0.4)	(\$0.4)	(\$0.3)	(\$0.2)	(\$0.2)	(\$0.1)	(\$0.0)	(\$1.5)
- Interest on In-year Transactions	\$0.0	\$0.0	(\$0.3)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.1)
TOTAL REVENUE	\$1.6	\$1.7	\$1.5	\$1.0	\$1.1	\$1.1	\$1.3	\$1.3	\$1.3	\$1.4	\$13.4
CLOSING CASH BALANCE	\$1.6	\$3.3	(\$7.7)	(\$6.7)	(\$5.6)	(\$4.5)	(\$3.2)	(\$1.9)	(\$0.5)	\$0.9	

2019 Adjusted Charge Per Capita	\$10
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Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.3

FIRE PROTECTION

APPENDIX B.3

FIRE PROTECTION

The Fire Department is responsible for the provision of fire protection services across the entire Township. The department currently operates three fire stations in MacTier, Honey Harbour, and Port Severn.

TABLE 1 HISTORICAL SERVICE LEVELS

The Fire ten-year historical inventory of capital assets includes three fire stations with a combined area of 8,040 square feet and a current value of \$2.25 million. The land area associated with the buildings is 1.61 hectares and is valued at \$627,900. Personal firefighter equipment, office furniture and equipment, and specialized equipment adds another \$635,800 to the value of the inventory. Finally, the 14 Fire vehicles are valued at a total of \$4.08 million.

The current replacement value of the Fire capital infrastructure is \$7.59 million. The average historical service level over ten years is \$377.74 per capita and employment. The historical service level multiplied by the forecast 10-year population and employment growth (1,349) results in a 10-year maximum allowable funding envelope of \$509,571 million. No ten per cent service discount is required for this service, and as such the maximum allowable funding envelope remains at \$509,571.

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

The 2019-2028 development-related capital program for Fire Protection includes the expansion of the Port Severn Fire Hall in 2024 at a total cost of \$560,000. Also included is the purchase of an additional ATV and Pumper Truck at a total cost of \$686,000. Lastly, \$50,000 of additional gear and minor equipment will be purchased through the planning period.

The total gross capital program is valued at nearly \$1.30 million. However, a benefit to existing share of \$18,000, related to the ATV purchase, is deducted from the capital program, leaving \$1.28 million in total DC eligible costs. Of this amount, \$293,038 will be funded through the existing reserve fund balance. The amount to be brought forward to the development charges calculation is \$509,571; the remaining \$475,391

is allocated to development occurring beyond 2028 and can be considered through future DC by-laws.

The remaining development-related net capital cost of \$509,571 is allocated 95 per cent to residential development, or \$484,093, and 5 per cent against non-residential development, or \$25,479. The resulting unadjusted development charge rates are \$356.19 per capita and \$7.35 per square metre of new non-residential development.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential and non-residential charges increase very slightly to \$357 per capita and \$7.37 per square metre, respectively.

FIRE PROTECTION SUMMARY						
10-year Hist.	2019 - 2041		Unadjusted		Adjusted	
Service Level per capita & emp	Development-Related Capital Program		Development Charge		Development Charge	
	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$377.74	\$1,296,000	\$509,571	\$356.19	\$7.35	\$357	\$7.37

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APPENDIX B.3
TABLE 1

TOWNSHIP OF GEORGIAN BAY
INVENTORY OF CAPITAL ASSETS
FIRE PROTECTION

BUILDINGS Station Name	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
MacTier Fire Hall	2,145	2,145	2,145	2,145	2,145	2,145	2,145	2,145	2,145	2,145	2,145	\$280
Honey Harbour Fire Hall	2,145	2,145	2,145	2,145	2,145	2,145	2,145	2,145	2,145	2,145	2,145	\$280
Port Severn Fire Hall	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	\$280
Total (sq.ft.)	8,040	8,040	8,040	8,040	8,040	8,040	8,040	8,040	8,040	8,040	8,040	
Total (\$000)	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	

LAND Station Name	# of Hectares										UNIT COST (\$/ha)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
MacTier Fire Hall	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	\$390,000
Honey Harbour Fire Hall	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	\$390,000
Port Severn Fire Hall	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	\$390,000
Total (ha)	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	
Total (\$000)	\$627.3	\$627.3	\$627.3	\$627.3	\$627.3	\$627.9	\$627.9	\$627.9	\$627.9	\$627.9	\$627.9	

FURNITURE & EQUIPMENT Description	Total Value of Furniture & Equipment (\$)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Personal Firefighter Gear ¹	\$153,000	\$153,000	\$153,000	\$153,000	\$153,000	\$153,000	\$153,000	\$153,000	\$153,000	\$153,000
SCBA Units (26) ²	\$190,000	\$190,000	\$190,000	\$190,000	\$190,000	\$190,000	\$190,000	\$190,000	\$205,000	\$221,000
Spare SCBA Bottles (76) ³	\$57,600	\$57,600	\$57,600	\$57,600	\$57,600	\$57,600	\$62,000	\$62,000	\$78,000	\$91,200
Compressor System	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Other Station Furniture and Equipment	\$120,600	\$120,600	\$120,600	\$120,600	\$120,600	\$120,600	\$120,600	\$120,600	\$120,600	\$120,600
Total (\$000)	\$571.2	\$571.2	\$571.2	\$571.2	\$571.2	\$571.2	\$575.6	\$575.6	\$606.6	\$635.8

1. Based on \$2,550 per firefighter

2. Based on \$8,500 per unit.

3. Based on \$1,200 per bottle.

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APPENDIX B.3
TABLE 1

TOWNSHIP OF GEORGIAN BAY
INVENTORY OF CAPITAL ASSETS
FIRE PROTECTION

VEHICLES Vehicle Type	# of Vehicles										UNIT COST (\$/vehicle)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Pumper	3	3	3	3	3	3	3	3	3	3	3	\$650,000
Tanker	2	2	2	2	2	2	2	2	2	2	2	\$400,000
Pumper/Tanker	1	1	1	1	1	1	1	1	1	1	1	\$400,000
Fireboat With Trailer	1	1	1	1	1	1	1	1	1	1	1	\$130,000
Fire Truck (3/4 Ton)	1	1	1	1	1	1	1	1	1	1	1	\$75,000
Rescue Unit	1	1	1	1	1	1	1	1	1	1	1	\$270,000
SUV	1	1	1	1	1	1	1	1	1	1	1	\$75,000
Fireboat	1	1	1	1	1	1	1	1	1	1	1	\$220,000
Bylaw Boat	0	0	0	1	1	1	1	1	1	1	1	\$7,000
1/2 ton pick up						1	1	1	1	1	2	\$75,000
Total (#)	11	11	11	12	12	13	13	13	13	13	14	
Total (\$000)	\$3,920.0	\$3,920.0	\$3,920.0	\$3,927.0	\$3,927.0	\$4,002.0	\$4,002.0	\$4,002.0	\$4,002.0	\$4,002.0	\$4,077.0	

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APPENDIX B.3
TABLE 1

TOWNSHIP OF GEORGIAN BAY
CALCULATION OF SERVICE LEVELS
FIRE PROTECTION

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	17,946	18,119	18,293	18,483	18,717	18,954	19,195	19,439	19,586	19,734
Historical Employment	850	840	831	832	833	834	835	837	842	850
Total Historical Population & Employment	18,796	18,959	19,124	19,315	19,550	19,788	20,030	20,276	20,428	20,584

INVENTORY SUMMARY (\$000)

Buildings	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2	\$2,251.2
Land	\$627.3	\$627.3	\$627.3	\$627.3	\$627.3	\$627.9	\$627.9	\$627.9	\$627.9	\$627.9
Furniture & Equipment	\$571.2	\$571.2	\$571.2	\$571.2	\$571.2	\$571.2	\$575.6	\$575.6	\$606.6	\$635.8
Vehicles	\$3,920.0	\$3,920.0	\$3,920.0	\$3,927.0	\$3,927.0	\$4,002.0	\$4,002.0	\$4,002.0	\$4,002.0	\$4,077.0
Total (\$000)	\$7,369.7	\$7,369.7	\$7,369.7	\$7,376.7	\$7,376.7	\$7,452.3	\$7,456.7	\$7,456.7	\$7,487.7	\$7,591.9

SERVICE LEVEL (\$/capita & emp)											Average Service Level
Buildings	\$119.77	\$118.74	\$117.72	\$116.55	\$115.15	\$113.77	\$112.39	\$111.03	\$110.20	\$109.37	\$114.47
Land	\$33.38	\$33.09	\$32.80	\$32.48	\$32.09	\$31.73	\$31.35	\$30.97	\$30.74	\$30.50	\$31.91
Furniture & Equipment	\$30.39	\$30.13	\$29.87	\$29.57	\$29.22	\$28.87	\$28.74	\$28.39	\$29.69	\$30.89	\$29.57
Vehicles	\$208.56	\$206.76	\$204.98	\$203.31	\$200.87	\$202.24	\$199.80	\$197.38	\$195.91	\$198.07	\$201.79
Total (\$/capita & emp)	\$392.09	\$388.72	\$385.37	\$381.92	\$377.33	\$376.61	\$372.28	\$367.76	\$366.54	\$368.83	\$377.74

TOWNSHIP OF GEORGIAN BAY
CALCULATION OF MAXIMUM ALLOWABLE
FIRE PROTECTION

10-Year Funding Envelope Calculation	
10-Year Average Service Level 2009 - 2018	\$377.74
Net Population & Employment Growth 2019 - 2028	1,349
Maximum Allowable Funding Envelope	\$509,571
Less: 10% Legislated Reduction	\$0
Discounted Maximum Allowable Funding Envelope	\$509,571

TOWNSHIP OF GEORGIAN BAY
DEVELOPMENT-RELATED CAPITAL PROGRAM
FIRE PROTECTION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	0% Reduction		Available DC Reserves	2019-2028	Post 2028
3.0 FIRE PROTECTION										
3.1 Buildings, Land & Furnishings										
3.1.1 Port Severn Fire Hall Expansion	2024	\$ 560,000	\$ -	\$ 560,000	\$ -	\$ -	\$ 560,000	\$ -	\$ 84,609	\$ 475,391
Subtotal Buildings, Land & Furnishings		\$ 560,000	\$ -	\$ 560,000	\$ -	\$ -	\$ 560,000	\$ -	\$ 84,609	\$ 475,391
3.2 Vehicles										
3.2.1 ATV	2019	\$ 36,000	\$ -	\$ 36,000	\$ 18,000	\$ -	\$ 18,000	\$ 18,000	\$ -	\$ -
3.2.2 Pumper Truck (Port Severn)	2024	\$ 650,000	\$ -	\$ 650,000	\$ -	\$ -	\$ 650,000	\$ 250,038	\$ 399,962	\$ -
Subtotal Vehicles		\$ 686,000	\$ -	\$ 686,000	\$ 18,000	\$ -	\$ 668,000	\$ 268,038	\$ 399,962	\$ -
3.3 Equipment										
3.3.1 Additional Gear and Minor Equipment	Various	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ 25,000	\$ 25,000	\$ -
Subtotal Equipment		\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ 25,000	\$ 25,000	\$ -
TOTAL FIRE PROTECTION		\$ 1,296,000	\$ -	\$ 1,296,000	\$ 18,000	\$ -	\$ 1,278,000	\$ 293,038	\$ 509,571	\$ 475,391

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 Development-Related Capital Program	95%	\$484,093
10-Year Growth in Population in New Units		1,359
Unadjusted Development Charge Per Capita		\$356.19
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 Development-Related Capital Program	5%	\$25,479
10-Year Growth in Square Metres		3,465
Unadjusted Development Charge Per Square Metre		\$7.35

2019 - 2028 Net Funding Envelope	\$509,571
Reserve Fund Balance	
Balance as at December 31, 2018	\$293,038

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APPENDIX B.3
TABLE 3

**TOWNSHIP OF GEORGIAN BAY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE PROTECTION
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

FIRE PROTECTION	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	\$53.9	\$107.9	\$162.7	\$205.7	\$249.9	(\$166.2)	(\$122.0)	(\$78.2)	(\$39.0)	
2019 - 2041 RESIDENTIAL FUNDING REQUIREMENTS											
- Fire Protection: Non Inflated	\$2.38	\$2.38	\$2.38	\$2.38	\$2.38	\$462.72	\$2.38	\$2.38	\$2.38	\$2.38	\$484.1
- Fire Protection: Inflated	\$2.4	\$2.4	\$2.4	\$2.4	\$2.4	\$462.7	\$2.4	\$2.4	\$2.4	\$2.4	\$484.1
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	158	158	160	127	130	130	130	129	116	120	1,359
REVENUE											
- DC Receipts: Inflated	\$56.3	\$56.3	\$57.2	\$45.4	\$46.6	\$46.6	\$46.6	\$46.1	\$41.6	\$42.7	\$485.4
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Interest on In-year Transactions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
TOTAL REVENUE	\$56.3	\$56.3	\$57.2	\$45.4	\$46.6	\$46.6	\$46.6	\$46.1	\$41.6	\$42.7	\$485.4
CLOSING CASH BALANCE	\$53.9	\$107.9	\$162.7	\$205.7	\$249.9	(\$166.2)	(\$122.0)	(\$78.2)	(\$39.0)	\$1.3	

2019 Adjusted Charge Per Capita	\$357
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Allocation of Capital Program	
Residential Sector	95.0%
Non-Residential Sector	5.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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APPENDIX B.3
TABLE 3

**TOWNSHIP OF GEORGIAN BAY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE PROTECTION
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

FIRE PROTECTION	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	\$2.58	\$5.15	\$8.63	\$10.80	\$12.98	(\$9.08)	(\$6.90)	(\$4.73)	(\$2.55)	
2019 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Fire Protection: Non Inflated	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$24.4	\$0.1	\$0.1	\$0.1	\$0.1	\$25.5
- Fire Protection: Inflated	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$24.4	\$0.1	\$0.1	\$0.1	\$0.1	\$25.5
NEW NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres	360	360	495	315	315	315	315	315	315	360	3,465
REVENUE											
- DC Receipts: Inflated	\$2.7	\$2.7	\$3.6	\$2.3	\$2.3	\$2.3	\$2.3	\$2.3	\$2.3	\$2.7	\$25.5
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Interest on In-year Transactions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
TOTAL REVENUE	\$2.7	\$2.7	\$3.6	\$2.3	\$2.3	\$2.3	\$2.3	\$2.3	\$2.3	\$2.7	\$25.5
CLOSING CASH BALANCE	\$2.6	\$5.2	\$8.6	\$10.8	\$13.0	(\$9.1)	(\$6.9)	(\$4.7)	(\$2.6)	\$0.0	

2019 Adjusted Charge Per Square Metre	\$7.37
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Allocation of Capital Program	
Residential Sector	95.0%
Non-Residential Sector	5.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.4

PUBLIC WORKS

APPENDIX B.4**PUBLIC WORKS**

The Township of Georgian Bay Public Works Department is responsible for the operation and maintenance of Township infrastructure, including Public Works buildings, fleet, and equipment, as well as roads and related infrastructure. It is noted that Roads and Related Infrastructure is considered under the separate Appendix B.5.

TABLE 1 HISTORICAL SERVICE LEVELS

The ten-year historical inventory of capital assets for Public Works includes 21,644 square feet of building space, valued at a total of \$2.29 million. This includes two equipment depots, two storage facilities, and two salt/sand domes. Land associated with Public Works facilities, totalling 2.44 hectares, is valued at \$950,300. Finally, the Township's Public Works fleet and equipment is valued at a total of \$3.33 million.

The combined value of capital assets for Public Works is \$6.57 million. The ten-year historical average service level is \$330.29 per capita and employment, and this, multiplied by the ten-year forecast growth in population and employment (1,349), results in a ten-year maximum allowable funding envelope of \$445,561.

**TABLE 2 2019-2028 DEVELOPMENT-RELATED CAPITAL PROGRAM &
CALCULATION OF THE UNADJUSTED DEVELOPMENT CHARGES**

The development-related capital program for Public Works includes a provision for additional fleet and equipment, a total value of \$90,000. This amount is 100 per cent growth related; however, the amount currently available within the Public Works DC reserve fund is sufficient to cover these costs. Therefore, no Public Works development charge is calculated.

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APPENDIX B.4
TABLE 1

TOWNSHIP OF GEORGIAN BAY
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS
BUILDINGS & FLEET

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq.ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Equipment Depot - MacTier	3,760	3,760	3,760	3,760	3,760	3,760	3,760	3,760	3,760	3,760	3,760	\$190
Equipment Depot - Port Severn	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	\$190
Storage - Port Severn	900	900	900	900	900	900	900	900	900	900	900	\$70
Storage - MacTier	900	900	900	900	900	900	900	900	900	900	900	\$70
Salt/Sand Dome Mactier	6,167	6,167	6,167	6,167	6,167	6,167	6,167	6,167	6,167	6,167	6,167	\$60
Salt/Sand Dome Port Severn	6,167	6,167	6,167	6,167	6,167	6,167	6,167	6,167	6,167	6,167	6,167	\$60
Total (sq. ft.)	21,644	21,644	21,644	21,644	21,644	21,644	21,644	21,644	21,644	21,644	21,644	
Total (\$000)	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Equipment Depot - MacTier	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	\$390,000
Equipment Depot - Port Severn	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	\$390,000
Total (ha)	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	
Total (\$000)	\$950.3	\$950.3	\$950.3	\$950.3	\$950.3	\$950.3	\$950.3	\$950.3	\$950.3	\$950.3	\$950.3	

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APPENDIX B.4
TABLE 1

TOWNSHIP OF GEORGIAN BAY
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS
BUILDINGS & FLEET

FLEET & EQUIPMENT Description	# of Fleet of Equipment										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Pickup Truck (No Plow)	1	1	1	1	1	1	1	2	2	2	\$48,000
1 Ton Pickup (Plow)	2	3	3	3	3	3	3	3	2	2	\$68,000
3 Ton Pickup (No Plow)	1	1	1	1	1	1	1	1	1	1	\$60,000
6 Ton Dump - Tandem Axle (2 Way Sander, Plow and Wing)	1	1	1	1	1	1	1	-	-	-	\$243,000
Truck - Single Axle (2 Way Sander, Plow and Wing)	1	1	1	1	1	1	1	1	1	-	\$178,000
Truck - Tandem Axle (2 Way Plow and Sander)	3	3	3	3	3	3	3	3	3	4	\$330,000
Grader	1	1	1	1	1	1	1	1	1	1	\$350,000
Loader	1	1	1	1	1	1	1	1	1	1	\$300,000
Riding Mower	1	1	1	1	1	3	3	3	3	3	\$9,000
Tractor With Sweeper Attachment	1	1	1	1	1	1	1	1	1	1	\$200,000
Backhoe	2	2	2	2	2	2	2	2	2	2	\$200,000
Steamer	2	2	2	2	2	2	2	2	2	2	\$28,000
Float Trailer	2	2	2	2	2	2	2	2	2	2	\$50,000
Miscellaneous Tools and Equipment	1	1	1	1	1	1	1	1	1	1	\$115,000
3 Ton Pickup (plow)										1	\$79,000
Sidewalk Machine										1	\$60,000
Tractor - Lawn & Snow	4	4	4	2	2	2	2	2	2	2	\$15,000
Total (#)	24	25	25	23	23	25	25	25	24	26	
Total (\$000)	\$3,245.0	\$3,313.0	\$3,313.0	\$3,283.0	\$3,283.0	\$3,301.0	\$3,301.0	\$3,106.0	\$3,038.0	\$3,329.0	

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APPENDIX B.4
TABLE 1

TOWNSHIP OF GEORGIAN BAY
CALCULATION OF SERVICE LEVELS
PUBLIC WORKS
BUILDINGS & FLEET

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	17,946	18,119	18,293	18,483	18,717	18,954	19,195	19,439	19,586	19,734
Historical Employment	<u>850</u>	<u>840</u>	<u>831</u>	<u>832</u>	<u>833</u>	<u>834</u>	<u>835</u>	<u>837</u>	<u>842</u>	<u>850</u>
Total Historical Population & Employment	18,796	18,959	19,124	19,315	19,550	19,788	20,030	20,276	20,428	20,584

INVENTORY SUMMARY (\$000)

Buildings	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9	\$2,292.9
Land	\$950.3	\$950.3	\$950.3	\$950.3	\$950.3	\$950.3	\$950.3	\$950.3	\$950.3	\$950.3
Fleet & Equipment	\$3,245.0	\$3,313.0	\$3,313.0	\$3,283.0	\$3,283.0	\$3,301.0	\$3,301.0	\$3,106.0	\$3,038.0	\$3,329.0
Total (\$000)	\$6,488.2	\$6,556.2	\$6,556.2	\$6,526.2	\$6,526.2	\$6,544.2	\$6,544.2	\$6,349.2	\$6,281.2	\$6,572.2

SERVICE LEVEL (\$/capita & emp)											Average Service Level
Buildings	\$121.99	\$120.94	\$119.90	\$118.71	\$117.29	\$115.88	\$114.48	\$113.09	\$112.24	\$111.39	\$116.59
Land	\$50.56	\$50.12	\$49.69	\$49.20	\$48.61	\$48.02	\$47.44	\$46.87	\$46.52	\$46.17	\$48.32
Fleet & Equipment	\$172.64	\$174.75	\$173.24	\$169.97	\$167.93	\$166.82	\$164.80	\$153.19	\$148.72	\$161.73	\$165.38
Total (\$/capita & emp)	\$345.19	\$345.81	\$342.83	\$337.88	\$333.82	\$330.72	\$326.72	\$313.14	\$307.48	\$319.29	\$330.29

TOWNSHIP OF GEORGIAN BAY
CALCULATION OF MAXIMUM ALLOWABLE
PUBLIC WORKS

10-Year Funding Envelope Calculation	
10-Year Average Service Level 2009 - 2018	\$330.29
Net Population & Employment Growth 2019 - 2028	1,349
Maximum Allowable Funding Envelope	\$445,561
Less: 10% Legislated Reduction	\$0
Discounted Maximum Allowable Funding Envelope	\$445,561

TOWNSHIP OF GEORGIAN BAY
DEVELOPMENT-RELATED CAPITAL PROGRAM
PUBLIC WORKS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	0% Reduction		Available DC Reserves	2019-2028	Post 2028
4.0 PUBLIC WORKS										
4.1 Fleet and Equipment										
4.1.1 Provision for Future Fleet and Equipment Upgrades (2019-2028)	Various	\$ 90,000	\$ -	\$ 90,000	\$ -	\$ -	\$ 90,000	\$ 90,000	\$ -	\$ -
Subtotal Fleet and Equipment		\$ 90,000	\$ -	\$ 90,000	\$ -	\$ -	\$ 90,000	\$ 90,000	\$ -	\$ -
TOTAL PUBLIC WORKS		\$ 90,000	\$ -	\$ 90,000	\$ -	\$ -	\$ 90,000	\$ 90,000	\$ -	\$ -

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 Development-Related Capital Program	95%	\$0
10-Year Growth in Population in New Units		1,359
Unadjusted Development Charge Per Capita		\$0.00
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 Development-Related Capital Program	5%	\$0
10-Year Growth in Square Metres		3,465
Unadjusted Development Charge Per Square Metre		\$0.00

2019 - 2028 Net Funding Envelope	\$445,561
Reserve Fund Balance	
Balance as at December 31, 2018	\$149,218

APPENDIX B.5

ROADS AND RELATED INFRASTRUCTURE

APPENDIX B.5

ROADS AND RELATED INFRASTRUCTURE

The capital costs associated with the Township's Roads and Related Infrastructure are accounted for in this appendix.

TABLE 1 HISTORICAL SERVICE LEVELS

The Roads and Related Infrastructure ten-year historical inventory of capital assets includes 88.8 kilometres of roadway with a current replacement value of \$63.86 million. It has provided the Township with a ten-year average service level of \$3,141.62 per capita and employment. This service level, multiplied by the ten-year population and employment growth (1,349) results in a maximum allowable funding envelope of approximately \$4.24 million.

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

The gross cost of the Roads and Related Infrastructure development-related capital program is \$5.93 million and includes the continued recovery of the Lone Pine Road and Hasketts Drive widening and improvement projects. Also included in the capital program are bi-annual Road Needs Studies as well as the Township's share of the MTO Interchange Study; together these studies are anticipated to cost \$60,000. Finally, the capital program includes planned on-road active transportation projects (bike lanes) at a total of \$2.09 million.

Grants and other recoveries in the amount of \$3.05 million have been deducted from the capital program. This includes grant amounts that have been allocated to the Hasketts Drive project, as well as the District's share of the planned active transportation projects. This leaves a net municipal cost of \$2.88 million for Roads and Related Infrastructure.

A further \$1.42 million has been allocated as benefit to existing development or replacement shares of projects, leaving \$1.46 million in total DC eligible costs. Of this amount, \$454,597 will be funded through the existing Roads and Related Infrastructure reserve fund balance. The remaining \$1.01 million is brought forward to the development charges calculation.

Of the \$1.01 million, \$485,124 is associated with the roadworks and development-related studies. This amount is allocated 95 per cent to residential development (\$460,867) and 5 per cent to non-residential development (\$24,256). This ratio is based on each sector's share of ten-year population in new unit growth and employment growth.

The other \$522,500 in costs associated with the active transportation projects has been allocated 100 per cent to residential development, as the need for bike lanes is driven by residential growth.

The residential share of the net development-related capital cost, totalling \$983,367, is divided by the ten-year forecast growth in population in new units to derive an unadjusted charge of \$723.55 per capita. The non-residential share of the net development-related capital cost (\$24,256) is divided by the ten-year forecast growth in floor space to derive an unadjusted charge of \$7.00 per square metre.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential charge increased to \$772 per capita and the non-residential charge increased to \$8.07 per square metre. This reflects the timing of the projects against the timing of the development charge revenues.

ROADS AND RELATED INFRASTRUCTURE SUMMARY						
10-year Hist.	2019 - 2028		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita & emp	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$3,141.62	\$5,929,442	\$1,007,624	\$723.55	\$7.00	\$772	\$8.07

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APPENDIX B.5
TABLE 1

TOWNSHIP OF GEORGIAN BAY
INVENTORY OF CAPITAL ASSETS
ROADS AND RELATED INFRASTRUCTURE

ROADS Type of Road	# of Kilometres										UNIT COST (\$/km)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Gravel	20.9	20.9	20.9	20.8	18.7	21.2	21.2	21.2	21.2	21.2	21.2	\$602,000
LCB	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	\$718,000
Hot Mix	7.1	7.1	7.1	9.8	14.5	13.0	13.0	13.0	13.0	13.0	13.0	\$915,000
Total (km)	82.6	82.6	82.6	85.2	87.8	88.8	88.8	88.8	88.8	88.8	88.8	
Total (\$000)	\$58,281.1	\$58,281.1	\$58,281.1	\$60,645.7	\$63,743.1	\$63,860.2	\$63,860.2	\$63,860.2	\$63,860.2	\$63,860.2	\$63,860.2	

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APPENDIX B.5
TABLE 1

TOWNSHIP OF GEORGIAN BAY
CALCULATION OF SERVICE LEVELS
ROADS AND RELATED INFRASTRUCTURE

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	17,946	18,119	18,293	18,483	18,717	18,954	19,195	19,439	19,586	19,734
Historical Employment	<u>850</u>	<u>840</u>	<u>831</u>	<u>832</u>	<u>833</u>	<u>834</u>	<u>835</u>	<u>837</u>	<u>842</u>	<u>850</u>
Total Historical Population & Employment	18,796	18,959	19,124	19,315	19,550	19,788	20,030	20,276	20,428	20,584

INVENTORY SUMMARY (\$000)

Roads	\$58,281.1	\$58,281.1	\$58,281.1	\$60,645.7	\$63,743.1	\$63,860.2	\$63,860.2	\$63,860.2	\$63,860.2	\$63,860.2
Total (\$000)	\$58,281.1	\$58,281.1	\$58,281.1	\$60,645.7	\$63,743.1	\$63,860.2	\$63,860.2	\$63,860.2	\$63,860.2	\$63,860.2

SERVICE LEVEL (\$/capita & emp)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average Service Level
Roads	\$3,100.72	\$3,074.06	\$3,047.54	\$3,139.82	\$3,260.52	\$3,227.22	\$3,188.23	\$3,149.55	\$3,126.11	\$3,102.42	\$3,141.62
Total (\$/capita & emp)	\$3,100.72	\$3,074.06	\$3,047.54	\$3,139.82	\$3,260.52	\$3,227.22	\$3,188.23	\$3,149.55	\$3,126.11	\$3,102.42	\$3,141.62

TOWNSHIP OF GEORGIAN BAY
CALCULATION OF MAXIMUM ALLOWABLE
ROADS AND RELATED INFRASTRUCTURE

10-Year Funding Envelope Calculation	
10-Year Average Service Level 2009 - 2018	\$3,141.62
Net Population & Employment Growth 2019 - 2028	1,349
Maximum Allowable Funding Envelope	\$4,238,045
Less: 10% Legislated Reduction	\$0
Discounted Maximum Allowable Funding Envelope	\$4,238,045

TOWNSHIP OF GEORGIAN BAY
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED INFRASTRUCTURE

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	0% Reduction		Available DC Reserves	2019-2023	Post 2023
5.0 ROADS AND RELATED INFRASTRUCTURE										
5.1 Roadway Capital Works										
5.1.1 Recovery for Lone Pine Road Road Widening and Improvements	2019	\$ 636,245		\$ 636,245	\$ 318,123	\$ -	\$ 318,123	\$ 159,061	\$ 159,061	\$ -
5.1.2 Recovery for Hasketts Drive Widening and Improvements	2019	\$ 3,143,197	\$ 2,000,000	\$ 1,143,197	\$ 571,599	\$ -	\$ 571,599	\$ 295,536	\$ 276,062	\$ -
Subtotal Roadway Capital Works		\$ 3,779,442	\$ 2,000,000	\$ 1,779,442	\$ 889,721	\$ -	\$ 889,721	\$ 454,597	\$ 435,124	\$ -
5.2 Development-Related Studies										
5.2.1 Road Needs Studies (every other year)	Various	\$ 20,000	\$ -	\$ 20,000	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ 10,000	\$ -
5.2.2 MTO Interchange Study - Township Share	2019	\$ 40,000	\$ -	\$ 40,000	\$ -	\$ -	\$ 40,000	\$ -	\$ 40,000	\$ -
Subtotal Development-Related Studies		\$ 60,000	\$ -	\$ 60,000	\$ 10,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -
5.3 Active Transportation (1)										
5.3.1 Active Transportation Projects	Various	\$ 2,090,000	\$ 1,045,000	\$ 1,045,000	\$ 522,500	\$ -	\$ 522,500	\$ -	\$ 522,500	\$ -
Subtotal Active Transportation (1)		\$ 2,090,000	\$ 1,045,000	\$ 1,045,000	\$ 522,500	\$ -	\$ 522,500	\$ -	\$ 522,500	\$ -
TOTAL ROADS AND RELATED INFRASTRUCTURE		\$ 5,929,442	\$ 3,045,000	\$ 2,884,442	\$ 1,422,221	\$ -	\$ 1,462,221	\$ 454,597	\$ 1,007,624	\$ -

Note (1): Active Transportation costs have been allocated 100% to residential development

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 Development-Related Capital Program - 5.1 & 5.2 Projects	95%	\$460,867
Residential Share of 2019 - 2028 Development-Related Capital Program - 5.3 Projects	100%	\$522,500
Residential Share of 2019 - 2028 Development-Related Capital Program - All Projects		\$983,367
10-Year Growth in Population in New Units		1,359
Unadjusted Development Charge Per Capita		\$723.55
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 Development-Related Capital Program - 5.1 & 5.2 Projects	5%	\$24,256
Non-Residential Share of 2019 - 2028 Development-Related Capital Program - 5.3 Projects	0%	\$0
Non-Residential Share of 2019 - 2028 Development-Related Capital Program - All Projects		\$24,256
10-Year Growth in Square Metres		3,465
Unadjusted Development Charge Per Square Metre		\$7.00

2019 - 2028 Net Funding Envelope	\$4,238,045
Reserve Fund Balance	
Balance as at December 31, 2018	\$454,597

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APPENDIX B.5
TABLE 3

**TOWNSHIP OF GEORGIAN BAY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS AND RELATED INFRASTRUCTURE
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

ROADS AND RELATED INFRASTRUCTURE	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$393.4)	(\$344.0)	(\$288.3)	(\$255.4)	(\$217.2)	(\$175.7)	(\$131.0)	(\$83.9)	(\$44.7)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Roads And Related Infrastructure: Non Inflated											
<i>5.1 & 5.2 Projects</i>	\$452.3	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$460.9
<i>5.3 Projects</i>	\$52.3	\$52.3	\$52.3	\$52.3	\$52.3	\$52.3	\$52.3	\$52.3	\$52.3	\$52.3	\$522.5
Total	\$504.6	\$53.2	\$53.2	\$53.2	\$53.2	\$53.2	\$53.2	\$53.2	\$53.2	\$53.2	\$983.4
- Roads And Related Infrastructure: Inflated	\$504.6	\$54.3	\$55.3	\$56.5	\$57.6	\$58.7	\$59.9	\$61.1	\$62.3	\$63.6	\$1,033.9
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	158	158	160	127	130	130	130	129	116	120	1,359
REVENUE											
- DC Receipts: Inflated	\$121.7	\$124.1	\$128.7	\$104.3	\$109.0	\$111.2	\$113.4	\$114.5	\$105.3	\$110.3	\$1,142.5
INTEREST											
- Interest on Opening Balance	\$0.0	(\$21.6)	(\$18.9)	(\$15.9)	(\$14.0)	(\$11.9)	(\$9.7)	(\$7.2)	(\$4.6)	(\$2.5)	(\$106.3)
- Interest on In-year Transactions	(\$10.5)	\$1.2	\$1.3	\$0.8	\$0.9	\$0.9	\$0.9	\$0.9	\$0.8	\$0.8	(\$1.9)
TOTAL REVENUE	\$111.2	\$103.7	\$111.1	\$89.3	\$95.9	\$100.2	\$104.7	\$108.2	\$101.4	\$108.7	\$1,034.2
CLOSING CASH BALANCE	(\$393.4)	(\$344.0)	(\$288.3)	(\$255.4)	(\$217.2)	(\$175.7)	(\$131.0)	(\$83.9)	(\$44.7)	\$0.3	

2019 Adjusted Charge Per Capita	\$772
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Allocation of Capital Program	
Residential Sector	95.0%
Non-Residential Sector	5.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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APPENDIX B.5
TABLE 3

**TOWNSHIP OF GEORGIAN BAY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS AND RELATED INFRASTRUCTURE
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

ROADS AND RELATED INFRASTRUCTURE	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	(\$21.48)	(\$19.66)	(\$16.52)	(\$14.74)	(\$12.75)	(\$10.66)	(\$8.36)	(\$5.92)	(\$3.26)	
2019 - 2028 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Roads And Related Infrastructure: Non Inflated											
5.1 & 5.2 Projects	\$23.8	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$24.3
5.3 Projects	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$23.8	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$24.3
- Roads And Related Infrastructure: Inflated	\$23.8	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$24.3
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	360	360	495	315	315	315	315	315	315	360	3,465
REVENUE											
- DC Receipts: Inflated	\$2.9	\$3.0	\$4.2	\$2.7	\$2.8	\$2.8	\$2.9	\$2.9	\$3.0	\$3.5	\$30.7
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1.2)	(\$1.1)	(\$0.9)	(\$0.8)	(\$0.7)	(\$0.6)	(\$0.5)	(\$0.3)	(\$0.2)	(\$6.2)
- Interest on In-year Transactions	(\$0.6)	\$0.1	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.1	(\$0.1)
TOTAL REVENUE	\$2.3	\$1.9	\$3.2	\$1.8	\$2.0	\$2.1	\$2.4	\$2.5	\$2.7	\$3.4	\$24.4
CLOSING CASH BALANCE	(\$21.5)	(\$19.7)	(\$16.5)	(\$14.7)	(\$12.8)	(\$10.7)	(\$8.4)	(\$5.9)	(\$3.3)	\$0.1	

2019 Adjusted Charge Per Square Metre	\$8.07
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Allocation of Capital Program	
Residential Sector	95.0%
Non-Residential Sector	5.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.6

GENERAL GOVERNMENT

APPENDIX B.6

GENERAL GOVERNMENT

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

**TABLE 1 2019-2028 DEVELOPMENT-RELATED CAPITAL PROGRAM &
CALCULATION OF THE UNADJUSTED DEVELOPMENT CHARGES**

The 2019-2028 development-related general government capital program includes provisions for various planning studies. These include recoveries for completed Master Plan and Urban Design studies for Honey Harbour, MacTier, and Port Severn; a Corporate Strategic Plan Update and Economic Development Strategy Update, a Waterfront Plan for Honey Harbour, future Development Charges Background Studies, and a provision for the growth-related portions of future planning studies such as Official Plan, Zoning By-law, and Secondary Plan updates.

The total gross cost of the General Government capital program is approximately \$2.56 million. Grants or subsidies have been identified in the amount of \$1.86 million, leaving \$695,787 in net municipal costs.

A further \$165,750 is considered to benefit existing development, and the ten per cent legislated discount equates to \$53,004. These deductions leave \$477,033 in total DC eligible costs.

Of the \$477,033, \$75,819 will be funded through the existing General Government DC reserve balance. The remaining \$401,214 is brought forward to the development charges calculation.

This amount is allocated 95 per cent (\$381,154) to the residential sector and 5 per cent (\$20,061) to the non-residential sector based on shares of ten-year growth in population and employment. The resulting unadjusted per capita residential charge is \$280.45 before cash flow adjustments. The non-residential unadjusted charge is \$5.79 per square metre.

TABLE 2 CASH FLOW ANALYSIS

After cash flow consideration, the residential charge increases to \$298 per capita and the non-residential charge increases to \$6.32 per square metre.

GENERAL GOVERNMENT SUMMARY					
2019 - 2028		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/household	\$/sq.m
\$2,557,572	\$401,214	\$280.45	\$5.79	\$298	\$6.32

TOWNSHIP OF GEORGIAN BAY
DEVELOPMENT-RELATED CAPITAL PROGRAM
GENERAL GOVERNMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	10% Reduction		Available DC Reserves	2019-2028	Post 2028
6.0 GENERAL GOVERNMENT										
6.1 Development-Related Studies										
6.1.1 Recovery of Master Plan and Urban Design for Honey Harbour & MacTier	2019	\$ 165,555	\$ 82,778	\$ 82,777	\$ -	\$ 8,278	\$ 74,499	\$ 42,965	\$ 31,535	\$ -
6.1.2 Recovery of Master Plan and Urban Design for Port Severn	2019	\$ 152,017	\$ 79,007	\$ 73,010	\$ -	\$ 7,301	\$ 65,709	\$ 32,855	\$ 32,855	\$ -
6.1.3 Corporate Strategic Plan Update	2019	\$ 11,000	\$ -	\$ 11,000	\$ 8,250	\$ 275	\$ 2,475	\$ -	\$ 2,475	\$ -
6.1.4 Economic Development Strategy Update	2019	\$ 10,000	\$ -	\$ 10,000	\$ 7,500	\$ 250	\$ 2,250	\$ -	\$ 2,250	\$ -
6.1.5 Honey Harbour Waterfront Plan	2019	\$ 2,000,000	\$ 1,700,000	\$ 300,000	\$ 150,000	\$ 15,000	\$ 135,000	\$ -	\$ 135,000	\$ -
6.1.6 Development Charge Study	2019	\$ 28,000	\$ -	\$ 28,000	\$ -	\$ 2,800	\$ 25,200	\$ -	\$ 25,200	\$ -
6.1.7 Development Charge Study	2024	\$ 31,000	\$ -	\$ 31,000	\$ -	\$ 3,100	\$ 27,900	\$ -	\$ 27,900	\$ -
6.1.8 Provision for Growth-Related Portions of Future Planning Studies (Official Plan, Zoning By-Law Review, Secondary Plans)	Various	\$ 160,000	\$ -	\$ 160,000	\$ -	\$ 16,000	\$ 144,000	\$ -	\$ 144,000	\$ -
TOTAL GENERAL GOVERNMENT		\$ 2,557,572	\$ 1,861,785	\$ 695,787	\$ 165,750	\$ 53,004	\$ 477,033	\$ 75,819	\$ 401,214	\$ -

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 Development-Related Capital Program	95%	\$381,154
10-Year Growth in Population in New Units		1,359
Unadjusted Development Charge Per Capita		\$280.45
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 Development-Related Capital Program	5%	\$20,061
10-Year Growth in Square Metres		3,465
Unadjusted Development Charge Per Square Metre		\$5.79

Reserve Fund Balance	
Balance as at December 31, 2018	\$75,819

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APPENDIX B.6
TABLE 2

**TOWNSHIP OF GEORGIAN BAY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

GENERAL GOVERNMENT	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	(\$183.71)	(\$159.03)	(\$131.43)	(\$112.28)	(\$90.42)	(\$96.11)	(\$72.24)	(\$46.95)	(\$24.25)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$231.5	\$13.7	\$13.7	\$13.7	\$13.7	\$40.2	\$13.7	\$13.7	\$13.7	\$13.7	\$381.2
- General Government: Inflated	\$231.5	\$14.0	\$14.2	\$14.5	\$14.8	\$44.4	\$15.4	\$15.7	\$16.0	\$16.3	\$396.9
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	158	158	160	127	130	130	130	129	116	120	1,359
REVENUE											
- DC Receipts: Inflated	\$47.0	\$47.9	\$49.7	\$40.2	\$42.1	\$42.9	\$43.8	\$44.2	\$40.6	\$42.6	\$441.0
INTEREST											
- Interest on Opening Balance	\$0.0	(\$10.1)	(\$8.7)	(\$7.2)	(\$6.2)	(\$5.0)	(\$5.3)	(\$4.0)	(\$2.6)	(\$1.3)	(\$50.4)
- Interest on In-year Transactions	\$0.8	\$0.8	\$0.9	\$0.7	\$0.7	\$0.8	\$0.8	\$0.8	\$0.7	\$0.7	\$7.7
TOTAL REVENUE	\$47.8	\$38.6	\$41.8	\$33.7	\$36.7	\$38.7	\$39.3	\$41.0	\$38.7	\$42.0	\$398.3
CLOSING CASH BALANCE	(\$183.7)	(\$159.0)	(\$131.4)	(\$112.3)	(\$90.4)	(\$96.1)	(\$72.2)	(\$47.0)	(\$24.3)	\$1.4	

2019 Adjusted Charge Per Capita	\$298
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Allocation of Capital Program	
Residential Sector	95.0%
Non-Residential Sector	5.0%
Rates for 2019	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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APPENDIX B.6
TABLE 2

**TOWNSHIP OF GEORGIAN BAY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

GENERAL GOVERNMENT	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	(\$10.16)	(\$9.12)	(\$7.03)	(\$6.06)	(\$4.94)	(\$5.36)	(\$4.24)	(\$2.97)	(\$1.65)	
2019 - 2028 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$12.2	\$0.7	\$0.7	\$0.7	\$0.7	\$2.1	\$0.7	\$0.7	\$0.7	\$0.7	\$20.1
- General Government: Inflated	\$12.2	\$0.7	\$0.7	\$0.8	\$0.8	\$2.3	\$0.8	\$0.8	\$0.8	\$0.9	\$20.9
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	360	360	495	315	315	315	315	315	315	360	3,465
REVENUE											
- DC Receipts: Inflated	\$2.3	\$2.3	\$3.3	\$2.1	\$2.2	\$2.2	\$2.2	\$2.3	\$2.3	\$2.7	\$23.9
INTEREST											
- Interest on Opening Balance	\$0.0	(\$0.6)	(\$0.5)	(\$0.4)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.2)	(\$0.2)	(\$0.1)	(\$2.8)
- Interest on In-year Transactions	(\$0.3)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)
TOTAL REVENUE	\$2.0	\$1.8	\$2.8	\$1.7	\$1.9	\$1.9	\$1.9	\$2.1	\$2.2	\$2.6	\$21.0
CLOSING CASH BALANCE	(\$10.2)	(\$9.1)	(\$7.0)	(\$6.1)	(\$4.9)	(\$5.4)	(\$4.2)	(\$3.0)	(\$1.7)	\$0.1	

2019 Adjusted Charge Per Square Metre	\$6.32
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Allocation of Capital Program	
Residential Sector	95.0%
Non-Residential Sector	5.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX C

RESERVE FUNDS

APPENDIX C

DEVELOPMENT CHARGES RESERVE FUNDS

The *Development Charges Act* requires that a reserve fund be established for each service for which development charges are collected. Table 1 presents the uncommitted reserve fund balances that are available to help fund the development-related net capital costs identified in this study. The opening balances of the development charges reserve funds are as at December 31, 2018.

As shown on Table 1, the 2018 year-end total DC reserve fund balance was approximately \$1.02 million. It is noted that a \$3,375 draw from the General Government DC reserve fund to fund the remaining share of the Township's previous Economic Development Strategy in 2019, has been deducted from this balance.

The application of the available balance in each of the reserve funds is discussed in the appendix section related to each service. These funds are assigned to projects in the initial years of the capital program for the services in which the reserves are in a positive balance. This has the effect of reducing and deferring capital costs brought forward to the development charge calculation and the cash flow analysis. For Library services, where the balance is negative, the deficit is recovered up to the limitations allowable under the *Development Charges Act*.

**APPENDIX C
TABLE 1**

**TOWNSHIP OF GEORGIAN BAY
DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT
YEAR ENDING DECEMBER 31, 2018**

Service	Reserve Fund Balance as at Dec. 31, 2018	2019 Capital Budget Draws	Uncommitted Reserve Funds
Library	(\$33,467.24)	\$0.00	(\$33,467.24)
Parks And Recreation	\$77,990.52	\$0.00	\$77,990.52
Fire Protection	293,038.11	\$0.00	\$293,038.11
Public Works	\$149,218.29	\$0.00	\$149,218.29
Roads And Related Infrastructure	\$454,597.34	\$0.00	\$454,597.34
General Government	\$79,194.01	\$3,375	\$75,819.01
Total Development Charge Reserves	\$1,020,571.03	\$3,375.00	\$1,017,196.03

APPENDIX D

LONG-TERM CAPITAL AND OPERATING COSTS

APPENDIX D

TABLE 1

**TOWNSHIP OF GEORGIAN BAY
ESTIMATED NET OPERATING COST OF THE PROPOSED
DEVELOPMENT-RELATED CAPITAL PROGRAM
(in constant 2019 dollars)**

	Cost Driver (in 2019\$)		Commentary	DC Funded		Total Annual Increase
	\$/Unit	# of Units		2019-2028	Post 2028	
	LIBRARY None				No additional operating costs arising from new collections materials	\$0 \$0
PARKS AND RECREATION Improvements to Baxter Community Centre and Parking Lot	\$0.10	per \$1.00 of new infrastructure	Based on 2018 approved operating budget for existing facilities	\$10,000 \$10,000	\$0 \$0	\$10,000 \$10,000
FIRE PROTECTION Port Severn Fire Hall Expansion	\$10.00	per sq.ft. added	Based on 2018 approved operating budget for existing fire halls	\$69,822 \$3,022	\$16,978 \$16,978	\$86,800 \$20,000
Vehicle Additions	\$0.10	per \$1.00 of new infrastructure	Based on Operations - Fleet Maintenance 2018 approved operating budget	\$66,800	\$0	\$66,800
PUBLIC WORKS Vehicle Additions	\$0.10	per \$1.00 of new infrastructure	Based on Operations - Fleet Maintenance 2018 approved operating budget	\$9,000 \$9,000	\$0 \$0	\$9,000 \$9,000
ROADS AND RELATED INFRASTRUCTURE	\$50.00	per capita + employment	Based on Roads 2018 approved operating budget	\$67,450 \$67,450	\$0 \$0	\$67,450 \$67,450
GENERAL GOVERNMENT None			No additional operating costs arising from undertaking studies	\$0 \$0	\$0 \$0	\$0 \$0
TOTAL ESTIMATED OPERATING COSTS				\$156,272	\$16,978	\$173,250

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APPENDIX D
TABLE 2

TOWNSHIP OF GEORGIAN BAY
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS

Net Capital Cost of Development-Related Projects	2019 (\$000)	2020 (\$000)	2021 (\$000)	2022 (\$000)	2023 (\$000)	2024 (\$000)	2025 (\$000)	2026 (\$000)	2027 (\$000)	2028 (\$000)	TOTAL (\$000)
LIBRARY											
Total Net Cost (1)	39.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	88.5
Net Cost From Development Charges (2)	38.4	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	83.0
Net Cost From Non-DC Sources	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	5.5
- Discount Portion (3)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	5.5
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PARKS AND RECREATION											
Total Net Cost (1)	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Net Cost From Development Charges (2)	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0
Net Cost From Non-DC Sources	0.0	0.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.0
- Discount Portion (3)	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
- Available DC Reserves (4)	0.0	0.0	78.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.0
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FIRE PROTECTION											
Total Net Cost (1)	41.0	5.0	5.0	5.0	5.0	1,215.0	5.0	5.0	5.0	5.0	1,296.0
Net Cost From Development Charges (2)	2.5	2.5	2.5	2.5	2.5	487.1	2.5	2.5	2.5	2.5	509.6
Net Cost From Non-DC Sources	38.5	2.5	2.5	2.5	2.5	727.9	2.5	2.5	2.5	2.5	786.4
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	20.5	2.5	2.5	2.5	2.5	252.5	2.5	2.5	2.5	2.5	293.0
- Replacement & Benefit to Existing	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	475.4	0.0	0.0	0.0	0.0	475.4
PUBLIC WORKS											
Total Net Cost (1)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	90.0
Net Cost From Development Charges (2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Cost From Non-DC Sources	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	90.0
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	90.0
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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APPENDIX D
TABLE 2

TOWNSHIP OF GEORGIAN BAY
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS

Net Capital Cost of Development-Related Projects	2019 (\$000)	2020 (\$000)	2021 (\$000)	2022 (\$000)	2023 (\$000)	2024 (\$000)	2025 (\$000)	2026 (\$000)	2027 (\$000)	2028 (\$000)	TOTAL (\$000)
ROADS AND RELATED INFRASTRUCTURE											
Total Net Cost (1)	1,925.9	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	2,884.4
Net Cost From Development Charges (2)	528.4	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	1,007.6
Net Cost From Non-DC Sources	1,397.6	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	1,876.8
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	454.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	454.6
- Replacement & Benefit to Existing	943.0	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	1,422.2
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GENERAL GOVERNMENT											
Total Net Cost (1)	520.8	16.0	16.0	16.0	16.0	47.0	16.0	16.0	16.0	16.0	695.8
Net Cost From Development Charges (2)	243.7	14.4	14.4	14.4	14.4	42.3	14.4	14.4	14.4	14.4	401.2
Net Cost From Non-DC Sources	277.1	1.6	1.6	1.6	1.6	4.7	1.6	1.6	1.6	1.6	294.6
- Discount Portion (3)	35.5	1.6	1.6	1.6	1.6	4.7	1.6	1.6	1.6	1.6	53.0
- Available DC Reserves (4)	75.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.8
- Replacement & Benefit to Existing	165.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	165.8
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL MUNICIPAL SERVICES											
Total Net Cost (1)	2,535.7	142.0	242.0	142.0	142.0	1,383.0	142.0	142.0	142.0	142.0	5,154.7
Net Cost From Development Charges (2)	813.0	75.1	87.1	75.1	75.1	587.6	75.1	75.1	75.1	75.1	2,013.4
Net Cost From Non-DC Sources	1,722.7	66.9	154.9	66.9	66.9	795.4	66.9	66.9	66.9	66.9	3,141.3
- Discount Portion (3)	36.1	2.2	12.2	2.2	2.2	5.3	2.2	2.2	2.2	2.2	68.5
- Available DC Reserves (4)	559.9	11.5	89.5	11.5	11.5	261.5	11.5	11.5	11.5	11.5	991.4
- Replacement & Benefit to Existing	1,126.7	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	1,606.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	475.4	0.0	0.0	0.0	0.0	475.4

Notes: (1) For total development-related capital program see Appendix B.

(2) Share of capital program to be funded from development charges if calculated rates are fully implemented

(3) Mandatory 10% reduction for applicable services

(4) Portion of development-related capital program identified as available DC reserves (to be funded from present Development Charge reserve fund balances).

(5) Post 2028 development-related net capital costs may be eligible for development charges in future DC by-laws, but interim financing of this share may be required

APPENDIX E

ASSET MANAGEMENT PLAN

APPENDIX C

ASSET MANAGEMENT PLAN

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

ASSET TYPES

A summary of the future municipal-owned assets and estimated useful life assumptions for eligible DC services considered as part of the study are outlined in Table 1. Although all capital assets considered in the study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. Some projects do not relate to the 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.

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 1 Summary of Municipal Assets Considered	
Service and Amenities	Estimated Useful Life
Public Library <ul style="list-style-type: none"> • Collection Materials • Recovery of Negative Reserve Fund Balance 	10 years Not Infrastructure
Parks and Recreation <ul style="list-style-type: none"> • Recreation Facilities 	40 years
Public Library <ul style="list-style-type: none"> • Library Branch • Collection Materials 	60 years 10 years
Fire Protection <ul style="list-style-type: none"> • Buildings • Vehicles • Gear and Minor Equipment 	40 years 10-15 years 10 years
Public Works <ul style="list-style-type: none"> • Fleet and Equipment 	10 years
Roads and Related Infrastructure <ul style="list-style-type: none"> • Roadway Capital Works • Development-Related Studies • Active Transportation Projects 	50 years Not Infrastructure 20 years
General Government <ul style="list-style-type: none"> • Development-Related Studies 	Not Infrastructure

ANNUAL PROVISION

When assets require rehabilitation or are due for replacement, the source of funds is limited to reserves or contributions from operating. Capital expenditures to carry out the rehabilitation and replacement of aging infrastructure are not growth-related and are therefore not eligible for funding through development charge revenues or other developer contributions.

Based on the information obtained from the Township's Asset Management Plan and Township 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 all services. 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, 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 DC 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 ten per cent statutory discount, benefit-to-existing and post-period benefit have also been calculated.

Table 2 provides an overview of the capital provisions required to replace the capital infrastructure proposed to be funded under the development charges by-law for all services. By 2028, the Township will need to fund an additional \$115,000 per annum in order to properly fund the full life-cycle costs of the new assets.

TABLE 2
TOWNSHIP OF GEORGIAN BAY
CALCULATED ANNUAL PROVISION BY 2028

Service	2019 - 2028 Capital Program		Calculated AMP Annual Provision by 2028	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Library	\$ 49,500	\$ 5,500	\$ 4,800	\$ 500
Parks And Recreation	\$ 90,000	\$ 10,000	\$ -	\$ -
Fire Protection	\$ 802,600	\$ 493,400	\$ 57,400	\$ 15,100
Public Works	\$ 90,000	\$ -	\$ 8,800	\$ -
Roads And Related Infrastructure	\$ 1,412,200	\$ 4,457,200	\$ 43,500	\$ 135,000
General Government	\$ -	\$ -	\$ -	\$ -
Total 2028 Provision	\$ 2,444,300	\$ 4,966,100	\$ 114,500	\$ 150,600

FINANCIAL SUSTAINABILITY OF THE PROGRAM

FUTURE REVENUE GROWTH

The calculated annual funding provision should be considered within the context of the Township's projected growth. Over the next ten years (to 2028) the Township is projected to increase by approximately 440 households, which represents an 8 per cent increase over the existing base. In addition, the Township will also add nearly 80 new employees that will result in approximately 3,470 square metres of additional 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 Township's reserves for the future replacement of these assets.

ANNUAL BUDGETARY REVIEWS

Through this annual exercise, staff identify the required funding and propose mitigating measures in order to ensure there are sufficient funds in reserves over the long term. Life cycle funding methodologies are also reviewed in order to ensure that the Township is continuing to implement financially sustainable practices for funding the eventual replacement of assets.

THE PROGRAM IS DEEMED FINANCIALLY SUSTAINABLE

The calculated annual provisions identified in Table 2 are considered to be financially sustainable as it is expected that the increased capital asset management requirements can be absorbed by the tax and user base over the long-term.

Importantly, the Township's annual operating budget processes allow for opportunities for ongoing review of asset management requirements. These tools and processes will allow staff to continue to monitor and implement mitigating measures should the program become less sustainable.

APPENDIX F

***DRAFT 2019 DEVELOPMENT CHARGES BY-LAW
(PROVIDED UNDER SEPARATE COVER)***