

DEVELOPMENT CHARGES BACKGROUND STUDY

City of Greater Sudbury

HEMSON Consulting Ltd.

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Executive Summary

The following summarizes the findings of the 2019 Development Charges (DC) Background Study. This Background Study provides the basis to update the City's development charges to accurately reflect the servicing needs of new development in Greater Sudbury.

A. Purpose Of The 2019 Development Charges (DC) Background Study

1. Legislative Context

The City of Greater Sudbury 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 through a cash flow analysis.

3. DC Eligible and In-Eligible Costs

Development charges are intended to 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 include 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 Program is Subject to Change

It is recommended that Council adopt the development-related capital program developed for the purposes of the 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 City'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 development forecast is further discussed in Appendix A.

Development Forecast	2018 Estimate	2019 - 2028		2019 - 2041	
		Growth	Total at 2028	Growth	Total at 2041
Residential					
Total Occupied Dwellings	69,962	2,944	72,906	4,946	74,908
Total Population					
Census	162,272	2,918	165,190	5,061	167,333
Population in New Dwellings		7,402		12,275	
Non-Residential					
Employment	76,851	2,360	79,211	4,727	81,578
Non-Residential Building Space (sq.ft.)		1,804,390		3,741,570	

C. Calculated Development Charges

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

	Residential Charge Per Unit			Non-Residential Charge Per Sq.Ft.	
	Single Detached	Semi Detached	Apartments and Multiples	Non-Industrial	Industrial
TOTAL CHARGE	\$17,721	\$14,238	\$10,227	\$8.89	\$5.92

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 E. By 2028 the City's net operating costs are estimated to increase by about \$2.87 million.

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 City will need to fund an additional \$710,000 per annum in order to properly fund the full life cycle costs of the new general and engineered services assets proposed to be funded under the 2019 Development Charges By-Law.

F. Modifications To The City's Development Charges By-Law Are Proposed

The City is proposing to modify the current development charges by-law. 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 City of Greater Sudbury 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 City of Greater Sudbury experiences residential and non-residential development that will increase the demand on all municipal services, the City 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 City;
- The average capital service levels provided in the City over the 10 year period immediately preceding the preparation of the background study;
- A review of capital works in progress and anticipated future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred or to be incurred by the City 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 for the City.

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 City over the 2019-2028 period.

Section IV summarizes the 10-year historical average capital service levels that have been attained in the City, which form the basis for the development charge calculations.

In Section V, the development-related capital program that has been developed by various City departments, in collaboration with Hemson Consulting Ltd., is reviewed.

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

Section VII provides a comparison of existing development charge rates in the City 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 City, demonstrating financial sustainability of assets over the life cycle of the 2019 Development Charges By-law and satisfying the new requirements implicated by the amendment to the *Development Charges Act*.

Section X provides a review of development charges administrative matters as well as consideration for area rating.

II The Methodology Uses A City-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 City of Greater Sudbury's 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 City-wide basis which is consistent with the City's 2014 Development Charges Study.

A. City-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 City, and all Greater Sudbury 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 City. A widely accepted method of sharing the development-related capital costs for such City services is to apportion them over all anticipated growth.

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

- General Government
- Library Services
- Fire Services
- Police Services
- Public Safety
- Parks and Recreation
- Ambulance Services
- Emergency Preparedness
- Transit
- Roads and Related
- Water Services
- Wastewater Services
- Drains

These services form a reasonable basis in which to plan and administer the City-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 City.

B. Key Steps In Determining Development Charges For Future Development-Related Projects

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

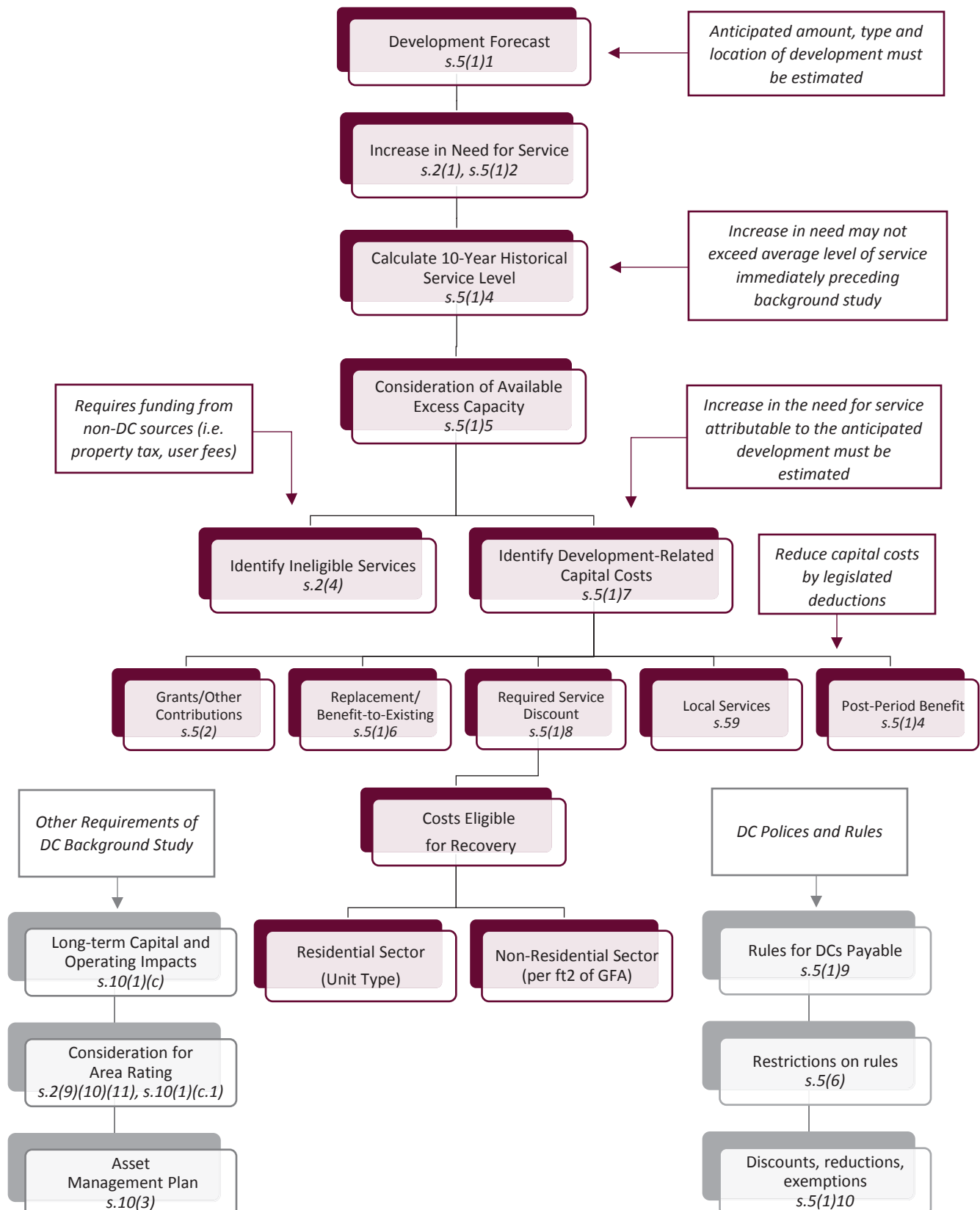


Figure 1: Statutory Requirements of Development Charge Calculation and Study Process

1. Development Forecast

The first step in the methodology requires a development forecast to be prepared for the 10-year study period from 2019-2028. The forecast of future residential and non-residential development used in this study is based on the City's *Growth Outlook to 2046* as well as recent Census data.

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

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. Factors for floor space per worker by category are used to convert the employment forecast into gross floor areas for the purposes of the development charges study.

2. Service Categories and Historical Service Levels

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

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

Historical 10 year average service levels thus form the basis for development charges. A review of City's capital service levels for buildings, land, vehicles, and so on has therefore been prepared as a reference for the calculation so that the portion of future capital projects that may be included in the development charge can be determined. The historical service levels used in this study have been calculated based on the period 2009-2018.

For "hard" services, such as water, wastewater, and drains, historical service levels are less applicable; service levels are based on current City engineering standards as well as Provincial health and environmental requirements.

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

A development-related capital program has been prepared by City staff, in collaboration with Hemson Consulting Ltd., as part of the present study. The capital program 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 program 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 10 year average service levels or the service levels embodied in future plans of the City. The development-related capital program 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 program, a portion of the project may confer benefits to existing residents. As required by the *DCA*, s. 5. (1) 6., these portions of projects and their associated net costs are the funding responsibility of the City from non-development charges sources. The amount of City funding for such non-growth shares of projects is also identified as part of the preparation of the development-related capital program.

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 10 per cent for all services except transit, water, wastewater, drains, roads and related infrastructure, fire, police and public safety (*DCA*, s. 5. (1) 8.). The 10 per cent discount is applied to the other services, e.g. parks and recreation, libraries etc., and the resulting City funding responsibility from non-development charge sources is identified.

4. Attribution to Types of Development

The next step in the determination of development charges is the allocation of the development-related net capital costs between the residential and the non-residential sectors. In the City of Greater Sudbury, 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 feet.

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 City to estimate “the anticipated amount, type and location of development” for which development charges may be imposed. The development forecast must cover both residential and non-residential development and be specific enough with regards to quantum, type, location and timing of development to allow the City to prepare a reasonable development-related capital program.

The development forecast used in this DC Background Study is based on the Reference Scenario as presented within the *Outlook for Growth to 2046* prepared for the City by Hemson Consulting Ltd. (dated March 2018). A ten year development forecast, from 2019 to 2028, has been used for all the development charges eligible services in the City.

Greater Sudbury’s 2018 Census population is estimated at 162,272 with an estimated place of work (excluding work at home) employment of 76,851. The City’s population is forecast to grow by 2,918 in the 10-year planning period from 2019 to 2028. The population in new households forecast is higher at 7,402 due to the declining occupancy levels in existing housing units. Employment is expected to grow by 2,360 over the 10-year forecast period, which will generate an additional 1.8 million square feet 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

**CITY OF GREATER SUDBURY
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT FORECAST**

Development Forecast	2018 Estimate	2019 - 2028		2019 - 2041	
		Growth	Total at 2028	Growth	Total at 2041
Residential					
Total Occupied Dwellings	69,962	2,944	72,906	4,946	74,908
Total Population					
Census	162,272	2,918	165,190	5,061	167,333
<i>Population in New Dwellings</i>		7,402		12,275	
Non-Residential					
Employment	76,851	2,360	79,211	4,727	81,578
<i>Non-Residential Building Space (sq.ft.)</i>		1,804,390		3,741,570	

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

For non-engineering services (fire, library, recreation etc.) the legislative requirement is met by documenting historical service levels for the preceding 10 years, in this case, for the period 2009 to 2018. Typically, service levels for non-engineering services are measured as a ratio of inputs per capita (or per population and employment). With engineered services such as water and wastewater, engineering and legislated environmental and health standards are used in lieu of inputs per capita.

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 \$'s/square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be charged to new growth reflect not only the quantity (number and size) but also the quality (value or replacement cost) of service provided historically by the City. Both the quantitative and qualitative aspects of service levels used in the present analysis are based on information provided by City 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 City-wide services included in the development charge calculation (excluding City-wide engineered services). Appendix B provides detailed historical inventory data upon which the calculation of service levels is based.

TABLE 2

**CITY OF GREATER SUDBURY
SUMMARY OF AVERAGE HISTORICAL SERVICE LEVELS 2009 - 2018**

Service	2009 - 2018 Service Level Indicator
2.0 LIBRARY SERVICES	\$373.71 per capita
Buildings	\$250.65 per capita
Land	\$12.76 per capita
Materials	\$82.30 per capita
Machinery & Equipment	\$27.59 per capita
Vehicles	\$0.41 per capita
3.0 FIRE SERVICES	\$331.15 per population & employment
Buildings	\$143.27 per population & employment
Land	\$6.83 per population & employment
Vehicles (# At All Stations & Divisions)	\$134.05 per population & employment
Machinery & Equipment (Excluding Computers)	\$47.01 per population & employment
4.0 POLICE SERVICES	\$175.72 per population & employment
Buildings	\$134.51 per population & employment
Land	\$2.93 per population & employment
Furniture & Equipment	\$14.21 per population & employment
Vehicles (# At All Stations & Divisions)	\$24.07 per population & employment
5.0 PUBLIC SAFETY	\$56.33 per population & employment
Communication Infrastructure And Related Assets	\$1.85 per population & employment
Equipment	\$54.48 per population & employment
6.0 PARKS AND RECREATION	\$2,147.39 per capita
Parks Buildings	\$249.33 per capita
Special Facilities	\$139.52 per capita
Sports Fields	\$260.43 per capita
Park And Playground Equipment	\$23.03 per capita
Trails	\$29.99 per capita
Ski Hills	\$11.77 per capita
Related Equipment (For Specific Facility)	\$18.25 per capita
Fleet And Equipment	\$64.73 per capita
Major Facilities	\$1,303.69 per capita
Land - Major Facilities	\$30.83 per capita
Fleet And Equipment - Major Facilities	\$15.82 per capita
7.0 AMBULANCE SERVICES	\$67.70 per population & employment
Buildings	\$31.22 per population & employment
Land	\$1.50 per population & employment
Ambulances & Other Vehicles	\$20.71 per population & employment
Machinery & Equipment (Excluding Computers)	\$14.27 per population & employment
8.0 EMERGENCY PREPAREDNESS	\$207.42 per population & employment
Buildings	\$200.55 per population & employment
Land	\$0.45 per population & employment
Vehicles And Equipment	\$6.42 per population & employment

V Development-Related Capital Program

The *DCA* requires the Council of a municipality to express its intent to provide future capital infrastructure 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, staff of the City departments, in collaboration with Hemson Consulting Ltd., 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 10 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 City. It is acknowledged that changes to the capital program presented here may occur through the City's normal capital budget process.

B. The Development-Related Capital Program For General Services

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

TABLE 3

**CITY OF GREATER SUDBURY
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR GENERAL SERVICES 2009 - 2028
(in \$000)**

Service	Gross Cost	Grants/ Subsidies	Municipal Cost	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
1.0 GENERAL GOVERNMENT	\$5,122.0	\$100.0	\$5,022.0	\$1,421.0	\$1,060.0	\$1,085.0	\$1,090.0	\$104.7	\$79.7	\$39.2	\$39.2	\$39.2	\$64.2
1.1 Development-Related Studies	\$5,122.0	\$100.0	\$5,022.0	\$1,421.0	\$1,060.0	\$1,085.0	\$1,090.0	\$104.7	\$79.7	\$39.2	\$39.2	\$39.2	\$64.2
2.0 LIBRARY SERVICES	\$17,797.0	\$138.9	\$17,658.1	\$10,165.5	\$832.5	\$832.5	\$832.5	\$832.5	\$832.5	\$832.5	\$832.5	\$832.5	\$832.5
2.1 Buildings, Land & Furnishings	\$6,009.3	\$138.9	\$5,870.4	\$5,870.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.2 Material Acquisitions	\$11,787.7	\$0.0	\$11,787.7	\$4,295.0	\$832.5	\$832.5	\$832.5	\$832.5	\$832.5	\$832.5	\$832.5	\$832.5	\$832.5
3.0 FIRE SERVICES	\$6,610.3	\$0.0	\$6,610.3	\$729.8	\$20.0	\$0.0	\$4,630.0	\$0.0	\$0.0	\$0.0	\$1,230.5	\$0.0	\$0.0
3.1 Buildings, Land & Furnishings	\$5,860.5	\$0.0	\$5,860.5	\$0.0	\$0.0	\$0.0	\$4,630.0	\$0.0	\$0.0	\$0.0	\$1,230.5	\$0.0	\$0.0
3.2 Vehicles	\$42.5	\$0.0	\$42.5	\$42.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3.3 Equipment	\$707.3	\$0.0	\$707.3	\$687.3	\$20.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.0 POLICE SERVICES	\$60,066.1	\$0.0	\$60,066.1	\$38,214.9	\$5,487.6	\$5,454.5	\$5,454.5	\$5,454.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.1 Personal Equipment	\$66.1	\$0.0	\$66.1	\$33.1	\$33.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.2 Buildings, Land & Furnishings	\$60,000.0	\$0.0	\$60,000.0	\$38,181.8	\$5,454.5	\$5,454.5	\$5,454.5	\$5,454.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.0 PUBLIC SAFETY	\$12,578.0	\$0.0	\$12,578.0	\$12,403.0	\$175.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.1 Public Safety Equipment	\$12,578.0	\$0.0	\$12,578.0	\$12,403.0	\$175.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
6.0 PARKS AND RECREATION	\$15,044.8	\$2,516.8	\$12,528.0	\$11,510.0	\$817.0	\$67.0	\$67.0	\$67.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
6.1 Indoor Recreation	\$10,375.3	\$11.2	\$10,364.1	\$10,364.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
6.2 Outdoor Recreation	\$4,669.5	\$2,505.6	\$2,163.9	\$1,145.9	\$817.0	\$67.0	\$67.0	\$67.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
7.0 AMBULANCE SERVICES	\$1,537.0	\$0.0	\$1,537.0	\$5.0	\$0.0	\$0.0	\$766.0	\$766.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
7.1 Buildings, Land & Equipment	\$1,537.0	\$0.0	\$1,537.0	\$5.0	\$0.0	\$0.0	\$766.0	\$766.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
8.0 EMERGENCY PREPAREDNESS	\$3,038.8	\$1,000.0	\$2,038.8	\$1,638.8	\$100.0	\$100.0	\$100.0	\$100.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
8.1 Buildings, Land & Equipment	\$3,038.8	\$1,000.0	\$2,038.8	\$1,638.8	\$100.0	\$100.0	\$100.0	\$100.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
9.0 TRANSIT	\$28,098.8	\$16,067.2	\$12,031.6	\$9,720.5	\$288.9	\$288.9	\$288.9	\$288.9	\$288.9	\$288.9	\$288.9	\$288.9	\$0.0
9.1 Buildings, Land & Equipment	\$18,098.8	\$8,667.2	\$9,431.6	\$9,431.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
9.2 Growth Projects	\$10,000.0	\$7,400.0	\$2,600.0	\$288.9	\$288.9	\$288.9	\$288.9	\$288.9	\$288.9	\$288.9	\$288.9	\$288.9	\$0.0
TOTAL - 10 YEAR GENERAL SERVICES	\$149,892.9	\$19,822.8	\$130,070.1	\$85,808.6	\$8,781.0	\$7,827.9	\$13,228.9	\$7,613.6	\$1,201.1	\$1,160.6	\$2,391.1	\$1,160.6	\$896.7

The table provides a separate total for services analysed over the 10 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 for 10-year general services estimates a total gross cost of \$149.89 million. Approximately \$19.82 million in grants and subsidies has been identified. The City of Greater Sudbury's share of the capital program is \$130.07 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 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 (e.g. replacement portion of building expansion projects) or for growth anticipated to occur beyond the 2019-2028 planning period. In addition, the amounts shown in Table 3 have not been reduced by 10 per cent for various "soft" services as mandated by s.5(1)8. of the *DCA*.

Of the \$130.07 million in 10-year net capital costs for general services, \$60.07 million (46 per cent) is related to the provision of Police Services. The capital program includes the headquarters expansion project as well as equipment for new officers.

Library Services is the next largest component at \$17.66 million or 14 per cent of the total general services program. The program recovers for the South Branch expansion, additional collections materials, as well as growth-related studies.

Public Safety's capital program totals \$12.58 million or 10 per cent of the total general services program. The program contains upgrades to communication infrastructure.

The Parks and Recreation capital program totals \$12.53 million, or another 10 per cent of the total. It contains recoveries for the Gerry McCrory Countryside Sports Complex 2nd ice pad and the James Jerome Sports Complex Renewal Program, along with several planned outdoor recreation projects.

Nine per cent of the net municipal capital program, or \$12.03 million is associated with Transit. This program includes recoveries for the transit garage expansion, as well as a provision for additional growth-related projects to be primarily funded through the federal Public Transit Infrastructure Fund, with some supplementary development charge revenue.

The other ten-year forecast services include: Fire Services at \$6.61 million (5 per cent), General Government at \$5.02 million (4 per cent), Emergency Preparedness at \$2.04 million (2 per cent), and Ambulance Services at \$1.54 million (1 per cent).

C. The Development-Related Capital Program For Engineered Services

In addition to the development-related capital program for general services, Table 4 summarizes the capital programs for Roads and Related, Water, Wastewater and Drains services.

The development-related capital program for 10-year engineered services estimates a total gross cost of \$668.51 million. Approximately \$196.55 million in grants and subsidies has been identified. The City of Greater Sudbury's share of the capital program is \$471.96 million.

Of the \$471.96 million in 10-year net capital costs for engineered services, \$198.45 million (42 per cent) is related to Roads and Related infrastructure. Another \$184.06 million (39 per cent) is related to Wastewater services. The remaining net capital costs are associated with Water services (12 per cent, or \$56.83 million) and Drains infrastructure (7 per cent, or \$32.63 million).

The engineered services capital programs are detailed in Appendix C.

TABLE 4

**CITY OF GREATER SUDBURY
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR ENGINEERED SERVICES 2009 - 2028
(in \$000)**

Service	Gross Cost	Grants / Subsidies	Net Municipal Cost	Total Net Capital Program									
				2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
1.0 ROADS AND RELATED	\$338,926.3	\$140,479.5	\$198,446.8	\$104,526.2	\$14,727.8	\$14,284.4	\$13,359.4	\$8,107.2	\$7,165.6	\$6,728.1	\$6,728.1	\$6,728.1	\$16,091.8
2.0 WATER	\$56,830.4	\$0.0	\$56,830.4	\$19,702.9	\$8,867.5	\$6,260.0	\$6,260.0	\$5,330.0	\$4,710.0	\$2,450.0	\$0.0	\$0.0	\$3,250.0
3.0 WASTEWATER	\$196,355.8	\$12,299.9	\$184,055.9	\$107,346.9	\$7,073.4	\$7,073.4	\$4,034.8	\$3,009.4	\$7,169.4	\$11,649.7	\$11,649.7	\$11,649.7	\$13,399.7
4.0 DRAINS	\$76,398.6	\$43,772.9	\$32,625.7	\$12,292.0	\$2,259.3	\$2,259.3	\$2,259.3	\$2,259.3	\$2,259.3	\$2,259.3	\$2,259.3	\$2,259.3	\$2,259.3
TOTAL - 10 YR ENGINEERED SERVICES	\$668,511.1	\$196,552.3	\$471,958.8	\$243,868.0	\$32,927.9	\$29,877.1	\$25,913.6	\$18,705.9	\$21,304.3	\$23,087.0	\$20,637.0	\$20,637.0	\$35,000.8

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 foot (non-residential) is presented. Adjustments are made to these amounts resulting from a cash flow analysis that takes 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, the proposed charge is based on gross floor area (GFA) of building space. For Roads and Related services, a distinct charge is calculated for Industrial and Non-Industrial development.

It is noted that the calculation of the City-wide development charges does not include any provision for exemptions required under the *DCA* such as the exemption for enlargements of up to 50 per cent on existing industrial buildings. Such legislated exemptions, or other exemptions 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 For General Services

A summary of the “unadjusted” residential and non-residential development charges for general services is presented in Table 5. Further details of the calculation for each individual City service category are available in Appendix B.

TABLE 5

**CITY OF GREATER SUDBURY
SUMMARY OF ADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
10-YEAR CAPITAL PROGRAM FOR GENERAL SERVICES**

10 Year Growth in Population in New Units	7,402
10 Year Growth in Square Feet	1,804,390

Service	Development-Related Capital Program (2019 - 2028)										
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Required Service Discount (\$000)	Prior DCs (\$000)	Available DC Reserves (\$000)	Post-2028 Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)	Residential		Non-Residential	
								Share		Share	
								%	(\$000)	%	(\$000)
1.0 GENERAL GOVERNMENT	\$5,022.00	\$4,192.00	\$83.00	\$95.75	\$23.14	\$0.00	\$628.11	76%	\$477.37	24%	\$150.75
Unadjusted Development Charge Per Capita									\$64.49		
Unadjusted Development Charge Per Sq.Ft.											\$0.08
2.0 LIBRARY SERVICES	\$17,658.11	\$13,692.23	\$396.59	\$890.38	\$89.13	\$1,608.35	\$981.44	100%	\$981.44	0%	\$0.00
Unadjusted Development Charge Per Capita									\$132.59		
Unadjusted Development Charge Per Sq.Ft.											\$0.00
3.0 FIRE SERVICES	\$6,610.33	\$5,148.67	\$0.00	\$0.00	\$1,320.09	\$0.00	\$141.57	76%	\$107.59	24%	\$33.98
Unadjusted Development Charge Per Capita									\$14.54		
Unadjusted Development Charge Per Sq.Ft.											\$0.02
4.0 POLICE SERVICES	\$60,066.10	\$58,680.00	\$0.00	\$0.00	\$326.98	\$131.66	\$927.46	76%	\$704.87	24%	\$222.59
Unadjusted Development Charge Per Capita									\$95.23		
Unadjusted Development Charge Per Sq.Ft.											\$0.12
5.0 PUBLIC SAFETY	\$12,578.04	\$11,469.81	\$0.00	\$526.09	\$9.52	\$275.30	\$297.30	76%	\$225.95	24%	\$71.35
Unadjusted Development Charge Per Capita									\$30.53		
Unadjusted Development Charge Per Sq.Ft.											\$0.04
6.0 PARKS AND RECREATION	\$12,528.01	\$1,659.23	\$1,086.88	\$2,720.75	\$292.81	\$3,229.89	\$3,538.45	100%	\$3,538.45	0%	\$0.00
Unadjusted Development Charge Per Capita									\$478.04		
Unadjusted Development Charge Per Sq.Ft.											\$0.00
7.0 AMBULANCE SERVICES	\$1,537.00	\$383.00	\$115.40	\$0.00	\$301.31	\$415.69	\$321.60	76%	\$244.42	24%	\$77.18
Unadjusted Development Charge Per Capita									\$33.02		
Unadjusted Development Charge Per Sq.Ft.											\$0.04
8.0 EMERGENCY PREPAREDNESS	\$2,038.84	\$391.20	\$164.76	\$432.68	\$25.04	\$39.88	\$985.28	76%	\$748.81	24%	\$236.47
Unadjusted Development Charge Per Capita									\$101.16		
Unadjusted Development Charge Per Sq.Ft.											\$0.13
9.0 TRANSIT	\$12,031.63	\$7,873.79	\$0.00	\$1,141.61	\$190.24	\$1,302.13	\$1,523.87	76%	\$1,158.14	24%	\$365.73
Unadjusted Development Charge Per Capita									\$156.46		
Unadjusted Development Charge Per Sq.Ft.											\$0.20
TOTAL 10 YEAR GENERAL SERVICES	\$130,070.05	\$103,489.92	\$1,846.63	\$5,807.25	\$2,578.25	\$7,002.91	\$9,345.08		\$8,187.03		\$1,158.05
Unadjusted Development Charge Per Capita									\$1,106.06		
Unadjusted Development Charge Per Sq.Ft.											\$0.63

The capital program for general services incorporates those projects identified to be related to growth anticipated in the next 10 years. However, not all of the capital costs are to be recovered from new development by way of development charges. Table 5 shows that \$103.49 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.

The *DCA*, s.5(1)8 requires that development-related net capital costs for “soft” services be reduced by 10 per cent in calculating the applicable development charge. The discount does not apply to Transit, Fire, Police, and Public Safety. The 10 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 \$1.85 million is identified as the required 10 per cent reduction.

An additional share of \$5.81 million has been identified in prior DC revenues that have already been applied to certain projects. Another \$2.58 million represents the notional DC reserve fund balance available, including estimated revenue losses associated with the phase-in of the DC rates calculated in 2014. These portions have been netted out of the chargeable capital costs. Another share of the forecast, \$7.00 million, is attributable to growth beyond the 2028 period (and can therefore only be recovered under future development charges studies).

The discounted net development-related capital cost for general services is \$9.35 million. This amount is allocated between the residential and non-residential sectors to derive the unadjusted development charges. Library and Parks & Recreation services 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 \$8.19 million, or 88 per cent, of the general services development charges net discounted capital program is deemed to benefit residential development. When this amount is divided by the 10-year population growth in new units (7,402), an unadjusted charge of \$1,106.06 per capita is derived. The non-residential share of the general services capital program totals \$1.16 million, or 12 per cent, and when this amount is divided by the 10-year forecast of non-residential space growth (1,804,390 sq.ft.), an unadjusted charge of \$0.63 per square foot is derived.

B. Unadjusted Development Charge Calculation For Engineered Services

Table 6 describes the calculation of unadjusted rates for Engineered Services: Roads and Related, Water, Wastewater, and Drains services. The net cost of the capital program amounts to \$471.96 million. However, \$346.14 million of the works is deemed to benefit the existing population and, as such, is removed from the development charges calculation. Approximately \$13.01 million has been identified as prior DC-funded amounts, and an additional \$1.44 in notional DC reserve funds is removed from the development charges calculation. Another portion of the program that is not included in the DC calculation is the share of the works that is considered to provide benefit to development beyond the 2028 planning horizon. In total, \$73.42 million is identified as the post-period benefit share.

The net development-related capital program totals \$37.95 million, which is allocated to the residential and non-residential sectors based on each sector's share of forecast future population and employment growth between 2019 and 2028. On this basis, the allocation to the residential and non-residential sectors is calculated at 76 per cent and 24 per cent respectively. For Water and Wastewater services, as only serviced development is considered, the costs are allocated 72 per cent to the residential sector and 28 per cent to the non-residential sector.

The residential sector's "unadjusted" development charge is calculated at \$4,139.73 per capita. This was calculated by taking the residential share of the net development-related capital program (\$28.27 million) and dividing it by the growth in population in total new units (7,402) for Roads and Related and Drains services, or population in serviced units (6,020) for Water and Wastewater serviced, to 2028.

The non-residential "unadjusted" development charge is \$5.36 per square foot. This was calculated by taking the non-residential share of the net development-related capital program (\$9.68 million) and dividing it by the growth in non-residential gross floor area to 2028 (1,804,390). It is noted that the Roads and Related charge is further differentiated by Industrial and Non-Industrial development, as shown in Appendix C.

TABLE 6

CITY OF GREATER SUDBURY
SUMMARY OF ADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
10-YEAR CAPITAL PROGRAM FOR ENGINEERED SERVICES

10 Year Growth in Population in New Units (Total)	7,402
10 Year Growth in Population in New Units (Serv)	6,020
10 Year Growth in Square Feet	1,804,390

Service	Development-Related Capital Program (2019 - 2028)						Residential Share		Non-Residential Share		
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Prior DCs (\$000)	Available DC Reserves (\$000)	Post-2028 Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)					
							%	(\$000)	%	(\$000)	
1.0 ROADS AND RELATED	\$198,446.79	\$127,730.59	\$9,940.72	\$907.21	\$38,713.33	\$21,154.95	76%	\$16,077.76	24%	\$5,077.19	
Unadjusted Development Charge Per Capita								\$2,172.08			
Unadjusted Development Charge Per Sq.Ft.										\$2.81	
2.0 WATER	\$56,830.39	\$47,686.23	\$523.82	\$109.21	\$6,034.10	\$2,477.02	72%	\$1,783.46	28%	\$693.57	
Unadjusted Development Charge Per Capita								\$296.26			
Unadjusted Development Charge Per Sq.Ft.										\$0.38	
3.0 WASTEWATER	\$184,055.88	\$144,359.32	\$2,546.42	\$351.89	\$24,907.92	\$11,890.32	72%	\$8,561.03	28%	\$3,329.29	
Unadjusted Development Charge Per Capita								\$1,422.10			
Unadjusted Development Charge Per Sq.Ft.										\$1.85	
4.0 DRAINS	\$32,625.73	\$26,365.61	\$0.00	\$69.56	\$3,762.56	\$2,428.00	76%	\$1,845.28	24%	\$582.72	
Unadjusted Development Charge Per Capita								\$249.29			
Unadjusted Development Charge Per Sq.Ft.										\$0.32	
TOTAL 10 YEAR ENGINEERED SERVICES	\$471,958.79	\$346,141.76	\$13,010.96	\$1,437.88	\$73,417.90	\$37,950.29		\$28,267.53		\$9,682.76	
Unadjusted Development Charge Per Capita								\$4,139.73			
Unadjusted Development Charge Per Sq.Ft.										\$5.36	

C. Adjusted Rates For City-Wide Residential And Non-Residential Development Charges

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 the Appendices, considers the borrowing cost and interest earnings associated with the timing of expenditures and development charge receipts for each service.

Tables 7 and 8 summarize the results of the adjustment for the residential and non-residential components of the City-wide rates respectively. As shown on Table 7, the adjusted per capita rate for general services increases from \$1,106 to \$1,250 after the cash flow analysis. For engineered services, the charge increases after the cash flow analysis from \$4,140 to \$4,560 per capita. The total adjusted residential per capita charge for all services is \$5,810. Table 8 shows that the adjusted rate for non-residential development increases from \$6.01 to \$6.64 per square foot.

D. Proposed City-Wide Residential And Non-Residential Development Charges

Residential City-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 development charges for all services are shown in Table 7. As shown in the table, the proposed residential charge ranges from \$10,227 for apartments and multiples to \$17,721 for single detached units. The proposed charge for semi-detached units is \$14,238.

After differentiating the non-residential Roads and Related charge by sector, the total development charge rate is calculated at \$8.89 per square foot for Non-Industrial development and \$5.92 per square foot for Industrial development (see Table 8). Further details are included in Appendix C.

TABLE 7

**CITY OF GREATER SUDBURY
CITY-WIDE UNIFORM DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE**

Service	Unadjusted Charge Per Capita	Adjusted Charge Per Capita	Residential Charge By Unit Type (1)		
			Single Detached	Semi Detached	Apartments and Multiples
General Government	\$64	\$68	\$207	\$167	\$120
Library Services	\$133	\$150	\$458	\$368	\$264
Fire Services	\$15	\$15	\$46	\$37	\$26
Police Services	\$95	\$106	\$323	\$260	\$187
Public Safety	\$31	\$35	\$107	\$86	\$62
Parks And Recreation	\$478	\$546	\$1,665	\$1,338	\$961
Ambulance Services	\$33	\$35	\$107	\$86	\$62
Emergency Preparedness	\$101	\$116	\$354	\$284	\$204
Transit	\$156	\$179	\$546	\$439	\$315
Subtotal General Services Charge	\$1,106	\$1,250	\$3,813	\$3,065	\$2,201
Roads And Related	\$2,172	\$2,417	\$7,372	\$5,922	\$4,254
Water Services	\$296	\$329	\$1,003	\$806	\$579
Wastewater Services	\$1,422	\$1,537	\$4,688	\$3,766	\$2,705
Drains	\$249	\$277	\$845	\$679	\$488
Subtotal Engineered Services Charge	\$4,140	\$4,560	\$13,908	\$11,173	\$8,026
TOTAL CHARGE PER UNIT	\$5,246	\$5,810	\$17,721	\$14,238	\$10,227
(1) Based on Persons Per Unit Of:			3.05	2.45	1.76

TABLE 8

CITY OF GREATER SUDBURY
CITY-WIDE UNIFORM DEVELOPMENT CHARGES
NON-RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Unadjusted Charge Per Square Foot	Adjusted Charge Per Square Foot	Non-Residential Charge By Type	
			Non-Industrial Charge	Industrial Charge
General Government	\$0.08	\$0.09	\$0.09	\$0.09
Library Services	\$0.00	\$0.00	\$0.00	\$0.00
Fire Services	\$0.02	\$0.02	\$0.02	\$0.02
Police Services	\$0.12	\$0.14	\$0.14	\$0.14
Public Safety	\$0.04	\$0.05	\$0.05	\$0.05
Parks And Recreation	\$0.00	\$0.00	\$0.00	\$0.00
Ambulance Services	\$0.04	\$0.05	\$0.05	\$0.05
Emergency Preparedness	\$0.13	\$0.15	\$0.15	\$0.15
Transit	\$0.20	\$0.24	\$0.24	\$0.24
Subtotal General Services Charge	\$0.64	\$0.74	\$0.74	\$0.74
Roads And Related	\$2.81	\$3.12	\$5.37	\$2.40
Water Services	\$0.38	\$0.43	\$0.43	\$0.43
Wastewater Services	\$1.85	\$1.99	\$1.99	\$1.99
Drains	\$0.32	\$0.36	\$0.36	\$0.36
Subtotal Engineered Services Charge	\$5.37	\$5.90	\$8.15	\$5.18
TOTAL CHARGE PER SQ.FT.	\$6.01	\$6.64	\$8.89	\$5.92

VII Comparison Of Proposed And Existing Development Charges

Tables 9, 10, and 11 present a comparison of total proposed City-wide development charges for a single detached housing unit and non-residential uses (by sector) respectively with the City's existing charges (as of July 1, 2018).

Table 9 shows that the proposed charge per single/semi detached unit of \$17,721 represents a reduction of \$43 over the present development charge, or 0.2 per cent.

Table 10 shows that the proposed charge of \$8.89 per square foot of Non-Industrial development represents a decrease of about 5.4 per cent (\$0.51) over the existing rate of \$9.40.

Table 11 shows that the proposed charge of \$5.92 per square foot of Industrial development would produce an increase of \$1.00, or 20.3 per cent, over the existing rate of \$4.92.

TABLE 9

**CITY OF GREATER SUDBURY
COMPARISON OF CURRENT AND CALCULATED
RESIDENTIAL DEVELOPMENT CHARGES**

Service	Residential (\$/Single Detached Unit)			
	Current Residential Charge	Calculated Residential Charge	Difference in Charge	
General Government	\$97	\$207	\$110	112.7%
Library Services	\$820	\$458	-\$362	-44.2%
Fire Services	\$366	\$46	-\$320	-87.4%
Police Services	\$194	\$323	\$129	66.8%
Public Safety	\$82	\$107	\$25	30.8%
Parks And Recreation	\$2,693	\$1,665	-\$1,028	-38.2%
Cemetery Services	\$9	\$0	-\$9	N/A
Ambulance Services	\$114	\$107	-\$7	-6.1%
Emergency Preparedness	\$214	\$354	\$140	65.1%
Transit	\$521	\$546	\$25	4.8%
Subtotal General Services Charge	\$5,110	\$3,813	-\$1,297	-25.4%
Roads And Related	\$8,127	\$7,372	-\$755	-9.3%
Water Services	\$932	\$1,003	\$71	7.6%
Wastewater Services	\$3,002	\$4,688	\$1,686	56.2%
Drains	\$593	\$845	\$252	42.4%
Subtotal Engineered Services Charge	\$12,654	\$13,908	\$1,254	9.9%
TOTAL CHARGE PER UNIT	\$17,764	\$17,721	-\$43	-0.2%

TABLE 10

**CITY OF GREATER SUDBURY
COMPARISON OF CURRENT AND CALCULATED
NON-RESIDENTIAL DEVELOPMENT CHARGES**

Service	Non-Residential Non-Industrial (\$/Square Foot)			
	Current Non-Industrial Charge	Calculated Non-Industrial Charge	Difference in Charge	
General Government	\$0.05	\$0.09	\$0.04	80.0%
Library Services	\$0.00	\$0.00	\$0.00	N/A
Fire Services	\$0.21	\$0.02	-\$0.19	-90.5%
Police Services	\$0.10	\$0.14	\$0.04	40.0%
Public Safety	\$0.04	\$0.05	\$0.01	25.0%
Parks And Recreation	\$0.00	\$0.00	\$0.00	N/A
Ambulance Services	\$0.06	\$0.05	-\$0.01	-16.7%
Emergency Preparedness	\$0.11	\$0.15	\$0.04	36.4%
Transit	\$0.29	\$0.24	-\$0.05	-17.2%
Subtotal General Services Charge	\$0.86	\$0.74	-\$0.12	-14.0%
Roads And Related	\$5.94	\$5.37	-\$0.57	-9.6%
Water Services	\$0.54	\$0.43	-\$0.11	-20.4%
Wastewater Services	\$1.72	\$1.99	\$0.27	15.7%
Drains	\$0.34	\$0.36	\$0.02	5.9%
Subtotal Engineered Services Charge	\$8.54	\$8.15	-\$0.39	-4.6%
TOTAL CHARGE PER SQ.FT.	\$9.40	\$8.89	-\$0.51	-5.4%

TABLE 11

**CITY OF GREATER SUDBURY
COMPARISON OF CURRENT AND CALCULATED
NON-RESIDENTIAL DEVELOPMENT CHARGES**

Service	Non-Residential Industrial (\$/Square Foot)			
	Current Industrial Charge	Calculated Industrial Charge	Difference in Charge	
General Government	\$0.05	\$0.09	\$0.04	80.0%
Library Services	\$0.00	\$0.00	\$0.00	N/A
Fire Services	\$0.21	\$0.02	-\$0.19	-90.5%
Police Services	\$0.10	\$0.14	\$0.04	40.0%
Public Safety	\$0.04	\$0.05	\$0.01	25.0%
Parks And Recreation	\$0.00	\$0.00	\$0.00	N/A
Ambulance Services	\$0.06	\$0.05	-\$0.01	-16.7%
Emergency Preparedness	\$0.11	\$0.15	\$0.04	36.4%
Transit	\$0.29	\$0.24	-\$0.05	-17.2%
Subtotal General Services Charge	\$0.86	\$0.74	-\$0.12	-14.0%
Roads And Related	\$1.54	\$2.40	\$0.86	55.8%
Water Services	\$0.52	\$0.43	-\$0.09	-17.3%
Wastewater Services	\$1.67	\$1.99	\$0.32	19.2%
Drains	\$0.33	\$0.36	\$0.03	9.1%
Subtotal Engineered Services Charge	\$4.06	\$5.18	\$1.12	27.6%
TOTAL CHARGE PER SQ.FT.	\$4.92	\$5.92	\$1.00	20.3%

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 City's Services Estimated To Increase Over The Forecast Period

Table 11 summarizes the estimated increase in net operating costs that the City will experience for additions associated with the planned capital program. These estimates are based on average costs derived from a review of recent financial information returns and other municipal comparators. Additional details are included in Appendix E.

As shown in Table 11, by 2028, the City's net operating costs for tax-supported services are estimated to increase by \$2.87 million. Significant increases in net operating costs will be experienced as new facilities such as the police headquarters are opened.

B. Long-Term Capital Financing From Non-Development Charge Sources Totals \$258.94 Million For General Services

Table 11 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, \$258.94 million will need to be financed from non-development charge sources over the next 10 years. In addition, \$49.06 million 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 11

**CITY OF GREATER SUBBURY
SUMMARY OF LONG TERM CAPITAL AND
OPERATING COST IMPACTS**

	Additional Operating Costs at 2028 (1)			
	DC Funded		Total Annual	
	2019-2028	Post 2028	Increase	
General Government	\$0	\$0	\$0	
Library Services	\$127,457	\$260,852	\$388,309	
Fire Services	\$14,157	\$0	\$14,157	
Police Services	\$890,725	\$136,153	\$1,026,878	
Public Safety	\$0	\$0	\$0	
Parks And Recreation	\$338,417	\$322,989	\$661,406	
Ambulance Services	\$91,134	\$117,798	\$208,932	
Emergency Preparedness	\$98,528	\$3,988	\$102,516	
Transit	\$78,950	\$67,462	\$146,412	
Roads And Related	\$263,900	\$0	\$263,900	
Drains	\$52,780	\$0	\$52,780	
CUMULATIVE NET OPERATING IMPACTS	\$1,956,047	\$909,242	\$2,865,289	

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Long-term Capital Impact (1)											
Total Net Cost	\$202,627	\$25,768	\$24,372	\$28,082	\$17,214	\$10,626	\$10,148	\$11,378	\$10,148	\$19,248	\$359,611
Net Cost From Development Charges	\$25,387	\$1,577	\$1,528	\$1,268	\$1,036	\$446	\$305	\$446	\$305	\$310	\$32,606
Prior Growth / DC Reserve Balance Shares (2)	\$16,210	\$218	\$217	\$1,375	\$217	\$133	\$133	\$238	\$133	\$133	\$19,006
Portion for Post-2028 Development (3)	\$27,328	\$1,658	\$1,643	\$1,298	\$2,315	\$1,801	\$1,695	\$1,695	\$1,695	\$7,935	\$49,063
Funding From Non-DC Sources											
Discount Portion	\$1,654	\$14	\$14	\$15	\$14	\$8	\$3	\$3	\$3	\$5	\$1,732
Replacement	\$132,048	\$22,302	\$20,970	\$24,127	\$13,633	\$8,238	\$8,012	\$8,996	\$8,012	\$10,865	\$257,203
FUNDING FROM NON-DC SOURCES	\$133,701	\$22,316	\$20,983	\$24,142	\$13,647	\$8,246	\$8,015	\$9,000	\$8,015	\$10,870	\$258,935

Notes:

(1) See Appendix E

(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 F.

A. Annual Capital Provisions Will Reach \$710,000 By 2028

Table 12 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 through discussions with municipal staff as well as the City's Asset Management Plan regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset.

Table 12 illustrates that, by 2028, the City will need to fund an additional \$710,000 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 \$710,000 equates to less than 0.2 per cent of the City's 2017 Financial Information Return total own source revenues of \$414.65 million.

The calculated annual funding provision should be considered within the context of the City's projected growth; over the next 10 years (to 2028) the City is projecting an increase of approximately 2,944 total occupied dwellings units as well as roughly 2,360 new employees. This growth will have the effect of increasing the overall assessment base, which can contribute to the funding 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 12
CITY OF GREATER SUDBURY
SUMMARY OF CALCULATED DEVELOPMENT-RELATED ANNUAL PROVISIONS

Service	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
General Government	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Library Services	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000
Fire Services	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Police Services	\$ -	\$ 3,000	\$ 7,000	\$ 7,000	\$ 7,000	\$ 32,000	\$ 32,000	\$ 32,000	\$ 32,000	\$ 32,000
Public Safety	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000
Parks And Recreation	\$ 63,000	\$ 63,000	\$ 64,000	\$ 64,000	\$ 64,000	\$ 72,000	\$ 72,000	\$ 72,000	\$ 72,000	\$ 72,000
Ambulance Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000
Emergency Preparedness	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000
Transit	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 31,000
Roads And Related	\$ 103,000	\$ 140,000	\$ 140,000	\$ 154,000	\$ 173,000	\$ 302,000	\$ 313,000	\$ 313,000	\$ 313,000	\$ 313,000
Water Services	\$ 24,000	\$ 25,000	\$ 27,000	\$ 27,000	\$ 28,000	\$ 28,000	\$ 33,000	\$ 39,000	\$ 39,000	\$ 39,000
Wastewater Services	\$ 109,000	\$ 115,000	\$ 115,000	\$ 127,000	\$ 139,000	\$ 139,000	\$ 139,000	\$ 139,000	\$ 139,000	\$ 139,000
Drains	\$ 4,000	\$ 24,000	\$ 24,000	\$ 24,000	\$ 24,000	\$ 24,000	\$ 24,000	\$ 24,000	\$ 24,000	\$ 24,000
Total	\$ 379,000	\$ 446,000	\$ 453,000	\$ 479,000	\$ 511,000	\$ 687,000	\$ 703,000	\$ 709,000	\$ 709,000	\$ 710,000

B. Transit Asset Management In The City

The City of Greater Sudbury operates a number of transit routes serviced by approximately 60 conventional buses and 15 specialized accessible buses. In addition, the transit system includes a downtown terminal, a number of shelters, and a new transit garage. The City aims to maintain the transit fleet in state of good repair through regular maintenance and inspections to achieve public transit safety and reliability standards.

The City continues to recover for the expanded portion of the its new transit garage through development charges, as reflected in the Transit capital program. The City is also planned for future growth-related transit projects as it receives PTIF funding. The full cost of the growth related capital program for Transit is \$28.10 million (see Appendix B.9).

These capital projects are expected to have a yearly net operating impact of approximately \$146,400 per year by 2028 (see Appendix E). In addition, by 2028 the City will be required to contribute an additional \$31,000 in both DC related funds for future replacement of the development-related capital in this study (Table 12). The City also ensures that the transit system will be financially sustainable through yearly capital and operating budget reviews.

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 City 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 City 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 City 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 City's normal capital budget process.

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

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

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

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

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

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

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

City Services Considered	Servicing Needs
General Services	Services such as Library and Parks and Recreation are open and accessible to all residents in the City and are driven and planned for based on City-wide population growth. General Government, Fire, Police, Public Safety, Ambulance, Emergency Preparedness, and Transit services are provided to all residents and employees in the City and are driven and planned for based on City-wide population or population and employment growth.
Engineered Services	Roads and Related are provided through a City-wide network and is planned based on City-wide population and employment growth. For services such as Water, Wastewater and Drains services, a network of ponds, linear infrastructure and treatment facilities are used to provide services to City-wide population and employment growth.

It is noted that through the DC study process, a thorough examination of the appropriateness of area-specific DCs for Water, Wastewater, and Drains services was undertaken. Through extensive discussions with City staff and stakeholders, it was determined that a City-wide approach would continue to be most appropriate for a number of reasons, including the following:

- Due to the nature of Water, Wastewater, and Drains servicing in the City, it is difficult to accurately assign benefitting areas for all capital projects; and
- There is the potential for issues of equity and fairness due to the timing of certain projects and the historically City-wide application of development charges. For example, certain locations may require major near-term plant upgrades, while others have seen similar recent projects funded on a City-wide basis.

Appendix A

Development Forecast

Appendix A

Development Forecast

This appendix provides the details of the development forecast used to prepare the 2019 Development Charges Background Study for the City of Greater Sudbury. The forecast method and key assumptions are discussed. The results of the forecasts are presented in the following 11 tables:

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

A. Forecast Approach and Key Assumptions

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

Forecasts of population, households and employment are based upon the Reference Scenario as presented within the *Outlook for Growth to 2046* prepared for the City by Hemson Consulting Ltd. (dated March 2018). The forecasts take into account the most currently available information regarding the demographic and economic outlook in the Greater Sudbury region, including information from the 2016 Census.

The planning period for general services is 2019 to 2028, or a ten-year period, as limited by the DCA. The engineered services are also recovered under a ten-year planning period, however the recovery period for many engineered services projects stretch to 2031 or 2041 and beyond. The post-period benefit shares are calculated on this basis. Further detail is shown in Appendix B for the general services and Appendix C for engineered services.

It is noted that the forecast is based on Census years and is translated into the timeframes required for DC purposes, generally pro-rating the Census periods to the DC time period.

B. Historical Development in the City

Historical growth and development figures are based on Statistics Canada Census data. A “Census-based” definition of population is used for the purposes of the DC study. The definition does not include Census net undercoverage, which is typically included in the definition of “total” population commonly used in municipal planning documents, including the City’s *Outlook for Growth to 2046*. For DC purposes, a ten-year historical period of 2009 to 2018 is used for calculating historical service levels.

Over the last ten years, the City’s Census population has grown from approximately 158,900 people in 2008 to 162,300 in 2018; this represents an increase of 2.1 per cent (Table 1). During the same time period, the number of occupied households increased at a higher rate of approximately 6.0 per cent, from 66,000 dwellings in 2008 to nearly 70,000 dwellings in 2018. The difference between the rates of population and occupied dwelling unit growth is the result of a decline in the average number of persons residing in existing housing units.

Historical employment figures are also shown in Table 1 and are based on Statistics Canada place of work data. Place of work data records where people work rather than their place of residence. The employment figures used for DC calculations include workers with no fixed place of work, but exclude work at home employment. Overall, the City’s employment growth has increased in the last ten years from approximately 74,200 in 2008 to 76,900 in 2018; this represents an increase of 3.6 per cent.

C. Forecast Results

Development charges are levied on residential development as a charge per new unit and on non-residential development as a charge per unit of gross floor area (GFA).

1. Residential Development Forecast

The residential development forecast incorporates forecasts of population, households, and housing units by type. The population forecast to 2028 is anchored on the Census-based forecasts for the City established by the *Outlook for Growth to 2046*. As shown in Table 6, a Census population of 165,200 is anticipated in 2028; this is comparable to a total population of 169,800.

The residential forecast for 2041 is for a Census population of approximately 167,300. It is noted that this is comparable to a total population including Census net undercoverage of 172,000, as forecast within the City's *Outlook for Growth*.

The forecast of new households assumes that the total occupied units in the City will grow by approximately 2,940 units over the ten-year planning period from 2019 to 2028, to a total of 72,900 occupied households by the tenth year. It is anticipated that of the 2,940 new households to be added, approximately 1,670 will be single detached, 130 will be semi-detached, 90 will be rows and 1,060 will be apartment units (Table 8). By 2041, a total of 74,900 occupied units are anticipated

In addition to the Census population forecast, a forecast of "population in new units" that will result from the addition of new housing units has been made, and serves as the basis of the residential development charges calculation. Population growth in new units is estimated by applying persons per unit (PPU) assumptions to the housing unit forecast. The PPU assumptions are based on historical household size by period of construction by unit type, as per a 2016 special run received by Statistics Canada (Table 4). The forecast population in new housing units is 7,400 for the ten-year period (2019 to 2028), and 12,275 to 2041 (Table 9).

For the purposes of levying residential development charges, the occupancy levels in both unit types (single detached, semi-detached, and apartments and multiples) are considered. The PPUs used to calculate the development charges are the calculated average PPU in new units over the first five years of the forecast period (2019-2024). The PPU assumptions used are 3.05 per single detached unit, 2.45 per semi-detached unit, 2.44 per row unit, and 1.70 per apartment unit.

2. Non-Residential Development Forecast

Non-residential development charges are calculated on a unit of gross floor area (GFA) basis. Therefore, a forecast of new non-residential building space has been developed. As with the residential forecast, the floorspace forecast covers a ten-year period from 2019 to 2028.

The anticipated employment growth is consistent with the City's *Outlook for Growth*. As shown in Table 10, total employment is anticipated to reach 82,500 by 2028 and nearly 85,000 by 2041. However, only place of work employment is considered for the purposes of the DC calculation. Place of work employment is anticipated to grow by 2,360 jobs over the ten-year planning period, to a total of 79,200.

Employment densities have been used to convert the employment forecast into building space estimates. The forecast considers three non-residential categories: employment land (industrial), population-related (commercial and institutional) and major office. Rural employment growth is not anticipated to generate any additional floor space. The following densities, by employment type, have been utilized in this study:

Population-Related:	540 sq.ft. per employee
Employment Land:	1,000 sq.ft. per employee
Major Office:	290 sq.ft. per employee

Over the ten-year forecast period an additional 31,600 square feet of major office, 408,800 square feet of population-related employment space, and 1.36 million square feet of employment land space is projected to be built (Table 11). In total 1.80 million square feet of non-residential floor space is forecast to be added between 2019 and 2028 to accommodate 2,360 additional employees. By 2041, approximately 3.74 million square feet of new non-residential space is anticipated.

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

Mid-Year	Census Population	Annual Growth	Total Population	Annual Growth	Occupied Households	Annual Growth	Average Household Size (PPU)	Employment For DC Study	Annual Growth	Activity Rate
2006	157,915		163,900		64,960		2.43	73,545		46.6%
2007	158,405	490	164,100	200	65,487	527	2.42	73,870	325	46.6%
2008	158,896	491	164,300	200	66,019	532	2.41	74,197	327	46.7%
2009	159,389	493	164,500	200	66,555	536	2.39	74,525	328	46.8%
2010	159,884	495	164,700	200	67,095	540	2.38	74,854	329	46.8%
2011	160,380	496	164,900	200	67,640	545	2.37	75,185	331	46.9%
2012	160,628	248	165,139	239	67,949	309	2.36	75,400	215	47.0%
2013	160,877	249	165,379	240	68,260	311	2.35	75,616	216	47.1%
2014	161,126	249	165,619	240	68,572	312	2.34	75,833	217	47.2%
2015	161,375	249	165,859	240	68,885	313	2.33	76,050	217	47.3%
2016	161,625	250	166,100	241	69,200	315	2.32	76,268	218	47.4%
2017	161,948	323	166,465	365	69,580	380	2.31	76,559	291	47.5%
2018	162,272	324	166,798	333	69,962	382	2.30	76,851	292	47.6%
Growth 2009-2018		3,376		2,498		3,943			2,654	

Source: Statistics Canada, Census of Canada, Hemson estimates

APPENDIX A - TABLE 2
CITY OF GREATER SUDBURY
HISTORICAL OCCUPIED HOUSEHOLDS BY UNIT TYPE

Mid-Year	Occupied Households				Shares By Unit Type				
	Singles	Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2006	40,050	3,085	2,770	19,055	64,960	62%	4%	29%	95%
2007	40,559	3,116	2,756	19,051	65,487	62%	4%	29%	95%
2008	41,074	3,148	2,742	19,047	66,019	62%	4%	29%	95%
2009	41,596	3,180	2,728	19,043	66,555	62%	4%	29%	95%
2010	42,125	3,212	2,714	19,039	67,095	63%	4%	28%	95%
2011	42,660	3,245	2,700	19,035	67,640	63%	4%	28%	95%
2012	42,754	3,273	2,731	19,190	67,949	63%	4%	28%	95%
2013	42,848	3,301	2,763	19,347	68,260	63%	4%	28%	95%
2014	42,942	3,329	2,795	19,505	68,572	63%	4%	28%	95%
2015	43,036	3,357	2,827	19,664	68,885	62%	4%	29%	95%
2016	43,130	3,385	2,860	19,825	69,200	62%	4%	29%	95%
2017	43,547	3,421	2,882	20,112	69,962	62%	4%	29%	95%
2018	43,757	3,439	2,893	20,257	70,346	62%	4%	29%	95%

Source: Statistics Canada, Census of Canada, Hemson estimates

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

Mid-Year	Annual Growth in Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2006								
2007	509	(14)	(4)	491	104%	(3%)	(1%)	100%
2008	515	(14)	(4)	497	104%	(3%)	(1%)	100%
2009	522	(14)	(4)	504	104%	(3%)	(1%)	100%
2010	529	(14)	(4)	511	104%	(3%)	(1%)	100%
2011	535	(14)	(4)	517	103%	(3%)	(1%)	100%
2012	94	31	155	280	34%	11%	55%	100%
2013	94	32	157	283	33%	11%	55%	100%
2014	94	32	158	284	33%	11%	56%	100%
2015	94	32	159	285	33%	11%	56%	100%
2016	94	33	161	288	33%	11%	56%	100%
2017	417	22	287	726	57%	3%	40%	100%
2018	210	11	145	366	57%	3%	40%	100%
Growth 2009-2018	2,683	151	1,210	4,044	66%	4%	30%	100%

Source: Statistics Canada, Census of Canada, Hemson estimates

APPENDIX A - TABLE 4
CITY OF GREATER SUDBURY
HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE

Dwelling Unit Type	Period of Construction										Period of Construction Summaries		
	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	Pre 2006	2006-2016	Total
<i>Singles</i>													
Household Population	9,180	24,105	18,650	19,145	12,155	7,565	4,480	4,380	6,870	4,160	99,660	11,030	110,690
Households	4,125	10,330	7,680	7,455	4,455	2,605	1,470	1,445	2,180	1,380	39,565	3,560	43,125
Household Size	2.23	2.33	2.43	2.57	2.73	2.90	3.05	3.03	3.15	3.01	2.52	3.10	2.57
<i>Semis</i>													
Household Population	320	1,220	1,115	2,405	1,100	1,045	460	225	260	265	7,890	525	8,415
Households	155	520	440	960	460	380	165	75	110	110	3,155	220	3,375
Household Size	2.06	2.35	2.53	2.51	2.39	2.75	2.79	3.00	2.36	2.41	2.50	2.39	2.49
<i>Rows</i>													
Household Population	250	715	1,380	1,800	1,380	595	290	210	120	205	6,620	325	6,945
Households	90	290	525	680	625	245	135	75	65	105	2,665	170	2,835
Household Size	2.78	2.47	2.63	2.65	2.21	2.43	2.15	2.80	1.85	1.95	2.48	1.91	2.45
<i>Apartments (excl. Duplexes); Bachelor or 1BR</i>													
Household Population	775	1,480	1,615	1,675	1,045	325	275	100	110	175	7,290	285	7,575
Households	660	1,330	1,410	1,475	965	315	270	85	95	155	6,510	250	6,760
Household Size	1.17	1.11	1.15	1.14	1.08	1.03	1.02	1.18	1.16	1.13	1.12	1.14	1.12
<i>Apartments (excl. Duplexes); 2BR or more</i>													
Household Population	1,970	3,040	3,510	2,960	2,030	820	550	245	385	720	15,125	1,105	16,230
Households	955	1,590	1,920	1,725	1,230	480	340	150	230	410	8,390	640	9,030
Household Size	2.06	1.91	1.83	1.72	1.65	1.71	1.62	1.63	1.67	1.76	1.80	1.73	1.80
<i>Apartments (excl. Duplexes) - Total</i>													
Household Population	2,785	4,615	5,210	4,710	3,120	1,225	885	350	520	890	22,900	1,410	24,310
Households	1,605	2,920	3,340	3,185	2,200	815	595	230	320	565	14,890	885	15,775
Household Size	1.74	1.58	1.56	1.48	1.42	1.50	1.49	1.52	1.63	1.58	1.54	1.59	1.54
<i>Duplexes</i>													
Household Population	1,375	2,715	1,655	1,105	595	340	180	75	135	165	8,040	300	8,340
Households	725	1,350	860	545	285	135	60	25	50	70	3,965	120	4,105
Household Size	1.90	2.01	1.92	2.03	2.09	2.52	3.00	3.00	2.70	2.36	2.02	2.50	2.03
<i>All Units</i>													
Household Population	13,910	33,370	28,010	29,165	18,350	10,770	6,295	5,240	7,905	5,685	145,110	13,590	158,700
Households	6,700	15,410	12,845	12,825	8,025	4,180	2,425	1,850	2,725	2,230	64,260	4,955	69,215
Household Size	2.08	2.17	2.18	2.27	2.29	2.58	2.60	2.83	2.90	2.55	2.26	2.74	2.29

Source: Statistics Canada, 2016 Census Special Run

APPENDIX A - TABLE 5
CITY OF GREATER SUDBURY
HISTORICAL PLACE OF WORK EMPLOYMENT

Mid-Year	Major Office	Annual Growth	Population-Related	Annual Growth	Employment Land	Annual Growth	Other Rural	Annual Growth	Total For DC Study	Annual Growth	Work at Home	Annual Growth	Total w/ Work At Home	Annual Growth
2006	2,732		35,391		31,538		3,884		73,545		3,330		76,875	
2007	2,775	43	35,787	396	31,412	(126)	3,888	4	73,862	317	3,157	(173)	77,019	144
2008	2,818	43	36,187	400	31,287	(125)	3,892	4	74,184	322	2,993	(164)	77,177	158
2009	2,862	44	36,592	405	31,162	(125)	3,896	4	74,512	328	2,837	(156)	77,349	172
2010	2,907	45	37,001	409	31,037	(125)	3,900	4	74,845	333	2,690	(147)	77,535	186
2011	2,952	45	37,415	414	30,913	(124)	3,905	5	75,185	340	2,550	(140)	77,735	200
2012	2,936	(16)	37,527	112	30,975	62	3,961	56	75,399	214	2,663	113	78,062	327
2013	2,920	(16)	37,639	112	31,037	62	4,018	57	75,614	215	2,781	118	78,395	333
2014	2,904	(16)	37,751	112	31,099	62	4,076	58	75,830	216	2,905	124	78,735	340
2015	2,888	(16)	37,864	113	31,162	63	4,134	58	76,048	218	3,034	129	79,082	347
2016	2,873	(15)	37,977	113	31,225	63	4,193	59	76,268	220	3,170	136	79,438	356
2017	2,886	13	38,079	102	31,385	160	4,209	16	76,559	291	3,182	12	79,741	303
2018	2,899	13	38,181	102	31,546	161	4,225	16	76,851	292	3,194	12	80,045	304
Growth 2009-2018		37		1,589		384		329		2,339		357		2,596

Note: Employment Values Include No Fixed Place of Work Employment

Source: Statistics Canada, Census of Canada & Hemson estimates

APPENDIX A - TABLE 6
CITY OF GREATER SUDBURY
POPULATION, HOUSEHOLD & EMPLOYMENT FORECAST SUMMARY

Mid-Year	Census Population	Annual Growth	Total Population	Annual Growth	Total Occupied Households	Annual Growth	Av. Household Size (PPU)	Place of Work Employment	Annual Growth	Activity Rate
2016	161,625		166,133		69,200		2.34	76,268		47.2%
2017	161,948	323	166,465	332	69,580	380	2.33	76,559	291	47.3%
2018	162,272	324	166,798	333	69,962	382	2.32	76,851	292	47.4%
2019	162,596	324	167,131	333	70,346	384	2.31	77,145	294	47.4%
2020	162,921	325	167,465	334	70,732	386	2.30	77,439	294	47.5%
2021	163,247	326	167,800	335	71,119	387	2.30	77,737	298	47.6%
2022	163,556	309	168,118	318	71,392	273	2.29	77,992	255	47.7%
2023	163,866	310	168,437	319	71,666	274	2.29	78,248	256	47.8%
2024	164,177	311	168,756	319	71,941	275	2.28	78,504	256	47.8%
2025	164,488	311	169,076	320	72,217	276	2.28	78,761	257	47.9%
2026	164,800	312	169,396	320	72,495	278	2.27	79,021	260	47.9%
2027	164,995	195	169,596	200	72,700	205	2.27	79,116	95	48.0%
2028	165,190	195	169,797	201	72,906	206	2.27	79,211	95	48.0%
2029	165,385	195	169,998	201	73,112	206	2.26	79,306	95	48.0%
2030	165,580	195	170,199	201	73,319	207	2.26	79,401	95	48.0%
2031	165,776	196	170,400	201	73,526	207	2.25	79,502	101	48.0%
2032	165,987	211	170,617	217	73,702	176	2.25	79,727	225	48.0%
2033	166,199	212	170,834	217	73,879	177	2.25	79,953	226	48.1%
2034	166,411	212	171,052	218	74,056	177	2.25	80,180	227	48.2%
2035	166,623	212	171,270	218	74,234	178	2.24	80,408	228	48.3%
2036	166,835	212	171,488	218	74,412	178	2.24	80,635	227	48.3%
2037	166,934	99	171,590	102	74,511	99	2.24	80,822	187	48.4%
2038	167,034	100	171,692	102	74,610	99	2.24	81,010	188	48.5%
2039	167,134	100	171,794	102	74,709	99	2.24	81,199	189	48.6%
2040	167,234	100	171,896	102	74,808	99	2.24	81,388	189	48.7%
2041	167,333	99	172,000	104	74,908	100	2.23	81,578	190	48.8%
Growth 2019-2028		2,918		2,999		2,944			2,360	
Growth 2019-2031		3,504		3,602		3,564			2,651	
Growth 2019-2041		5,061		5,202		4,946			4,727	

Source: Henson estimates

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

Mid-Year	Occupied Households					Shares By Unit Type				
	Singles	Semis	Rows	Apartments	Total	Singles	Semis	Rows	Apartments	Total
2016	43,130	3,385	2,860	19,825	69,200	62%	5%	4%	29%	100%
2017	43,338	3,403	2,871	19,968	69,580	62%	5%	4%	29%	100%
2018	43,547	3,421	2,882	20,112	69,962	62%	5%	4%	29%	100%
2019	43,757	3,439	2,893	20,257	70,346	62%	5%	4%	29%	100%
2020	43,968	3,457	2,904	20,403	70,732	62%	5%	4%	29%	100%
2021	44,180	3,475	2,916	20,548	71,119	62%	5%	4%	29%	100%
2022	44,344	3,486	2,923	20,639	71,392	62%	5%	4%	29%	100%
2023	44,509	3,497	2,930	20,730	71,666	62%	5%	4%	29%	100%
2024	44,674	3,508	2,937	20,822	71,941	62%	5%	4%	29%	100%
2025	44,840	3,519	2,944	20,914	72,217	62%	5%	4%	29%	100%
2026	45,006	3,531	2,951	21,007	72,495	62%	5%	4%	29%	100%
2027	45,113	3,540	2,960	21,087	72,700	62%	5%	4%	29%	100%
2028	45,221	3,549	2,969	21,167	72,906	62%	5%	4%	29%	100%
2029	45,329	3,558	2,978	21,247	73,112	62%	5%	4%	29%	100%
2030	45,437	3,567	2,987	21,328	73,319	62%	5%	4%	29%	100%
2031	45,546	3,574	2,997	21,409	73,526	62%	5%	4%	29%	100%
2032	45,631	3,579	3,003	21,489	73,702	62%	5%	4%	29%	100%
2033	45,717	3,584	3,009	21,569	73,879	62%	5%	4%	29%	100%
2034	45,802	3,589	3,015	21,650	74,056	62%	5%	4%	29%	100%
2035	45,888	3,594	3,021	21,731	74,234	62%	5%	4%	29%	100%
2036	45,973	3,601	3,026	21,812	74,412	62%	5%	4%	29%	100%
2037	46,031	3,609	3,036	21,835	74,511	62%	5%	4%	29%	100%
2038	46,089	3,617	3,046	21,858	74,610	62%	5%	4%	29%	100%
2039	46,147	3,625	3,056	21,881	74,709	62%	5%	4%	29%	100%
2040	46,205	3,633	3,066	21,904	74,808	62%	5%	4%	29%	100%
2041	46,264	3,641	3,075	21,928	74,908	62%	5%	4%	29%	100%

Source: Henson estimates

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

Mid-Year	Annual Growth in Occupied Households					Shares By Unit Type				
	Singles	Semis	Rows	Apartments	Total	Singles	Semis	Rows	Apts.	Total
2016										
2017	208	18	11	143	380	55%	5%	3%	38%	100%
2018	209	18	11	144	382	55%	5%	3%	38%	100%
2019	210	18	11	145	384	55%	5%	3%	38%	100%
2020	211	18	11	146	386	55%	5%	3%	38%	100%
2021	212	18	12	145	387	55%	5%	3%	37%	100%
2022	164	11	7	91	273	60%	4%	3%	33%	100%
2023	165	11	7	91	274	60%	4%	3%	33%	100%
2024	165	11	7	92	275	60%	4%	3%	33%	100%
2025	166	11	7	92	276	60%	4%	3%	33%	100%
2026	166	12	7	93	278	60%	4%	3%	33%	100%
2027	107	9	9	80	205	52%	4%	4%	39%	100%
2028	108	9	9	80	206	52%	4%	4%	39%	100%
2029	108	9	9	80	206	52%	4%	4%	39%	100%
2030	108	9	9	81	207	52%	4%	4%	39%	100%
2031	109	7	10	81	207	53%	3%	5%	39%	100%
2032	85	5	6	80	176	48%	3%	3%	45%	100%
2033	86	5	6	80	177	49%	3%	3%	45%	100%
2034	85	5	6	81	177	48%	3%	3%	46%	100%
2035	86	5	6	81	178	48%	3%	3%	46%	100%
2036	85	7	5	81	178	48%	4%	3%	46%	100%
2037	58	8	10	23	99	59%	8%	10%	23%	100%
2038	58	8	10	23	99	59%	8%	10%	23%	100%
2039	58	8	10	23	99	59%	8%	10%	23%	100%
2040	58	8	10	23	99	59%	8%	10%	23%	100%
2041	59	8	9	24	100	59%	8%	9%	24%	100%
Growth 2019-2028	1,674	128	87	1,055	2,944	57%	4%	3%	36%	100%
Growth 2019-2031	1,999	153	115	1,297	3,564	56%	4%	3%	36%	100%
Growth 2019-2041	2,717	220	193	1,816	4,946	55%	4%	4%	37%	100%

Source: Hemson estimates

APPENDIX A - TABLE 9
CITY OF GREATER SUDBURY
FORECAST POPULATION IN NEW HOUSEHOLDS BY UNIT TYPE

Mid-Year	Assumed Average Occupancies (PPU)				Total	Forecast Population in New Households				
	Singles	Semis	Rows	Apartments		Singles	Semis	Rows	Apartments	Total
2016	3.10	2.49	2.45	1.70						
2017	3.09	2.48	2.44	1.70						
2018	3.08	2.48	2.43	1.70						
2019	3.07	2.47	2.42	1.70	2.50	644	44	27	247	962
2020	3.06	2.46	2.42	1.70	2.50	645	44	27	248	964
2021	3.04	2.45	2.41	1.70	2.49	646	44	29	247	966
2022	3.04	2.45	2.40	1.70	2.55	498	27	17	155	697
2023	3.03	2.44	2.40	1.70	2.55	500	27	17	155	699
2024	3.03	2.44	2.39	1.70	2.54	500	27	17	157	701
2025	3.02	2.43	2.39	1.70	2.54	502	27	17	157	703
2026	3.02	2.43	2.38	1.70	2.53	501	29	17	158	705
2027	3.01	2.42	2.38	1.70	2.45	322	22	21	136	501
2028	3.01	2.42	2.38	1.70	2.45	325	22	21	136	504
2029	3.00	2.41	2.37	1.70	2.44	324	22	21	136	503
2030	3.00	2.41	2.37	1.70	2.44	324	22	21	138	505
2031	2.99	2.41	2.36	1.70	2.44	326	17	24	138	505
2032	2.99	2.40	2.36	1.70	2.37	254	12	14	136	416
2033	2.98	2.40	2.36	1.70	2.37	257	12	14	136	419
2034	2.98	2.40	2.36	1.70	2.36	253	12	14	138	417
2035	2.98	2.40	2.35	1.70	2.36	256	12	14	138	420
2036	2.97	2.39	2.35	1.70	2.35	253	17	12	138	420
2037	2.97	2.39	2.35	1.70	2.57	172	19	23	39	253
2038	2.97	2.39	2.35	1.70	2.57	172	19	23	39	253
2039	2.97	2.39	2.35	1.70	2.56	172	19	23	39	253
2040	2.97	2.39	2.34	1.70	2.56	172	19	23	39	253
2041	2.96	2.38	2.34	1.70	2.56	175	19	21	41	256
Growth 2019-2023	3.05	2.45	2.44	1.70	2.52	2,933	186	117	1,052	4,288
Growth 2019-2028	3.04	2.45	2.41	1.70	2.51	5,083	313	210	1,796	7,402
Growth 2019-2031	3.03	2.44	2.40	1.70	2.50	6,057	374	276	2,208	8,915
Growth 2019-2041	3.02	2.43	2.37	1.70	2.48	8,193	534	457	3,091	12,275

Source: Statistics Canada, 2016 Census Special Run & Hemson estimates

APPENDIX A - TABLE 10
CITY OF GREATER SUDBURY
FORECAST OF PLACE OF WORK EMPLOYMENT

Mid-Year	Major Office	Annual Growth	Population-Related	Annual Growth	Employment Land	Annual Growth	Other Rural	Annual Growth	Total For DC Study	Annual Growth	Work at Home	Annual Growth	Total w/ Work At Home	Annual Growth
2016	2,873		37,977		31,225		4,193		76,268		3,170		79,438	
2017	2,886	13	38,079	102	31,385	160	4,209	16	76,559	291	3,182	12	79,741	303
2018	2,899	13	38,181	102	31,546	161	4,225	16	76,851	292	3,194	12	80,045	304
2019	2,912	13	38,284	103	31,708	162	4,241	16	77,145	294	3,206	12	80,351	306
2020	2,925	13	38,387	103	31,870	162	4,257	16	77,439	294	3,218	12	80,657	306
2021	2,940	15	38,490	103	32,033	163	4,274	17	77,737	298	3,231	13	80,969	312
2022	2,952	12	38,561	71	32,191	158	4,288	14	77,992	255	3,242	11	81,234	265
2023	2,964	12	38,632	71	32,350	159	4,302	14	78,248	256	3,253	11	81,501	267
2024	2,976	12	38,703	71	32,509	159	4,316	14	78,504	256	3,264	11	81,768	267
2025	2,988	12	38,774	71	32,669	160	4,330	14	78,761	257	3,275	11	82,036	268
2026	3,000	12	38,846	72	32,830	161	4,345	15	79,021	260	3,284	9	82,305	269
2027	3,004	4	38,892	46	32,870	40	4,350	5	79,116	95	3,288	4	82,404	99
2028	3,008	4	38,938	46	32,910	40	4,355	5	79,211	95	3,292	4	82,503	99
2029	3,012	4	38,984	46	32,950	40	4,360	5	79,306	95	3,296	4	82,602	99
2030	3,016	4	39,030	46	32,990	40	4,365	5	79,401	95	3,300	4	82,701	99
2031	3,022	6	39,077	47	33,032	42	4,371	6	79,502	101	3,304	4	82,805	104
2032	3,032	10	39,124	47	33,187	155	4,384	13	79,727	225	3,314	10	83,041	236
2033	3,042	10	39,172	48	33,342	155	4,397	13	79,953	226	3,324	10	83,277	236
2034	3,052	10	39,220	48	33,498	156	4,410	13	80,180	227	3,334	10	83,514	237
2035	3,062	10	39,268	48	33,655	157	4,423	13	80,408	228	3,344	10	83,752	238
2036	3,074	12	39,315	47	33,812	157	4,434	11	80,635	227	3,352	8	83,987	235
2037	3,083	9	39,336	21	33,959	147	4,444	10	80,822	187	3,360	8	84,182	195
2038	3,092	9	39,357	21	34,107	148	4,454	10	81,010	188	3,368	8	84,378	196
2039	3,101	9	39,378	21	34,256	149	4,464	10	81,199	189	3,376	8	84,575	197
2040	3,110	9	39,399	21	34,405	149	4,474	10	81,388	189	3,384	8	84,772	197
2041	3,118	8	39,420	21	34,555	150	4,485	11	81,578	190	3,391	7	84,970	198
Growth 2019-2028		109		757		1,364		130		2,360		98		2,458
Growth 2019-2031		123		896		1,486		146		2,651		110		2,760
Growth 2019-2041		219		1,239		3,009		260		4,727		197		4,925

Note: Includes No Fixed Place of Work Employment

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

Employment Density	
Population-Related Weighted	540 ft ² per employee
Employment Land	1000 ft ² per employee
Major Office	290 ft ² per employee

Mid-Year	Major Office	Population Related	Employment Land	Total For DC Study
2016				
2017				
2018	3,770	55,080	161,000	219,850
2019	3,770	55,620	162,000	221,390
2020	3,770	55,620	162,000	221,390
2021	4,350	55,620	163,000	222,970
2022	3,480	38,340	158,000	199,820
2023	3,480	38,340	159,000	200,820
2024	3,480	38,340	159,000	200,820
2025	3,480	38,340	160,000	201,820
2026	3,480	38,880	161,000	203,360
2027	1,160	24,840	40,000	66,000
2028	1,160	24,840	40,000	66,000
2029	1,160	24,840	40,000	66,000
2030	1,160	24,840	40,000	66,000
2031	1,740	25,380	42,000	69,120
2032	2,900	25,380	155,000	183,280
2033	2,900	25,920	155,000	183,820
2034	2,900	25,920	156,000	184,820
2035	2,900	25,920	157,000	185,820
2036	3,480	25,380	157,000	185,860
2037	2,610	11,340	147,000	160,950
2038	2,610	11,340	148,000	161,950
2039	2,610	11,340	149,000	162,950
2040	2,610	11,340	149,000	162,950
2041	2,320	11,340	150,000	163,660
Growth 2019-2028	31,610	408,780	1,364,000	1,804,390
Growth 2019-2031	35,670	483,840	1,486,000	2,005,510
Growth 2019-2041	63,510	669,060	3,009,000	3,741,570

Note: Includes No Fixed Place of Work Employment

Appendix B

General Services Technical Appendix

Appendix B

General Services Technical Appendix Introduction And Overview

The following appendices provide the detailed analysis undertaken to establish the development charge rates for each of the general services in the City of Greater Sudbury. Nine general services have been analysed as part of the development charges study:

Appendix B.1	General Government
Appendix B.2	Library Services
Appendix B.3	Fire Services
Appendix B.4	Police Services
Appendix B.5	Public Safety
Appendix B.6	Parks and Recreation
Appendix B.7	Ambulance Services
Appendix B.8	Emergency Preparedness
Appendix B.9	Transit

Every service, with the exception of General Government and Transit, 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* (O.Reg. 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 City staff with input from Hemson. 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 City’s existing infrastructure that may be available to partially meet the future servicing requirements. If Council has expressed its intent before or at the time the capacity was created to recoup the cost of providing the capacity from new development, it is considered “committed excess capacity” under the DCA, and the associated capital cost is eligible for recovery. 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 City 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 general services considered in this appendix with the exception of Fire Services, Police Services, Public Safety, and Transit. 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 general services, with the exception of Library Services and Parks and Recreation, the development-related costs have been apportioned as 76 per cent residential and 24 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 Services 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 foot 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, therefore, 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 foot (of GFA) non-residential development charges where applicable.

Appendix B.1

General Government

Appendix B.1

General Government

The DCA allows the cost of development-related studies and other general government functions to be included in the calculation of the development charges as long as they are permitted under the legislation. Consistent with s.5(1)7 of the DCA, the eligible development-related net capital cost for the provision of studies and permitted general government expenditures is reduced by 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 ongoing and future Official Plan and Zoning By-law updates, Development Charges Background Studies, and Population Projection studies, among others. The capital program also includes the introduction of the City's new Land and Planning Software.

The total gross cost of the General Government capital program is approximately \$5.12 million. Grants are anticipated to cover \$100,000 of the costs associated with the Downtown Master Plan Update, and this amount has been deducted from the capital program. A total of \$4.19 million related to the planning studies is considered to benefit existing development. Finally, the legislated ten per cent reduction amounts to \$83,000.

After accounting for these amounts, \$747,000 remains in development-related costs. However, \$95,749 in DCs has already been collected and applied to the ongoing Official Plan Update and Development Charges Background Study, and a further \$23,139 notional reserve fund balance exists, including notional revenue losses associated with the phase-in of the current DC rates over the 2014 to 2018 period. The remaining \$628,112 is brought forward to the DC calculation.

This amount is allocated 76 per cent (\$477,365) to the residential sector and 24 per cent (\$150,747) to the non-residential sector based on shares of ten-year growth in population and employment. The resulting unadjusted per

capita residential charge is \$64.49 before cash flow adjustments. The non-residential unadjusted charge is \$0.08 per square foot.

Table 2 Cash Flow Analysis

After cash flow consideration, the residential charge increases to \$68 per capita and the non-residential charge increases to \$0.09 per square foot.

GENERAL GOVERNMENT SUMMARY					
2019-2028		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.ft.	\$/capita	\$/sq.ft.
\$5,122,000	\$628,112	\$64.49	\$0.08	\$68	\$0.09

**APPENDIX B.1
TABLE 1**

**CITY OF GREATER SUDBURY
DEVELOPMENT-RELATED CAPITAL PROGRAM
GENERAL GOVERNMENT**

Project Description	Timing		Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	BTE %	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
	Start	Finish					Replacement & BTE Shares	10% Reduction		Prior DCs	Available DC Reserves	2019 - 2028
1.0 GENERAL GOVERNMENT												
1.1 Development-Related Studies												
1.1.1 Zoning By-Law Update	2021	2021	\$ 25,000	\$ -	\$ 25,000	50.0%	\$ 12,500	\$ 1,250	\$ 11,250	\$ -	\$ -	\$ 11,250
1.1.2 Zoning By-Law Update	2028	2028	\$ 25,000	\$ -	\$ 25,000	50.0%	\$ 12,500	\$ 1,250	\$ 11,250	\$ -	\$ -	\$ 11,250
1.1.3 Official Plan Update	2013	2019	\$ 275,000	\$ -	\$ 275,000	50.0%	\$ 137,500	\$ 13,750	\$ 123,750	\$ 47,778	\$ 13,139	\$ 62,833
1.1.4 Official Plan Update	2023	2028	\$ 235,000	\$ -	\$ 235,000	50.0%	\$ 117,500	\$ 11,750	\$ 105,750	\$ -	\$ -	\$ 105,750
1.1.5 Development Charges Study	2018	2019	\$ 81,000	\$ -	\$ 81,000	0.0%	\$ -	\$ 8,100	\$ 72,900	\$ 47,971	\$ -	\$ 24,929
1.1.6 Development Charges Study	2023	2024	\$ 81,000	\$ -	\$ 81,000	0.0%	\$ -	\$ 8,100	\$ 72,900	\$ -	\$ -	\$ 72,900
1.1.7 Development Guidelines Document	2019	2022	\$ 200,000	\$ -	\$ 200,000	0.0%	\$ -	\$ 20,000	\$ 180,000	\$ -	\$ -	\$ 180,000
1.1.8 Downtown Master Plan Update	2022	2022	\$ 150,000	\$ 100,000	\$ 50,000	97.8%	\$ 48,900	\$ 110	\$ 990	\$ -	\$ -	\$ 990
1.1.9 Housing Background Study	2020	2021	\$ 90,000	\$ -	\$ 90,000	97.8%	\$ 88,020	\$ 198	\$ 1,782	\$ -	\$ -	\$ 1,782
1.1.10 Population Projection Forecast	2018	2019	\$ 50,000	\$ -	\$ 50,000	0.0%	\$ -	\$ 5,000	\$ 45,000	\$ -	\$ 10,000	\$ 35,000
1.1.11 Population Projection Forecast	2022	2023	\$ 50,000	\$ -	\$ 50,000	0.0%	\$ -	\$ 5,000	\$ 45,000	\$ -	\$ -	\$ 45,000
1.1.12 Land and Planning Software	2019	2022	\$ 3,860,000	\$ -	\$ 3,860,000	97.8%	\$ 3,775,080	\$ 8,492	\$ 76,428	\$ -	\$ -	\$ 76,428
Subtotal Development-Related Studies			\$ 5,122,000	\$ 100,000	\$ 5,022,000		\$ 4,192,000	\$ 83,000	\$ 747,000	\$ 95,749	\$ 23,139	\$ 628,112
TOTAL GENERAL GOVERNMENT			\$ 5,122,000	\$ 100,000	\$ 5,022,000		\$ 4,192,000	\$ 83,000	\$ 747,000	\$ 95,749	\$ 23,139	\$ 628,112

Residential Development Charge Calculation

Residential Share of 2019 - 2028 DC Eligible Costs

10-Year Growth in Population in New Units

Unadjusted Development Charge Per Capita

Non-Residential Development Charge Calculation

Non-Residential Share of 2019 - 2028 DC Eligible Costs

10-Year Growth in Square Feet

Unadjusted Development Charge Per Square Foot

Notional Reserve Fund Balance

Balance as at December 31, 2018

Revenue Losses

HEMSON

**APPENDIX B.1
TABLE 2**

**CITY OF GREATER SUDBURY
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	\$0.0	(\$78.7)	(\$66.3)	(\$61.7)	(\$86.0)	(\$102.6)	(\$100.9)	(\$67.0)	(\$30.3)	(\$7.3)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$142.0	\$49.4	\$57.9	\$66.6	\$58.2	\$41.1	\$13.4	\$13.4	\$13.4	\$21.9	\$477.4
- General Government: Inflated	\$142.0	\$50.4	\$60.3	\$70.6	\$63.0	\$45.4	\$15.1	\$15.4	\$15.7	\$26.2	\$504.1
NEW RESIDENTIAL DEVELOPMENT	962	964	966	697	699	701	703	705	501	504	7,402
- Population Growth in New Units											
REVENUE	\$65.4	\$66.9	\$68.3	\$50.3	\$51.5	\$52.6	\$53.8	\$55.1	\$39.9	\$41.0	\$544.8
- DC Receipts: Inflated											
INTEREST	\$0.0	(\$4.3)	(\$3.6)	(\$3.4)	(\$4.7)	(\$5.6)	(\$5.5)	(\$3.7)	(\$1.7)	(\$0.4)	(\$33.1)
- Interest on Opening Balance	(\$2.1)	\$0.3	\$0.1	(\$0.6)	(\$0.3)	\$0.1	\$0.7	\$0.7	\$0.4	\$0.3	(\$0.4)
- Interest on In-year Transactions											
TOTAL REVENUE	\$63.3	\$62.8	\$64.8	\$46.3	\$46.4	\$47.1	\$49.0	\$52.1	\$38.7	\$40.8	\$511.3
CLOSING CASH BALANCE	(\$78.7)	(\$66.3)	(\$61.7)	(\$86.0)	(\$102.6)	(\$100.9)	(\$67.0)	(\$30.3)	(\$7.3)	\$7.2	

2019 Adjusted Charge Per Capita

\$68

Allocation of Capital Program

Residential Sector 76%
Non-Residential Sector 24%

Rates for 2019

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

APPENDIX B.1
TABLE 2

CITY OF GREATER SUDBURY
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	\$0.0	(\$25.6)	(\$22.5)	(\$21.9)	(\$26.4)	(\$28.2)	(\$24.0)	(\$9.4)	\$6.5	\$8.8	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$44.8	\$15.6	\$18.3	\$21.0	\$18.4	\$13.0	\$4.2	\$4.2	\$4.2	\$6.9	\$150.7
- General Government: Inflated	\$44.8	\$15.9	\$19.0	\$22.3	\$19.9	\$14.3	\$4.8	\$4.9	\$5.0	\$8.3	\$159.2
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square feet	221,390	221,390	222,970	199,820	200,820	200,820	201,820	203,360	66,000	66,000	1,804,390
REVENUE											
- DC Receipts: Inflated	\$19.9	\$20.3	\$20.9	\$19.1	\$19.6	\$20.0	\$20.5	\$21.0	\$7.0	\$7.1	\$175.3
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1.4)	(\$1.2)	(\$1.2)	(\$1.5)	(\$1.6)	(\$1.3)	(\$0.5)	\$0.2	\$0.3	(\$8.2)
- Interest on In-year Transactions	(\$0.7)	\$0.1	\$0.0	(\$0.1)	(\$0.0)	\$0.1	\$0.3	\$0.3	\$0.0	(\$0.0)	(\$0.0)
TOTAL REVENUE	\$19.2	\$19.0	\$19.7	\$17.8	\$18.1	\$18.5	\$19.4	\$20.8	\$7.2	\$7.4	\$167.1
CLOSING CASH BALANCE	(\$25.6)	(\$22.5)	(\$21.9)	(\$26.4)	(\$28.2)	(\$24.0)	(\$9.4)	\$6.5	\$8.8	\$7.9	

2019 Adjusted Charge Per Square Foot

\$0.09

Allocation of Capital Program

Residential Sector 76%
Non-Residential Sector 24%

Rates for 2019

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

Appendix B.2

Library Services

Appendix B.2

Library Services

The City of Greater Sudbury provides library services from 13 branch locations. Each branch offers a variety of books, periodicals, multimedia and other electronic resource materials for the community's use.

Table 1 Historical Service Levels

The ten-year historic inventory of capital assets for Library Services includes 169,100 square feet of building space, valued at \$44.05 million. As the South Branch Library, constructed in 2012, continues to be recovered for through development charges, the inventory displayed in Table 1 accounts for this portion as excess capacity and it is removed from the funding envelope calculation. Land associated with these buildings totals 30.23 acres and is valued at \$2.21 million.

The inventory also includes collections materials, valued at a total of \$11.81 million. Machinery and equipment such as printers, projectors, furniture, and software, is valued at \$4.44 million. Finally, Library Services maintains three vehicles at a total value of \$64,100.

The full replacement value of the inventory of capital assets for Library Services amounts to \$62.57 million. The ten-year average historical service level is \$373.71 per capita. This average historical service level multiplied by the ten-year forecast growth in population results in a ten-year maximum allowable funding envelope of \$1.09 million. After accounting for the ten per cent legislated discount, the discounted maximum allowable funding envelope is \$981,438.

Table 2 2019-2028 Development-Related Capital Program & Calculation Of The Unadjusted Development Charges

The 2019 to 2028 Library Services development-related capital program includes continued recoveries for the completed South Branch Expansion as well as the Mackenzie Library Study and Main Library Business Plan. The gross costs associated with these projects amount to \$6.01 million. A further \$11.79 million is associated with collections materials acquisitions, including some recoveries for materials acquired over the 2014 to 2018 period.

The total gross cost of the Library Services capital program is \$17.80 million. However, \$138,888 in grants has been applied to the South Branch Expansion project, leaving a net municipal cost of \$17.66 million. Of this amount, a \$13.69 million share has been attributed to replacements or benefit to existing development. A further \$396,588 is deducted due to the ten per cent legislated discount. This leaves \$3.57 million in development-related costs.

Of the development-related costs, \$890,377 has already been collected and applied to the South Branch Expansion projects. Further, a notional reserve fund balance of \$89,127 is also applied to the South Branch Expansion. Finally, the share of the Library Services capital program beyond the funding envelope, \$1.61 million, is deemed to benefit growth occurring beyond 2028.

The resulting development-related net capital cost of \$981,438 is allocated entirely against residential development, or the population in new units (7,402), anticipated over the 2019 to 2028 period. This results in an unadjusted residential development charge of \$132.59 per capita.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential calculated charge increases to \$150 per capita. This is a reflection of the front-ended nature of the capital program.

LIBRARY SERVICES SUMMARY						
10-Year Hist.	2019-2028		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
\$/capita	Total	Net DC Recoverable	\$/capita	\$/sq.ft.	\$/capita	\$/sq.ft.
\$373.71	\$17,796,994	\$981,438	\$132.59	\$0.00	\$150	\$0.00

APPENDIX B.2
TABLE 1

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
LIBRARY SERVICES

BUILDINGS	# of Square Feet										UNIT COST (\$/sq. ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Azilda Library (excluding museum of 500 sq ft)	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	\$179
Capreol Citizen Service Centre and Library	14,751	14,751	14,751	14,751	14,751	14,751	14,751	14,751	14,751	14,751	\$244
Chelmsford Citizen Library	9,255	9,255	9,255	9,255	9,255	9,255	9,255	9,255	9,255	9,255	\$319
Coniston Library	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	\$263
Copper Cliff Library	4,100	4,100	4,100	4,100	4,100	4,100	4,100	4,100	4,100	4,100	\$293
Dowling Citizen Service Centre and Library	4,550	4,550	4,550	4,550	4,550	4,550	4,550	4,550	4,550	4,550	\$213
Garson Citizen Service Centre and Library	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	\$234
Lively (Walden) Citizen Service Centre and Library	15,576	15,576	15,576	15,576	15,576	15,576	15,576	15,576	15,576	15,576	\$293
Mackenzie Street Library	37,103	37,103	37,103	37,103	37,103	37,103	37,103	37,103	37,103	37,103	\$275
New Sudbury Library	8,953	8,953	8,953	8,953	8,953	8,953	8,953	8,953	8,953	8,953	\$319
South Library	-	-	-	6,375	17,000	17,000	17,000	17,000	17,000	17,000	\$338
Excess Capacity					(6,754)	(6,754)	(6,754)	(6,754)	(6,754)	(6,754)	\$338
South Library (temporary location)	6,000	6,000	6,000	3,750	-	-	-	-	-	-	\$213
Valley East Citizen Service Centre and Library	10,645	10,645	10,645	10,645	10,645	10,645	10,645	10,645	10,645	10,645	\$260
Onaping Community Centre & Pool & Library	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300	\$199
Archives Building (in Falconbridge)	-	-	-	20,000	40,000	40,000	40,000	40,000	40,000	40,000	\$213
Total (sq.ft.)	124,835	124,835	124,835	148,960	169,081	169,081	169,081	169,081	169,081	169,081	
Total (\$000)	\$33,349.8	\$33,349.8	\$33,349.8	\$39,282.4	\$44,049.8	\$44,049.8	\$44,049.8	\$44,049.8	\$44,049.8	\$44,049.8	

LAND	# of Acres										UNIT COST (\$/acre)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Azilda Library	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	\$9,719
Capreol Citizen Service Centre and Library	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	\$42,502
Chelmsford Citizen Library	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	\$67,016
Coniston Library	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	\$158,177
Copper Cliff Library	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	\$187,919
Dowling Citizen Service Centre and Library	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	\$22,119
Garson Citizen Service Centre and Library	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	\$104,090
Lively (Walden) Citizen Service Centre and Library	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	\$9,050
Mackenzie Street Library	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	\$172,669
New Sudbury Library	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	\$1,021,915
South Library	0.33	0.33	0.33	1.06	1.06	1.06	1.06	1.06	1.06	1.06	\$649,934
Valley East Citizen Service Centre and Library	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	\$18,457
Onaping Community Centre & Pool	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	\$67,251
Archives Building (in Falconbridge)	-	-	-	3.88	3.88	3.88	3.88	3.88	3.88	3.88	\$8,516
Total (acres)	25.62	25.62	25.62	30.23	30.23	30.23	30.23	30.23	30.23	30.23	
Total (\$000)	\$1,697.8	\$1,697.8	\$1,697.8	\$2,205.3	\$2,207.3	\$2,207.3	\$2,207.3	\$2,207.3	\$2,207.3	\$2,207.3	

APPENDIX B.2
TABLE 1

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
LIBRARY SERVICES

MATERIALS	# of Materials										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Material Inventory	463,699	472,910	471,585	445,693	445,064	421,973	407,946	407,804	339,770	339,770	\$21
Electronic Resources	128,746	119,444	117,000	128,222	128,222	128,222	127,000	128,222	135,286	135,286	\$35
Total (#)	592,445	592,354	588,585	573,915	573,286	550,195	534,946	536,026	475,056	475,056	
Total (\$000)	\$14,159.4	\$14,025.6	\$13,912.5	\$13,766.2	\$13,753.1	\$13,272.4	\$12,937.6	\$12,977.4	\$11,808.3	\$11,808.3	

MACHINERY & EQUIPMENT	# of Machinery & Equipment										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Microform reader printers	7	7	7	7	7	7	7	7	7	7	\$14,006
Projectors - per branch	13	13	13	13	13	13	13	13	13	13	\$2,778
Millenium (Catalogue) Program	1	1	1	1	1	1	1	1	1	1	\$722,682
Furniture, Fixtures and Electronics - per branch	13	13	13	13	13	13	13	13	13	13	\$266,499
Library Booking Online Software	1	1	1	1	1	1	1	1	1	1	\$24,365
Sun Server for Innovative Software	1	1	1	1	1	1	1	1	1	1	\$43,440
Greater Sudbury Library website	1	1	1	1	1	1	1	1	1	1	\$52,045
Total (#)	37	37	37	37	37	37	37	37	37	37	
Total (\$000)	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2	

VEHICLES	# of Vehicles										UNIT COST (\$/vehicle)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Car	1	1	1	1	1	2	2	2	2	2	\$21,044
Truck	1	1	1	1	1	1	1	1	1	1	\$21,964
Van	1	1	1	1	1	-	-	-	-	-	\$24,586
Total (#)	3	3	3	3	3	3	3	3	3	3	
Total (\$000)	\$67.6	\$67.6	\$67.6	\$67.6	\$67.6	\$64.1	\$64.1	\$64.1	\$64.1	\$64.1	

APPENDIX B.2
TABLE 1

CITY OF GREATER SUDBURY
CALCULATION OF SERVICE LEVELS
LIBRARY SERVICES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historic Population	159,389	159,884	160,380	160,628	160,877	161,126	161,375	161,625	161,948	162,272
INVENTORY SUMMARY (\$000)										
Buildings	\$33,349.8	\$33,349.8	\$33,349.8	\$39,282.4	\$44,049.8	\$44,049.8	\$44,049.8	\$44,049.8	\$44,049.8	\$44,049.8
Land	\$1,697.8	\$1,697.8	\$1,697.8	\$2,205.3	\$2,207.3	\$2,207.3	\$2,207.3	\$2,207.3	\$2,207.3	\$2,207.3
Materials	\$14,159.4	\$14,025.6	\$13,912.5	\$13,766.2	\$13,753.1	\$13,272.4	\$12,937.6	\$12,977.4	\$11,808.3	\$11,808.3
Machinery & Equipment	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2	\$4,441.2
Vehicles	\$67.6	\$67.6	\$67.6	\$67.6	\$67.6	\$64.1	\$64.1	\$64.1	\$64.1	\$64.1
Total (\$000)	\$53,715.7	\$53,581.9	\$53,468.8	\$59,762.7	\$64,519.0	\$64,034.7	\$63,699.9	\$63,739.7	\$62,570.6	\$62,570.6
SERVICE LEVEL (\$/Capita)										
Buildings	\$209.24	\$208.59	\$207.94	\$244.56	\$273.81	\$273.39	\$272.97	\$272.54	\$272.00	\$271.46
Land	\$10.65	\$10.62	\$10.59	\$13.73	\$13.72	\$13.70	\$13.68	\$13.66	\$13.63	\$13.60
Materials	\$88.84	\$87.72	\$86.75	\$85.70	\$85.49	\$82.37	\$80.17	\$80.29	\$72.91	\$72.77
Machinery & Equipment	\$27.86	\$27.78	\$27.69	\$27.65	\$27.61	\$27.56	\$27.52	\$27.48	\$27.42	\$27.37
Vehicles	\$0.42	\$0.42	\$0.42	\$0.42	\$0.42	\$0.40	\$0.40	\$0.40	\$0.40	\$0.39
Total (\$/capita)	\$337.01	\$335.13	\$333.39	\$372.06	\$401.05	\$397.42	\$394.73	\$394.37	\$386.36	\$385.59
										Average Service Level
										\$250.65
										\$12.76
										\$82.30
										\$27.59
										\$0.41
										\$373.71

CITY OF GREATER SUDBURY
CALCULATION OF MAXIMUM ALLOWABLE
LIBRARY SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level (2009-2018)	\$373.71
Population Growth (2019-2028)	2.918
Maximum Allowable Funding Envelope	\$1,090,487
Less Legislated 10% Discount	\$109,049
Discounted Maximum Allowable Funding Envelope	\$981,438

**APPENDIX B.2
TABLE 2**

**CITY OF GREATER SUDBURY
DEVELOPMENT-RELATED CAPITAL PROGRAM
LIBRARY SERVICES**

Project Description	Timing		Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	BTE %	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
	Start	Finish					Replacement & BTE Shares	10% Reduction		Prior DCs	Available DC Reserves	2019 - 2028
2.0 LIBRARY SERVICES												
2.1 Buildings, Land & Furnishings												
2.1.1 South Branch Expansion	2009	2014	\$ 5,713,696	\$ 138,888	\$ 5,574,808	35.0%	\$ 1,951,183	\$ 362,363	\$ 3,261,263	\$ 890,377	\$ 89,127	\$ 748,955
2.1.2 Mackenzie Library Study	2013	2015	\$ 50,625	\$ -	\$ 50,625	56.0%	\$ 28,350	\$ 2,228	\$ 20,048	\$ -	\$ -	\$ 10,024
2.1.3 Plan/Study/Consultant	2018	2018	\$ 245,000	\$ -	\$ 245,000	56.0%	\$ 137,200	\$ 10,780	\$ 97,020	\$ -	\$ -	\$ 48,510
Subtotal Buildings, Land & Furnishings			\$ 6,009,321	\$ 138,888	\$ 5,870,433		\$ 2,116,733	\$ 375,370	\$ 3,378,330	\$ 890,377	\$ 89,127	\$ 807,489
2.2 Material Acquisitions												
2.2.1 Circulation Materials Collection	2014	2028	\$ 10,387,608	\$ -	\$ 10,387,608	98.2%	\$ 10,200,631	\$ 18,698	\$ 168,279	\$ -	\$ -	\$ 168,279
2.2.2 Electronic Materials	2019	2028	\$ 1,400,065	\$ -	\$ 1,400,065	98.2%	\$ 1,374,864	\$ 2,520	\$ 22,681	\$ -	\$ -	\$ 5,670
Subtotal Material Acquisitions			\$ 11,787,673	\$ -	\$ 11,787,673		\$ 11,575,495	\$ 21,218	\$ 190,960	\$ -	\$ -	\$ 173,950
TOTAL LIBRARY SERVICES			\$ 17,796,994	\$ 138,888	\$ 17,658,106		\$ 13,692,228	\$ 396,588	\$ 3,569,290	\$ 890,377	\$ 89,127	\$ 981,438

Residential Development Charge Calculation

Residential Share of 2019 - 2028 DC Eligible Costs	100%	\$981,438
10-Year Growth in Population in New Units		7,402
Unadjusted Development Charge Per Capita		\$132.59

Non-Residential Development Charge Calculation

Non-Residential Share of 2019 - 2028 DC Eligible Costs	0%	\$0
10-Year Growth in Square Feet		1,804,390
Unadjusted Development Charge Per Square Foot		\$0.00

2019 - 2028 Net Funding Envelope

Notional Reserve Fund Balance

Balance as at December 31, 2018
Revenue Losses

Total

\$981,438

\$0

\$89,127

\$89,127

APPENDIX B.2
TABLE 3

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

LIBRARY SERVICES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$751.2)	(\$654.6)	(\$549.7)	(\$479.8)	(\$403.7)	(\$321.0)	(\$231.3)	(\$134.2)	(\$66.1)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$875.4	\$11.8	\$11.8	\$11.8	\$11.8	\$11.8	\$11.8	\$11.8	\$11.8	\$11.8	\$981.4
- General Government: Inflated	\$875.4	\$12.0	\$12.3	\$12.5	\$12.8	\$13.0	\$13.3	\$13.5	\$13.8	\$14.1	\$992.6
NEW RESIDENTIAL DEVELOPMENT	962	964	966	697	699	701	703	705	501	504	7,402
- Population Growth in New Units											
REVENUE	\$144.3	\$147.5	\$150.8	\$110.9	\$113.5	\$116.1	\$118.8	\$121.5	\$88.1	\$90.3	\$1,201.7
- DC Receipts: Inflated											
INTEREST	\$0.0	(\$41.3)	(\$36.0)	(\$30.2)	(\$26.4)	(\$22.2)	(\$17.7)	(\$12.7)	(\$7.4)	(\$3.6)	(\$197.5)
- Interest on Opening Balance	(\$20.1)	\$2.4	\$2.4	\$1.7	\$1.8	\$1.8	\$1.8	\$1.9	\$1.3	\$1.3	(\$3.7)
- Interest on In-year Transactions											
TOTAL REVENUE	\$124.2	\$108.5	\$117.2	\$82.4	\$88.9	\$95.7	\$102.9	\$110.6	\$82.0	\$88.0	\$1,000.5
CLOSING CASH BALANCE	(\$751.2)	(\$654.6)	(\$549.7)	(\$479.8)	(\$403.7)	(\$321.0)	(\$231.3)	(\$134.2)	(\$66.1)	\$7.9	

2019 Adjusted Charge Per Capita

\$150

Allocation of Capital Program

Residential Sector

100%

Non-Residential Sector

0%

Rates for 2019

Inflation Rate

2.0%

Interest Rate on Positive Balances

3.5%

Interest Rate on Negative Balances

5.5%

Appendix B.3

Fire Services

Appendix B.3

Fire Services

The Fire Services Division is comprised of 108 career and 350 volunteer firefighters dedicated to delivering fire protection services in the City of Greater Sudbury.

Table 1 Historical Service Levels

The Fire Services inventory of capital assets includes 96,700 square feet of fire station and related building space, valued at \$33.56 million. The 23.01 acres of land associated with the buildings is valued at \$1.62 million. The division currently operates 83 vehicles worth \$30.27 million. Fire Services machinery and equipment is valued at \$12.08 million.

The full replacement value of the 2018 inventory of capital assets for Fire Services is \$77.52 million, and the average historical service level over 10 years is \$331.15 per population and employment. The historical service level multiplied by the forecast ten-year population and employment growth results in a ten-year maximum allowable funding envelope of approximately \$1.75 million.

Table 2 2019-2028 Development-Related Capital Program & Calculation Of The Unadjusted Development Charges

The 2019-2028 development-related capital program for Fire Services provides for a Station Redevelopment project as well as a Fire Training Centre, at a total cost of \$5.86 million. It also includes recoveries for training vehicles (\$42,500) and various equipment (\$707,332).

The total ten-year development-related capital program for Fire Services is approximately \$6.61 million. No senior government grants or subsidies are anticipated to offset the cost of the program. However, \$5.15 million is deemed to benefit existing development, leaving \$1.46 million in development-related costs.

The notional reserve fund balance of \$1.32 million is first applied to the development-related costs. The remaining amount of \$141,569 is carried forward to the development charges calculation. This amount is allocated 76

per cent to residential development and 24 per cent to non-residential development based on shares of forecasted population and employment. This yields unadjusted development charges rate of \$14.54 per capita and \$0.02 per square foot.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential charge increases slightly to \$15 per capita and the non-residential charge remains at \$0.02 per square foot.

FIRE SERVICES SUMMARY						
10-Year Hist.	2019-2028		Unadjusted		Adjusted	
Service Level	Development-Related	Capital Program	Development Charge		Development Charge	
\$/pop & emp	Total	Net DC Recoverable	\$/capita	\$/sq.ft.	\$/capita	\$/sq.ft.
\$331.15	\$6,610,332	\$141,569	\$14.54	\$0.02	\$15	\$0.02

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

APPENDIX B.3
TABLE 1

BUILDINGS	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Capreol Fire Station	8,400	8,400	8,400	8,400	8,400	8,400	8,400	8,400	8,400	8,400		\$350
Val Caron Station	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760		\$350
Black Lake Rd (Waters)	3,330	3,330	3,330	3,330	3,330	3,330	3,330	3,330	3,330	3,330		\$350
Coniston Fire Station	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200		\$350
Copper Cliff Fire Station	3,790	3,790	3,790	3,790	3,790	3,790	3,790	3,790	3,790	3,790		\$350
Dowling Fire Station	4,516	4,516	4,516	4,516	4,516	4,516	4,516	4,516	4,516	4,516		\$350
Falconbridge Fire Station	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200		\$350
Fireman Training - Gazebo	966	966	966	966	966	966	966	966	966	966		\$53
Nickel Centre (Garson) Fire Station	4,808	4,808	4,808	4,808	4,808	4,808	4,808	4,808	4,808	4,808		\$350
Hammer Fire Station	1,931	1,932	1,933	1,934	1,935	1,935	1,935	1,935	1,935	1,935		\$350
Leon Avenue Fire Station	5,644	5,644	5,644	5,644	5,644	5,644	5,644	5,644	5,644	5,644		\$350
Levack Fire Station	2,791	2,791	2,791	2,791	2,791	2,791	2,791	2,791	2,791	2,791		\$350
Lively Fire Station	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166		\$350
Long Lake Road Fire Station	4,695	4,695	4,695	4,695	4,695	4,695	4,695	4,695	4,695	4,695		\$350
Red Deer Lake Fire Station	1,650	1,650	1,650	1,650	1,650	1,513	-	-	-	-		\$350
Red Deer Lake Fire Station - Storage	96	96	96	96	96	88	-	-	-	-		\$71
Second Avenue Fire Station	5,794	5,794	5,794	5,794	5,794	5,794	5,794	5,794	5,794	5,794		\$350
Skead Fire Station	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200		\$350
Val Therese Fire Station	5,087	5,087	5,087	5,087	5,087	5,087	5,087	5,087	5,087	5,087		\$350
Vermillion Lake Fire Station	1,620	1,620	1,620	1,620	1,620	1,620	1,620	1,620	1,620	1,620		\$350
Wahnapiitae Fire Station	2,080	2,080	2,080	2,080	2,080	2,080	2,080	2,080	2,080	2,080		\$350
Whitefish Fire Station	2,320	2,320	2,320	2,320	2,320	2,320	2,320	2,320	2,320	2,320		\$350
Chelmsford Fire and EMS Station	5,121	5,121	5,121	5,121	5,121	5,121	5,121	5,121	5,121	5,121		\$350
Van Home Fire Station	16,277	16,277	16,277	16,277	16,277	16,277	16,277	16,277	16,277	16,277		\$350
Total (sq. ft.)	98,442	98,443	98,444	98,445	98,446	98,301	96,700	96,700	96,700	96,700		
Total (\$000)	\$34,140.6	\$34,141.0	\$34,141.3	\$34,141.7	\$34,142.0	\$34,093.3	\$33,557.7	\$33,557.7	\$33,557.7	\$33,557.7		

APPENDIX B.3
TABLE 1

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

LAND	# of Acres										UNIT COST (\$/acre)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Capreol Fire Station	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	\$18,462
Val Caron Station	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	\$112,575
Black Lake Rd (Waters)	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	\$18,462
Chelmsford Fire and EMS Station	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	\$122,241
Coniston Fire Station	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	\$45,036
Copper Cliff Fire Station	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	\$261,950
Dowling Fire Station	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	\$2,707
Falconbridge Fire Station	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	\$115,590
Nickel Centre (Garson) Fire Station	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	\$141,532
Hammer Fire Station	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	\$137,618
Leon Avenue Fire Station	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	\$369,057
Levack Fire Station	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	\$30,029
Lively Fire Station	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	\$14,802
Long Lake Road Fire Station	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	\$243,945
Second Avenue Station	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	\$76,926
Skead Fire Station	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$14,770
Val Therese Fire Station	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	\$10,026
Van Horne Fire Station	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	\$804,195
Vermillion Lake Fire Station	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	\$84,303
Wahnapiatae Fire Station	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	\$48,256
Whitefish Fire Station	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	\$27,693
Total (acres)	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	
Total (\$000)	\$1,615.2	\$1,615.2	\$1,615.2	\$1,615.2	\$1,616.1	\$1,616.1	\$1,616.1	\$1,616.1	\$1,616.1	\$1,616.1	

APPENDIX B.3
TABLE 1

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

VEHICLES (# at all stations & divisions)	# of Vehicles										UNIT COST (\$/vehicle)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Commercial Pumper	16	16	16	16	16	16	16	15	15	15	\$450,000
Custom Pumper	10	10	10	10	10	10	10	12	12	12	\$675,000
ERV	3	3	3	3	3	3	3	8	8	8	\$233,750
Rescue - Heavy	6	6	6	5	5	5	5	1	1	1	\$306,000
Rescue - Light	5	5	5	5	5	5	5	-	-	-	\$223,125
Squirt Trucks	1	1	1	1	1	1	1	-	-	-	\$637,500
Support Vehicles	3	3	4	6	6	6	6	11	11	11	\$167,242
Tankers	10	10	10	10	10	10	10	9	9	9	\$350,000
Aerial Truck (100FT)	2	2	2	2	2	2	2	1	1	1	\$1,700,000
Aerial Truck (75FT)	3	3	3	3	3	3	3	3	3	3	\$1,400,000
Bush Trucks	11	11	11	11	11	11	11	11	11	11	\$200,000
Boats, Trailers, Motors, Quads & Zodiacs	13	13	13	13	13	13	13	12	12	12	\$12,500
Total (#)	83	83	84	85	85	85	85	83	83	83	
Total (\$000)	\$32,204.6	\$32,204.6	\$32,371.8	\$32,400.3	\$32,400.3	\$32,400.3	\$32,400.3	\$30,265.7	\$30,265.7	\$30,265.7	

APPENDIX B.3
TABLE 1

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

MACHINERY & EQUIPMENT (excluding computers)	# of Machinery & Equipment										UNIT COST (\$/unit)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Bunker Gear	536	536	536	536	536	536	536	536	536	536	536	\$3,200
Hoses (per roll)	250	250	250	250	250	250	250	250	250	250	250	\$557
Mobile Radios	132	132	132	132	132	132	132	132	132	132	132	\$12,000
Mobile Repeaters	39	39	39	39	39	39	39	39	39	39	39	\$18,000
Nozzles	206	206	206	206	206	206	206	206	206	206	206	\$1,109
Pagers	450	450	450	450	450	450	450	450	450	450	450	\$800
Portable Radios	225	225	225	225	225	225	225	225	225	225	225	\$8,000
SCBA Compressor	6	6	6	6	6	6	6	6	6	6	6	\$50,081
SCBA Cylinders	458	458	458	458	458	458	458	458	458	458	458	\$838
SCBA Face Piece	255	255	255	255	255	255	255	255	255	255	255	\$447
SCBA Fill Station	6	6	6	6	6	6	6	6	6	6	6	\$22,299
SCBA Harness & Regulator	186	186	186	186	186	186	186	186	186	186	186	\$8,363
Station Generator	6	6	6	6	6	6	6	6	6	6	6	\$65,000
Thermal Imaging Camera	8	8	8	8	8	8	8	8	8	8	8	\$10,300
Vehicle Extraction Tool (Jaws of Life)	8	8	8	8	8	8	8	8	8	8	8	\$33,448
Water Rescue Suits	30	30	30	30	30	30	30	30	30	30	30	\$1,672
AED Units	10	10	10	10	10	10	10	10	10	10	10	\$2,453
Cascade System	1	1	1	1	1	1	1	1	1	1	1	\$149,490
Commercial Dryer	3	3	3	3	3	3	3	3	3	3	3	\$8,362
Commercial Washer	3	3	3	3	3	3	3	3	3	3	3	\$13,379
Fire Extinguishers	135	135	135	135	135	135	135	135	135	135	135	\$279
Gas Fired Burner Simulator System	1	1	1	1	1	1	1	1	1	1	1	\$202,021
Gas Monitors	29	29	29	29	29	29	29	29	29	29	29	\$412
Hazmat Decontamination Tent	1	1	1	1	1	1	1	1	1	1	1	\$50,045
Knox Box	8	8	8	8	8	8	8	8	8	8	8	\$2,063
Ladders	97	97	97	97	97	97	97	97	97	97	97	\$1,366
Portable Fire Pumps	10	10	10	10	10	10	10	10	10	10	10	\$5,352
Portable Generator	26	26	26	26	26	26	26	26	26	26	26	\$669
PPV Fan	26	26	26	26	26	26	26	26	26	26	26	\$2,509
Rescue Rope	71	71	71	71	71	71	71	71	71	71	71	\$570
Residential Dryer	6	6	6	6	6	6	6	6	6	6	6	\$669
Residential Washer	6	6	6	6	6	6	6	6	6	6	6	\$892
Sets of Vetter Bags (3 per set)	4	4	4	4	4	4	4	4	4	4	4	\$8,920
Stream Light Hand Lamp	190	190	190	190	190	190	190	190	190	190	190	\$275
Wajax Bush Pumps	34	34	34	34	34	34	34	34	34	34	34	\$2,787
Total (#)	3,462	3,462	3,462	3,462	3,462	3,462	3,462	3,462	3,462	3,462	3,462	
Total (\$000)	\$10,865.3	\$10,865.3	\$10,865.3	\$10,865.3	\$10,865.3	\$10,865.3	\$10,865.3	\$11,061.5	\$12,079.4	\$12,079.4	4,023	

APPENDIX B.3
TABLE 1

CITY OF GREATER SUDBURY
CALCULATION OF SERVICE LEVELS
FIRE SERVICES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historic Population	159,389	159,884	160,380	160,628	160,877	161,126	161,375	161,625	161,948	162,272
Historic Employment	74,525	74,854	75,185	75,400	75,616	75,833	76,050	76,268	76,559	76,851
Total Population & Employment	233,914	234,738	235,565	236,028	236,493	236,959	237,425	237,893	238,507	239,123

INVENTORY SUMMARY (\$000)

Buildings	\$34,140.6	\$34,141.0	\$34,141.3	\$34,141.7	\$34,142.0	\$34,093.3	\$33,557.7	\$33,557.7	\$33,557.7	\$33,557.7
Land	\$1,615.2	\$1,615.2	\$1,615.2	\$1,615.2	\$1,616.1	\$1,616.1	\$1,616.1	\$1,616.1	\$1,616.1	\$1,616.1
Vehicles (# At All Stations & Divisions)	\$32,204.6	\$32,204.6	\$32,371.8	\$32,400.3	\$32,400.3	\$32,400.3	\$32,400.3	\$30,265.7	\$30,265.7	\$30,265.7
Machinery & Equipment (Excluding Computers)	\$10,865.3	\$10,865.3	\$10,865.3	\$10,865.3	\$10,865.3	\$10,865.3	\$10,865.3	\$11,061.5	\$12,079.4	\$12,079.4
Total (\$000)	\$78,825.7	\$78,826.1	\$78,993.7	\$79,022.5	\$79,023.8	\$78,975.1	\$78,439.5	\$76,501.1	\$77,519.0	\$77,519.0

SERVICE LEVEL (\$/pop & emp)

Buildings	\$145.95	\$145.44	\$144.93	\$144.65	\$144.37	\$143.88	\$141.34	\$141.06	\$140.70	\$140.34	\$143.27
Land	\$6.91	\$6.88	\$6.86	\$6.84	\$6.83	\$6.82	\$6.81	\$6.79	\$6.78	\$6.76	\$6.83
Vehicles (# At All Stations & Divisions)	\$137.68	\$137.19	\$137.42	\$137.27	\$137.00	\$136.73	\$136.47	\$127.22	\$126.90	\$126.57	\$134.05
Machinery & Equipment (Excluding Computers)	\$46.45	\$46.29	\$46.12	\$46.03	\$45.94	\$45.85	\$45.76	\$46.50	\$50.65	\$50.52	\$47.01
Total (\$/pop & emp)	\$336.99	\$335.80	\$335.34	\$334.80	\$334.15	\$333.29	\$330.38	\$321.58	\$325.02	\$324.18	\$331.15

Average
Service
Level

CITY OF GREATER SUDBURY
CALCULATION OF MAXIMUM ALLOWABLE
FIRE SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level (2009-2018)	\$331.15
Net Population and Employment Growth (2019-2028)	5,278
Maximum Allowable Funding Envelope	\$1,747,817
Discounted Maximum Allowable Funding Envelope	\$1,747,817

APPENDIX B.3
TABLE 2

CITY OF GREATER SUDBURY
DEVELOPMENT-RELATED CAPITAL PROGRAM
FIRE SERVICES

Project Description	Timing		Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
	Start	Finish				BTE %	Replacement & BTE Shares		Prior DCs	Available DC Reserves	2019 - 2028
3.0 FIRE SERVICES											
3.1 Buildings, Land & Furnishings											
3.1.1 Station Redevelopment (including land)	2022	2022	\$ 4,630,000	-	\$ 4,630,000	75.0%	\$ 3,472,500	\$ 1,157,500	-	\$ 1,157,500	\$ -
Fire Training Centre (to expand for single detached houses)	2026	2026	\$ 1,230,500	-	\$ 1,230,500	80.0%	\$ 984,400	\$ 246,100	-	\$ 104,531	\$ 141,569
Subtotal Buildings, Land & Furnishings			\$ 5,860,500	-	\$ 5,860,500		\$ 4,456,900	\$ 1,403,600	-	\$ 1,262,031	\$ 141,569
3.2 Vehicles											
3.2.1 Training Vehicles	2018	2018	\$ 42,500	-	\$ 42,500	0.0%	\$ -	\$ 42,500	-	\$ 42,500	\$ -
Subtotal Vehicles			\$ 42,500	-	\$ 42,500		\$ -	\$ 42,500	-	\$ 42,500	\$ -
3.3 Equipment											
3.3.1 Two Generators	2015	2020	\$ 120,000	-	\$ 120,000	97.8%	\$ 117,360	\$ 2,640	-	\$ 2,640	\$ -
3.3.2 Records Management System (RMS)	2014	2015	\$ 155,755	-	\$ 155,755	97.8%	\$ 152,328	\$ 3,427	-	\$ 3,427	\$ -
3.3.3 Prevention Inspection Scheduling System	2016	2016	\$ 43,897	-	\$ 43,897	97.8%	\$ 42,931	\$ 966	-	\$ 966	\$ -
3.3.4 Mobile for Public Safety (MDT)	2017	2018	\$ 121,130	-	\$ 121,130	97.8%	\$ 118,465	\$ 2,665	-	\$ 2,665	\$ -
3.3.5 Mobile Responder (Cellular Dispatch)	2018	2019	\$ 266,550	-	\$ 266,550	97.8%	\$ 260,686	\$ 5,864	-	\$ 5,864	\$ -
Subtotal Equipment			\$ 707,332	-	\$ 707,332		\$ 691,771	\$ 15,561	-	\$ 15,561	\$ -
TOTAL FIRE SERVICES			\$ 6,610,332	\$ -	\$ 6,610,332		\$ 5,148,671	\$ 1,461,661	\$ -	\$ 1,320,092	\$ 141,569

Residential Development Charge Calculation	76%	\$107,592
Residential Share of 2019 - 2028 DC Eligible Costs		7,402
10-Year Growth in Population in New Units		\$14.54
Unadjusted Development Charge Per Capita		
Non-Residential Development Charge Calculation	24%	\$33,977
Non-Residential Share of 2019 - 2028 DC Eligible Costs		1,804,390
10-Year Growth in Square Feet		\$0.02
Unadjusted Development Charge Per Square Foot		

2019 - 2028 Net Funding Envelope	\$1,747,817
Notional Reserve Fund Balance	
Balance as at December 31, 2018	\$1,277,082
Revenue Losses	\$43,010
Total	\$1,320,092

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

FIRE SERVICES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	\$14.7	\$30.2	\$46.6	\$59.5	\$73.2	\$87.5	\$102.7	(\$8.2)	\$0.3	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$107.6	\$0.0	\$0.0	\$107.6
- General Government: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$123.6	\$0.0	\$0.0	\$123.6
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	962	964	966	697	699	701	703	705	501	504	7,402
REVENUE											
- DC Receipts: Inflated	\$14.4	\$14.7	\$15.1	\$11.1	\$11.3	\$11.6	\$11.9	\$12.1	\$8.8	\$9.0	\$120.2
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.5	\$1.1	\$1.6	\$2.1	\$2.6	\$3.1	\$3.6	(\$0.5)	\$0.0	\$14.1
- Interest on In-year Transactions	\$0.3	\$0.3	\$0.3	\$0.2	\$0.2	\$0.2	\$0.2	(\$3.1)	\$0.2	\$0.2	(\$1.2)
TOTAL REVENUE	\$14.7	\$15.5	\$16.4	\$12.9	\$13.6	\$14.4	\$15.1	\$12.7	\$8.5	\$9.2	\$133.1
CLOSING CASH BALANCE	\$14.7	\$30.2	\$46.6	\$59.5	\$73.2	\$87.5	\$102.7	(\$8.2)	\$0.3	\$9.5	

2019 Adjusted Charge Per Capita

\$15

Allocation of Capital Program
Residential Sector
Non-Residential Sector

76%
24%

Rates for 2019

Inflation Rate
Interest Rate on Positive Balances
Interest Rate on Negative Balances

2.0%
3.5%
5.5%

APPENDIX B.3
TABLE 3

CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE SERVICES
NON-RESIDENTIAL DEVELOPMENT CHARGE
(In \$000)

FIRE SERVICES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	\$4.5	\$9.3	\$14.3	\$19.1	\$24.2	\$29.6	\$35.2	\$1.2	\$2.8	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$34.0	\$0.0	\$0.0	\$34.0
- General Government: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$39.0	\$0.0	\$0.0	\$39.0
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square feet	221,390	221,390	222,970	199,820	200,820	200,820	201,820	203,360	66,000	66,000	1,804,390
REVENUE											
- DC Receipts: Inflated	\$4.4	\$4.5	\$4.6	\$4.2	\$4.3	\$4.4	\$4.5	\$4.7	\$1.5	\$1.6	\$38.9
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.2	\$0.3	\$0.5	\$0.7	\$0.8	\$1.0	\$1.2	\$0.0	\$0.1	\$4.9
- Interest on In-year Transactions	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.9)	\$0.0	\$0.0	(\$0.3)
TOTAL REVENUE	\$4.5	\$4.8	\$5.0	\$4.8	\$5.1	\$5.4	\$5.7	\$5.0	\$1.6	\$1.7	\$43.5
CLOSING CASH BALANCE	\$4.5	\$9.3	\$14.3	\$19.1	\$24.2	\$29.6	\$35.2	\$1.2	\$2.8	\$4.5	

2019 Adjusted Charge Per Square Foot

\$0.02

Allocation of Capital Program

Residential Sector 76%
Non-Residential Sector 24%

Rates for 2019

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

Appendix B.4

Police Services

Appendix B.4

Police Services

The Greater Sudbury Police Service is comprised of 264 sworn officers and 122 full-time civilian officers. It is the 12th largest municipal police service in the province.

Table 1 Historical Service Levels

The ten-year historical inventory of capital assets for Police Services includes building space totalling 78,488 square feet and valued at \$26.62 million, and 39.24 acres of land valued at \$693,600. The inventory of furniture and equipment at stations as well as personal police equipment is valued at \$3.58 million. The 170 Police Service vehicles are valued at \$6.60 million.

The combined value of capital assets for Police Services is \$37.50 million. The ten-year historical average service level is \$175.72 per population and employment, and this, multiplied by the ten-year forecast growth in population and employment, results in a ten-year maximum allowable funding envelope of \$927,464.

Table 2 2019-2028 Development-Related Capital Program & Calculation Of The Unadjusted Development Charges

The development-related capital program for Police Services includes equipment for eight new officers, at a gross cost of \$66,104. It also includes a Police Headquarters Expansion project at \$60.00 million.

No grants or subsidies have been identified. However, \$58.68 million of the costs of the Headquarters Expansion has been attributed to the replacement portion of the project, as well as shares attributed to the existing deficit in building space. After this deduction, \$1.39 million remains in development-related costs.

The notional reserve fund balance of \$326,976 is first applied to the development-related costs. The share of the Police Services capital program beyond the funding envelope, \$131,664, is deemed to benefit development beyond 2028 and can be recovered under future development charges by-

laws. The remaining \$927,464 is brought forward to the development charges calculation.

The development-related net capital cost of \$927,464 is allocated 76 per cent (\$704,873) against new residential development, and 24 per cent (\$222,591) against non-residential development. This yields an unadjusted development charge of \$95.23 per capita and \$0.12 per square foot.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential calculated charge increases to \$106 per capita and the non-residential charge increases to \$0.14 per square foot.

POLICE SERVICES SUMMARY						
10-Year Hist.	2019-2028		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
\$/pop & emp	Total	Net DC Recoverable	\$/capita	\$/sq.ft.	\$/capita	\$/sq.ft.
\$175.72	\$60,066,104	\$927,464	\$95.23	\$0.12	\$106	\$0.14

APPENDIX B.4
TABLE 1

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
POLICE SERVICES

BUILDINGS	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2017	2018
Burwash Training Centre	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	\$300
Confidential Storage #1	31,772	31,772	31,772	31,772	31,772	31,772	31,772	31,772	31,772	-	-	\$162
Confidential Storage #2 (leased)	-	-	-	-	3,319	3,319	3,319	3,319	3,319	3,319	3,319	\$226
Radio Tower Shack (George St)	64	64	64	64	64	64	64	64	64	64	64	\$226
Police Tower - 190 Brady	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	\$351
Police Storefronts:												
59 Young Street, Capreol	450	450	450	450	450	450	450	450	450	450	450	\$237
62 Second Avenue, Coniston	625	625	625	625	625	625	625	625	625	625	625	\$262
7 Serpentine Street, Copper Cliff	1,000	1,000	1,000	1,000	1,000	1,000	1,000	667	-	-	-	\$235
55 Levack Drive, Levack	300	300	300	300	300	300	300	300	300	300	75	\$253
4040 Elmview Drive, Hammer (moved from Leduc St. in 2010)	8,760	8,760	3,320	600	600	600	600	600	600	600	600	\$229
3457 Falconbridge Road, Garson	450	450	450	450	450	450	450	300	-	-	-	\$226
720 Bruce Street, Unit 109, Balmoral, Sudbury	500	500	500	500	500	500	500	500	458	-	-	\$226
247 Shaughnessy Street, Unit 3 Sudbury	419	419	419	419	419	419	419	419	105	-	-	\$226
135 Regional Road 24, Walden (leased)	800	800	800	800	800	800	800	800	800	800	800	\$226
1960 Paris Street, Unit B, Rumball Terrace, Sudbury	700	700	700	700	700	700	700	700	700	700	700	\$226
37 Veterans Road, Copper Cliff									21	255		\$213
Total (sq. ft.)	117,440	117,440	112,000	109,280	112,599	112,599	112,599	112,116	110,814	78,488		
Total (\$000)	\$33,430.5	\$33,430.5	\$32,182.6	\$31,558.7	\$32,308.8	\$32,308.8	\$32,308.8	\$32,196.5	\$31,895.9	\$26,624.9		

LAND	# of Acres										UNIT COST (\$/acre)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2017	2018
Confidential Storage #1	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	\$18,831
Radio Tower Shack (George St)	37.29	37.29	37.29	37.29	37.29	37.29	37.29	37.29	37.29	37.29	37.29	\$828
Police Tower - 190 Brady	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	\$773,089
Total (acres)	39.24	39.24	39.24	39.24	39.24	39.24	39.24	39.24	39.24	39.24		
Total (\$000)	\$693.6	\$693.6	\$693.6	\$693.6	\$693.6	\$693.6	\$693.6	\$693.6	\$693.6	\$693.6		

FURNITURE & EQUIPMENT	Value of Furniture & Equipment										UNIT COST (\$/unit)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2017	2018
Furniture & Equipment at all stations	\$ 477,335	\$ 487,205	\$ 487,205	\$ 632,565	\$ 632,565	\$ 755,609	\$ 766,824	\$ 788,536	\$ 800,857	\$ 853,240		n/a
Front Line Vehicle Emergency Equipment	44	44	44	44	44	44	44	44	44	45		\$10,188
Personal Police Equipment:												\$0
- Number of Sworn Officers	255	255	259	266	264	264	264	264	264	264		\$8,573
- Number of Full-Time Civilian	103	103	105	107	107	107	111	119	119	122		\$0
Total (\$000)	\$3,112.2	\$3,122.1	\$3,156.4	\$3,361.7	\$3,344.6	\$3,467.6	\$3,478.8	\$3,500.5	\$3,512.9	\$3,575.5		

**APPENDIX B.4
TABLE 1**

**CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
POLICE SERVICES**

VEHICLES (# at all stations & divisions)	# of Vehicles											UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Prisoner Transport Unit	2	2	2	2	2	2	2	2	2	2		\$75,285
Boat & Motor (14' foot)	1	1	1	1	1	1	1	1	1	1		\$16,020
Boat & Motor	1	1	1	1	1	1	1	1	1	1		\$3,988
Boat & Motor (#260 & #263)	2	2	2	2	2	2	2	2	2	2		\$52,390
Boat Trailer	2	3	3	3	3	3	3	3	3	3		\$3,142
Office trailer	1	1	1	1	1	1	1	1	1	1		\$17,137
Sedans - Marked/Unmarked	62	63	63	61	59	65	71	66	67	59		\$55,419
Truck	1	1	1	1	1	1	4	4	5	7		\$35,126
Bicycles	6	6	10	16	17	17	17	17	17	17		\$1,246
Motorcycles	4	4	4	4	4	4	4	4	4	4		\$28,022
Vans / SUVs	21	23	25	28	29	30	34	45	44	55		\$44,626
Sleds	8	4	6	6	6	4	4	4	6	6		\$15,255
Sled trailer	7	3	3	3	3	2	-	-	-	-		\$1,731
Double Sled Trailer	1	-	-	-	-	-	2	2	2	2		\$2,467
ATV Trailer	1	1	1	1	1	1	2	2	2	2		\$4,800
ATV	2	2	2	2	4	4	4	4	4	4		\$13,024
Cargo Trailer	-	2	2	2	3	3	4	4	4	4		\$9,418
Total (#)	122	119	127	134	137	141	156	162	165	170		
Total (\$000)	\$4,994.1	\$5,090.3	\$5,215.0	\$5,245.6	\$5,216.1	\$5,561.0	\$6,193.0	\$6,406.8	\$6,483.3	\$6,601.0		

APPENDIX B.4
TABLE 1

CITY OF GREATER SUDBURY
CALCULATION OF SERVICE LEVELS
POLICE SERVICES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historic Population	159,389	159,884	160,380	160,628	160,877	161,126	161,375	161,625	161,948	162,272
Historic Employment	74,525	74,854	75,185	75,400	75,616	75,833	76,050	76,268	76,559	76,851
Total Population & Employment	233,914	234,738	235,565	236,028	236,493	236,959	237,425	237,893	238,507	239,123

INVENTORY SUMMARY (\$000)

Buildings	\$33,430.5	\$33,430.5	\$32,182.6	\$31,558.7	\$32,308.8	\$32,308.8	\$32,308.8	\$32,196.5	\$31,895.9	\$26,624.9
Land	\$693.6	\$693.6	\$693.6	\$693.6	\$693.6	\$693.6	\$693.6	\$693.6	\$693.6	\$693.6
Furniture & Equipment	\$3,112.2	\$3,122.1	\$3,156.4	\$3,361.7	\$3,344.6	\$3,467.6	\$3,478.8	\$3,500.5	\$3,512.9	\$3,575.5
Vehicles (# At All Stations & Divisions)	\$4,994.1	\$5,090.3	\$5,215.0	\$5,245.6	\$5,216.1	\$5,561.0	\$6,193.0	\$6,406.8	\$6,483.3	\$6,601.0
Total (\$000)	\$42,230.4	\$42,336.5	\$41,247.7	\$40,859.6	\$41,563.1	\$42,031.0	\$42,674.3	\$42,797.5	\$42,585.6	\$37,495.0

SERVICE LEVEL (\$/pop & emp)

SERVICE LEVEL (\$/pop & emp)											
Buildings	\$142.92	\$142.42	\$136.62	\$133.71	\$136.62	\$136.35	\$136.08	\$135.34	\$133.73	\$111.34	Average Service Level
Land	\$2.97	\$2.95	\$2.94	\$2.94	\$2.93	\$2.93	\$2.92	\$2.92	\$2.91	\$2.90	
Furniture & Equipment	\$13.30	\$13.30	\$13.40	\$14.24	\$14.14	\$14.63	\$14.65	\$14.71	\$14.73	\$14.95	
Vehicles (# At All Stations & Divisions)	\$21.35	\$21.69	\$22.14	\$22.22	\$22.06	\$23.47	\$26.08	\$26.93	\$27.18	\$27.61	
Total (\$/pop & emp)	\$180.54	\$180.36	\$175.10	\$173.11	\$175.75	\$177.38	\$179.74	\$179.90	\$175.55	\$156.80	
											\$175.72

CITY OF GREATER SUDBURY
CALCULATION OF MAXIMUM ALLOWABLE
POLICE SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level (2009-2018)	\$175.72
Net Population and Employment Growth (2019-2028)	5,278
Maximum Allowable Funding Envelope	\$927,464
Discounted Maximum Allowable Funding Envelope	\$927,464

APPENDIX B.4
TABLE 2
CITY OF GREATER SUDBURY
DEVELOPMENT-RELATED CAPITAL PROGRAM
POLICE SERVICES

Project Description	Timing		Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
	Start	Finish				BTE %	Replacement & BTE Shares		Prior DCs	Available DC Reserves	2019 - 2028
4.0 POLICE SERVICES											
4.1 Personal Equipment											
4.1.1 Equipment for 4 new officers	2019	2019	\$ 33,052	\$ -	\$ 33,052	0.0%	\$ -	\$ 33,052	\$ -	\$ 33,052	\$ -
4.1.2 Equipment for 4 new officers	2020	2020	\$ 33,052	\$ -	\$ 33,052	0.0%	\$ -	\$ 33,052	\$ -	\$ 33,052	\$ -
Subtotal Personal Equipment			\$ 66,104	\$ -	\$ 66,104		\$ -	\$ 66,104	\$ -	\$ 66,104	\$ -
4.2 Buildings, Land & Furnishings											
4.2.1 Headquarters Expansion	2013	2023	\$ 60,000,000	\$ -	\$ 60,000,000	97.8%	\$ 58,680,000	\$ 1,320,000	\$ -	\$ 326,976	\$ 861,360
Subtotal Buildings, Land & Furnishings			\$ 60,000,000	\$ -	\$ 60,000,000		\$ 58,680,000	\$ 1,320,000	\$ -	\$ 326,976	\$ 861,360
TOTAL POLICE SERVICES			\$ 60,066,104	\$ -	\$ 60,066,104		\$ 58,680,000	\$ 1,386,104	\$ -	\$ 326,976	\$ 927,464

Residential Development Charge Calculation

Residential Share of 2019 - 2028 DC Eligible Costs
10-Year Growth in Population in New Units
Unadjusted Development Charge Per Capita

76%
\$704,873
7,402
\$95.23

2019 - 2028 Net Funding Envelope

\$927,464

Non-Residential Development Charge Calculation

Non-Residential Share of 2019 - 2028 DC Eligible Costs
10-Year Growth in Square Feet
Unadjusted Development Charge Per Square Foot

24%
\$222,591
1,804,390
\$0.12

Notional Reserve Fund Balance

Balance as at December 31, 2018

Revenue Losses

Total

\$304,345

\$22,631

\$326,976

**APPENDIX B.4
TABLE 3**

**CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
POLICE SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

POLICE SERVICES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$349.1)	(\$350.1)	(\$323.9)	(\$326.2)	(\$328.1)	(\$262.7)	(\$191.7)	(\$114.9)	(\$57.9)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$441.7	\$84.6	\$59.5	\$59.5	\$59.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$704.9
- General Government: Inflated	\$441.7	\$86.3	\$61.9	\$63.2	\$64.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$717.5
NEW RESIDENTIAL DEVELOPMENT	962	964	966	697	699	701	703	705	501	504	7,402
- Population Growth in New Units											
REVENUE											
- DC Receipts: Inflated	\$102.0	\$104.2	\$106.5	\$78.4	\$80.2	\$82.0	\$83.9	\$85.8	\$62.2	\$63.8	\$849.2
INTEREST											
- Interest on Opening Balance	\$0.0	(\$19.2)	(\$19.3)	(\$17.8)	(\$17.9)	(\$18.0)	(\$14.4)	(\$10.5)	(\$6.3)	(\$3.2)	(\$126.8)
- Interest on In-year Transactions	(\$9.3)	\$0.3	\$0.8	\$0.3	\$0.3	\$1.4	\$1.5	\$1.5	\$1.1	\$1.1	(\$1.1)
TOTAL REVENUE	\$92.6	\$85.3	\$88.1	\$60.9	\$62.5	\$65.4	\$70.9	\$76.8	\$57.0	\$61.8	\$721.4
CLOSING CASH BALANCE	(\$349.1)	(\$350.1)	(\$323.9)	(\$326.2)	(\$328.1)	(\$262.7)	(\$191.7)	(\$114.9)	(\$57.9)	\$3.8	

2019 Adjusted Charge Per Capita

\$106

Allocation of Capital Program

Residential Sector

76%

Non-Residential Sector

24%

Rates for 2019

Inflation Rate

2.0%

Interest Rate on Positive Balances

3.5%

Interest Rate on Negative Balances

5.5%

**APPENDIX B.4
TABLE 3**

**CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
POLICE SERVICES
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

POLICE SERVICES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$111.5)	(\$113.2)	(\$106.2)	(\$102.2)	(\$97.5)	(\$71.3)	(\$42.9)	(\$11.9)	(\$1.6)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$139.5	\$26.7	\$18.8	\$18.8	\$18.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$222.6
- General Government: Inflated	\$139.5	\$27.3	\$19.6	\$19.9	\$20.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$226.6
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square feet	221,390	221,390	222,970	199,820	200,820	200,820	201,820	203,360	66,000	66,000	1,804,390
REVENUE											
- DC Receipts: Inflated	\$31.0	\$31.6	\$32.5	\$29.7	\$30.4	\$31.0	\$31.8	\$32.7	\$10.8	\$11.0	\$272.6
INTEREST											
- Interest on Opening Balance	\$0.0	(\$6.1)	(\$6.2)	(\$5.8)	(\$5.6)	(\$5.4)	(\$3.9)	(\$2.4)	(\$0.7)	(\$0.1)	(\$36.2)
- Interest on In-year Transactions	(\$3.0)	\$0.1	\$0.2	\$0.2	\$0.2	\$0.5	\$0.6	\$0.6	\$0.2	\$0.2	(\$0.3)
TOTAL REVENUE	\$28.0	\$25.6	\$26.5	\$24.0	\$25.0	\$26.2	\$28.5	\$30.9	\$10.4	\$11.1	\$236.2
CLOSING CASH BALANCE	(\$111.5)	(\$113.2)	(\$106.2)	(\$102.2)	(\$97.5)	(\$71.3)	(\$42.9)	(\$11.9)	(\$1.6)	\$9.6	

2019 Adjusted Charge Per Square Foot

\$0.14

Allocation of Capital Program

Residential Sector 76%
Non-Residential Sector 24%

Rates for 2019

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

HEMSON

Appendix B.5

Public Safety

Appendix B.5

Public Safety

The Public Safety service category includes capital projects that provide support for the City's emergency services departments.

Table 1 Historical Service Levels

The ten-year historical inventory of capital assets for Public Safety includes 1,934 square feet of communication tower infrastructure, which has a replacement value of \$437,100. Also included is equipment required to provide the municipal service, which is valued at \$13.42 million.

The full replacement cost of the 2018 inventory of capital assets for Public Safety is \$13.86 million, and the average historical service level over ten years is \$56.33 per population and employment. The historical service level multiplied by the forecast ten-year population and employment growth results in a ten-year maximum allowable charge of \$297,304.

Table 2 2019-2028 Development-Related Capital Program & Calculation Of The Unadjusted Development Charges

The 2019-2028 development-related capital program for Public Safety contains recoveries for Communications Infrastructure improvements as well as an enhanced 911 system. The total value of the capital program is \$12.58 million.

No grants have been identified. A replacement share of \$11.47 million has been deducted from the DC calculation, and the remaining \$1.11 million is deemed to be development-related. Prior DC revenues in the amount of \$526,091 have already been applied to the Communications Infrastructure, and the notional reserve fund balance of \$9,525 is also applied. A further \$275,303 is identified to benefit post-period development due to the funding envelope restriction, leaving \$297,304 to be brought forward to the DC calculation.

The \$297,304 is allocated 76 per cent to residential development (\$225,951) and 24 per cent to non-residential development (\$71,353). This ratio is based on each sector's share of ten-year population in new unit growth and

employment growth. The residential share of the net development-related capital cost is divided by the ten-year forecast growth in population in new units to derive an unadjusted charge of \$30.53 per capita. The non-residential share of the net development-related capital cost is divided by the ten-year forecast growth in floor space to derive an unadjusted charge of \$0.04 per square foot.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential charge increases to \$35 per capita and the non-residential charge increases to \$0.05 per square foot.

PUBLIC SAFETY SUMMARY						
10-Year Hist.	2019-2028		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
\$/pop & emp	Total	Net DC Recoverable	\$/capita	\$/sq.ft.	\$/capita	\$/sq.ft.
\$56.33	\$12,578,035	\$297,304	\$30.53	\$0.04	\$35	\$0.05

**APPENDIX B.5
TABLE 1**

**CITY OF GREATER SUBURBY
INVENTORY OF CAPITAL ASSETS
PUBLIC SAFETY**

COMMUNICATION INFRASTRUCTURE AND RELATED ASSETS	# of Square Feet										UNIT COST (\$/sq. ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Communication Tower - Falconbridge Smelter	100	100	100	100	100	100	100	100	100	100	\$226
Communication Tower - Kukagami	204	204	204	204	204	204	204	204	204	204	\$226
Communication Tower - Long Lake (leased)	160	160	160	160	160	160	160	160	160	160	\$226
Communication Tower - Lonsdale Avenue	64	64	64	64	64	64	64	64	64	64	\$226
Communication Tower - Onaping (leased)	180	180	180	180	180	180	180	180	180	180	\$226
Communication Tower - Panache Lake Road	140	140	140	140	140	140	140	140	140	140	\$226
Communication Tower - Val Caron	220	220	220	220	220	220	220	220	220	220	\$226
Communication Tower - Wahnapitae	206	206	206	206	206	206	206	206	206	206	\$226
Communication Tower - Whitefish (Blueberry Hill)	320	320	320	320	320	320	320	320	320	320	\$226
Communication Tower - Worthington Building	100	100	100	100	100	100	100	100	100	100	\$226
Rayside Balfour Communications Tower	100	100	100	100	100	100	100	100	100	100	\$226
Skead Communication Tower	140	140	140	140	140	140	140	140	140	140	\$226
Total (sq.ft.)	1,934	1,934	1,934	1,934	1,934	1,934	1,934	1,934	1,934	1,934	
Total (\$000)	\$437.1	\$437.1	\$437.1	\$437.1	\$437.1	\$437.1	\$437.1	\$437.1	\$437.1	\$437.1	

EQUIPMENT	# of Equipment										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Communication Infrastructure - Equip. in buildings/towers - 12 Tower Sites	12	12	12	12	12	12	12	12	12	12	\$1,100,000
Excess Capacity	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	\$1,100,000
Communication Infrastructure - Towers - 12 Tower Sites	12	12	12	12	12	12	12	12	12	12	\$237,600
Comm. Towers / Antennas at LEL and Court House	-	-	-	-	-	2	2	2	2	2	\$15,000
Generators at Communication Infrastructure Tower Sites (at the majority)	-	-	-	-	-	-	-	-	1	1	\$642,242
Total (#)	21	21	21	21	21	23	23	23	24	24	
Total (\$000)	\$12,751.2	\$12,751.2	\$12,751.2	\$12,751.2	\$12,751.2	\$12,781.2	\$12,781.2	\$12,781.2	\$13,423.4	\$13,423.4	

APPENDIX B.5
TABLE 1

CITY OF GREATER SUDBURY
CALCULATION OF SERVICE LEVELS
PUBLIC SAFETY

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historic Population	159,389	159,884	160,380	160,628	160,877	161,126	161,375	161,625	161,948	162,272
Historic Employment	74,525	74,854	75,185	75,400	75,616	75,833	76,050	76,268	76,559	76,851
Total Population & Employment	233,914	234,738	235,565	236,028	236,493	236,959	237,425	237,893	238,507	239,123

INVENTORY SUMMARY (\$000)

Communication Infrastructure And Related Assets	\$437.1	\$437.1	\$437.1	\$437.1	\$437.1	\$437.1	\$437.1	\$437.1	\$437.1	\$437.1
Equipment	\$12,751.2	\$12,751.2	\$12,751.2	\$12,751.2	\$12,751.2	\$12,781.2	\$12,781.2	\$12,781.2	\$13,423.4	\$13,423.4
Total (\$000)	\$13,188.3	\$13,188.3	\$13,188.3	\$13,188.3	\$13,188.3	\$13,218.3	\$13,218.3	\$13,218.3	\$13,860.5	\$13,860.5

SERVICE LEVEL (\$/pop & emp)

Communication Infrastructure And Related Assets	\$1.87	\$1.86	\$1.86	\$1.85	\$1.85	\$1.84	\$1.84	\$1.84	\$1.83	\$1.85
Equipment	\$54.51	\$54.32	\$54.13	\$54.02	\$53.92	\$53.94	\$53.83	\$53.73	\$56.28	\$54.48
Total (\$/pop & emp)	\$56.38	\$56.18	\$55.99	\$55.88	\$55.77	\$55.78	\$55.67	\$55.56	\$58.11	\$57.96
Average Service Level									\$56.33	

CITY OF GREATER SUDBURY
CALCULATION OF MAXIMUM ALLOWABLE
PUBLIC SAFETY

10-Year Funding Envelope Calculation	
10 Year Average Service Level (2009-2018)	\$56.33
Net Population and Employment Growth (2019-2028)	5,278
Maximum Allowable Funding Envelope	\$297,304
Discounted Maximum Allowable Funding Envelope	\$297,304

CITY OF GREATER SUDBURY
DEVELOPMENT-RELATED CAPITAL PROGRAM
PUBLIC SAFETY

Project Description	Timing		Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs			Total DC Eligible Costs	DC Eligible Costs			
	Start	Finish				BTE %	Replacement & BTE Shares	0% Reduction		Prior DCs	Available DC Reserves	2019 - 2028	Post 2028
5.0 PUBLIC SAFETY													
5.1 Public Safety Equipment													
5.1.1 Communication Infrastructure	2012	2014	\$ 12,228,035	\$ -	\$ 12,228,035	91.0%	\$ 11,127,512	\$ -	\$ 1,100,523	\$ 526,091	\$ 9,525	\$ 293,454	\$ 271,453
5.1.2 Next Generation 911	2019	2020	\$ 350,000	\$ -	\$ 350,000	97.8%	\$ 342,300	\$ -	\$ 7,700	\$ -	\$ -	\$ 3,850	\$ 3,850
Subtotal Public Safety Equipment			\$ 12,578,035	\$ -	\$ 12,578,035		\$ 11,469,812	\$ -	\$ 1,108,223	\$ 526,091	\$ 9,525	\$ 297,304	\$ 275,303
TOTAL PUBLIC SAFETY			\$ 12,578,035	\$ -	\$ 12,578,035		\$ 11,469,812	\$ -	\$ 1,108,223	\$ 526,091	\$ 9,525	\$ 297,304	\$ 275,303

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	76%	\$225,951
10-Year Growth in Population in New Units		7,402
Unadjusted Development Charge Per Capita		\$30.53
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	24%	\$71,353
10-Year Growth in Square Feet		1,804,390
Unadjusted Development Charge Per Square Foot		\$0.04

2019 - 2028 Net Funding Envelope	\$297,304
Notional Reserve Fund Balance	\$0
Balance as at December 31, 2018	\$9,525
Revenue Losses	
Total	\$9,525

**APPENDIX B.5
TABLE 3**

**CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC SAFETY
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PUBLIC SAFETY	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$196.1)	(\$173.4)	(\$147.1)	(\$128.8)	(\$109.0)	(\$87.4)	(\$64.0)	(\$38.7)	(\$19.9)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$224.5	\$1.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$226.0
- General Government: Inflated	\$224.5	\$1.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$226.0
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	962	964	966	697	699	701	703	705	501	504	7,402
REVENUE											
- DC Receipts: Inflated	\$33.7	\$34.4	\$35.2	\$25.9	\$26.5	\$27.1	\$27.7	\$28.3	\$20.5	\$21.1	\$280.4
INTEREST											
- Interest on Opening Balance	\$0.0	(\$10.8)	(\$9.5)	(\$8.1)	(\$7.1)	(\$6.0)	(\$4.8)	(\$3.5)	(\$2.1)	(\$1.1)	(\$53.0)
- Interest on In-year Transactions	(\$5.2)	\$0.6	\$0.6	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.4	\$0.4	(\$1.0)
TOTAL REVENUE	\$28.4	\$24.2	\$26.3	\$18.3	\$19.9	\$21.6	\$23.4	\$25.3	\$18.8	\$20.4	\$226.4
CLOSING CASH BALANCE	(\$196.1)	(\$173.4)	(\$147.1)	(\$128.8)	(\$109.0)	(\$87.4)	(\$64.0)	(\$38.7)	(\$19.9)	\$0.4	

2019 Adjusted Charge Per Capita

\$35

Allocation of Capital Program

Residential Sector 76%
Non-Residential Sector 24%

Rates for 2019

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

**APPENDIX B.5
TABLE 3**

**CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC SAFETY
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PUBLIC SAFETY	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$61.5)	(\$53.8)	(\$45.0)	(\$36.7)	(\$27.6)	(\$17.9)	(\$7.3)	\$4.2	\$8.3	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$70.9	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$71.4
- General Government: Inflated	\$70.9	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$71.4
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square feet	221,390	221,390	222,970	199,820	200,820	200,820	201,820	203,360	66,000	66,000	1,804,390
REVENUE											
- DC Receipts: Inflated	\$11.1	\$11.3	\$11.6	\$10.6	\$10.9	\$11.1	\$11.4	\$11.7	\$3.9	\$3.9	\$97.4
INTEREST											
- Interest on Opening Balance	\$0.0	(\$3.4)	(\$3.0)	(\$2.5)	(\$2.0)	(\$1.5)	(\$1.0)	(\$0.4)	\$0.1	\$0.3	(\$13.3)
- Interest on In-year Transactions	(\$1.6)	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.1	\$0.1	(\$0.1)
TOTAL REVENUE	\$9.4	\$8.1	\$8.8	\$8.3	\$9.0	\$9.8	\$10.6	\$11.5	\$4.1	\$4.3	\$83.9
CLOSING CASH BALANCE	(\$61.5)	(\$53.8)	(\$45.0)	(\$36.7)	(\$27.6)	(\$17.9)	(\$7.3)	\$4.2	\$8.3	\$12.6	

2019 Adjusted Charge Per Square Foot

\$0.05

Allocation of Capital Program

Residential Sector 76%
Non-Residential Sector 24%

Rates for 2019

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

Appendix B.6

Parks and Recreation

Appendix B.6

Parks and Recreation

The City of Greater Sudbury Leisure Services Department is responsible for providing indoor and outdoor recreational space to its residents. The City offers a wide array of recreational opportunities by way of community and neighbourhood parks, indoor recreation facilities and community centres. This department also offers a variety of outdoor recreation infrastructure including soccer fields, baseball diamonds, tennis and basketball courts, outdoor skating rinks and numerous playgrounds.

Table 1 Historical Service Levels

The City offers a variety of parks buildings by way of storage space, field houses, gazebos, picnic shelters, washrooms, concession stands, and ticket booths. These buildings total 160,778 square feet of space and are valued at \$39.79 million. Special facilities are provided in 81,177 square feet of space, worth a total of \$21.98 million. Sports fields, including soccer fields, basketball courts, baseball diamonds, tennis courts, outdoor rinks and skate parks add \$43.80 million to the inventory.

Park and playground equipment amounts to \$3.85 million in current value. The City operates various trails worth \$4.98 million. Ski hills and the related equipment total \$5.79 million. The City's various parks equipment is worth \$11.04 million.

The City operates a number of major indoor recreation facilities, totalling 850,837 square feet and worth an estimated \$211.10 million. The 295.70 acres of land associated with these major facilities is valued at \$4.96 million. Approximately \$2.67 million in fleet and equipment is associated with the major facilities.

The combined value of capital assets for Parks and Recreation is \$349.96 million. The ten-year historical average service level is \$2,147.39 per capita, and this, multiplied by the ten-year forecast growth in population, results in a ten-year maximum allowable funding envelope of \$6.27 million. Once the statutory ten per cent discount is applied, the maximum allowable funding envelope is reduced to \$5.64 million.

Table 2 2019-2028 Development-Related Capital Program & Calculation Of The Unadjusted Development Charges

The development-related capital program for Parks and Recreation includes continued recoveries for the Gerry McCrory Countryside Sports Complex additional ice pad, at a gross cost of \$10.38 million, as well as recoveries for the James Jerome Sports Complex Renewal Program at \$3.58 million. Future projects include new skate parks and soccer fields at a total value of \$1.08 million.

The ten-year capital program for Parks and Recreation totals \$15.04 million. After deductions for government grants (\$2.52 million, primarily allocated towards the James Jerome Sports Complex), replacement and benefit to existing shares (\$1.66 million), and the ten per cent discount (\$1.09 million), the development-related capital program is reduced to \$9.78 million.

Approximately \$2.72 million in past DC revenues have already been applied to the Gerry McCrory Countryside Sports Complex ice pad project, and another \$292,812 notional reserve fund balance exists (including past revenue losses due to the phase-in of the current DC rates). Finally, due to the scale and long benefitting horizon of the Gerry McCrory additional ice pad, another \$3.23 million has been allocated to development occurring beyond 2028 period and can be recovered through subsequent development charges studies. The remaining \$3.54 million is related to growth between 2019 and 2028.

The \$3.54 million is allocated entirely against residential development in the City resulting in an unadjusted development charge of \$478.04 per capita.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential calculated charge increases to \$546 per capita. This is a reflection of the front-ended nature of the more costly projects in the capital program.

PARKS AND RECREATION SUMMARY						
10-Year Hist. Service Level \$/capita	2019-2028		Unadjusted		Adjusted	
	Development-Related Capital Program Total	Net DC Recoverable	Development Charge \$/capita	\$/sq.ft.	Development Charge \$/capita	\$/sq.ft.
\$2,147.39	\$15,044,807	\$3,538,445	\$478.04	\$0.00	\$546	\$0.00

CITY OF GREATER SUBURY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION

PARKS BUILDINGS	# of Square Feet										UNIT COST (\$/sq. ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Adamsdale Playground Fieldhouse	1,373	1,373	1,373	1,373	1,373	1,373	1,373	1,373	1,373	1,373	\$368
Algonquin Fieldhouse	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427	\$229
Algonquin Playground - Storage	100	100	100	100	100	100	100	100	100	100	\$43
Antwerp Playground Fieldhouse	2,193	2,193	2,193	2,193	2,193	2,193	2,193	2,193	2,193	2,193	\$170
Azilda Seniors Park Gazebo	-	-	-	384	384	384	384	384	384	384	\$101
Beaver Lake Playground - Storage Building #1	256	256	256	256	256	256	256	256	256	256	\$478
Beaver Lake Playground - Storage Building #2	192	192	192	192	192	192	192	192	192	192	\$63
Beil Park - Change Room/Washroom	2,512	2,512	2,512	2,512	2,512	2,512	2,512	2,512	2,512	2,512	\$195
Bell Park - Gazebo (Ige)	962	962	962	962	962	962	962	962	962	962	\$104
Bell Park - Gazebo No. 2	196	196	196	196	196	196	196	196	196	196	\$99
Bell Park - Sun Shelter	-	730	730	730	730	730	730	730	730	730	\$73
Bell Park - Lifeguard Building	756	756	756	756	756	756	756	756	756	756	\$199
Bell Park - Picnic Shelter	264	264	264	264	264	264	264	264	264	264	\$51
Bell Park - Projection Booth	183	183	-	-	-	-	-	-	-	-	\$107
Bell Park - Storage Building No. 1	224	224	224	224	224	224	224	224	224	224	\$125
Bell Park - Storage Building No. 2	192	192	192	192	192	192	192	192	192	192	\$101
Bell Park - Washroom 2	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	\$394
Bell Park Concession	912	912	912	912	912	912	912	912	912	912	\$411
Bell Park - Storage Building	-	-	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	\$149
Ben Moxam Community Centre - Storage	120	120	120	120	120	120	-	-	-	-	\$31
Black Lake Playground Fieldhouse	1,145	1,145	1,145	1,145	1,145	1,145	1,145	1,145	1,145	1,145	\$270
Black Lake Playground Storage Shed	80	80	80	80	80	80	80	80	80	80	\$36
Bleazard Playground Fieldhouse	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$332
Calmo Beach Change Rooms	685	685	685	685	685	685	685	685	685	685	\$212
Capitol Baseball Field Score Booth	52	52	52	52	52	52	52	52	52	52	\$3,302
Capitol Community Centre - Baseball Field B1	85	85	85	85	85	85	85	85	85	85	\$78
Carling Tot Lot- Building #1	76	76	76	76	76	76	76	76	76	76	\$785
Carol Richard Playground Fieldhouse	378	378	378	378	378	378	378	378	378	378	\$977
Cedar Park - Rink Shack	264	264	264	264	264	264	264	264	264	264	\$105
Cedar Park Playground Fieldhouse	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	\$305
Cenelaph Park Gazebo	400	400	400	400	400	400	400	400	400	400	\$74
Centennial Field Picnic Gazebo	800	800	800	800	800	800	800	800	800	800	\$49
Centennial Park - Laundry/Shower Building	1,359	1,359	1,359	1,359	1,359	1,359	1,359	1,359	1,359	1,359	\$236
Centennial Park - Main Building	1,470	1,470	1,470	1,470	1,470	1,470	1,470	1,470	1,470	1,470	\$249
Centennial Park Fieldhouse And Concession	960	960	960	960	960	960	960	960	960	960	\$270
Centennial Park Gazebo # 1	1,257	1,257	1,257	1,257	1,257	1,257	1,257	1,257	1,257	1,257	\$45
Centennial Park Gazebo # 2	100	100	100	100	100	100	100	100	100	100	\$46
Confederation Ball Fieldhouse	842	842	842	842	842	842	842	842	-	-	\$524
Cote Park Score Booth	68	68	68	68	68	68	68	68	68	68	\$3,312
Delki Dozzi - Bocce Storage	100	100	100	100	100	100	100	100	100	100	\$47
Delki Dozzi - Bocce Washroom Building	189	189	189	189	189	189	189	189	189	189	\$702
Delki Dozzi - Rink Storage Building	91	91	91	91	91	91	91	91	91	91	\$108
Delki Dozzi Memorial Park	4,897	4,897	4,897	4,897	4,897	4,897	4,897	4,897	4,897	4,897	\$415
Den Lou Playground Storage Shed	80	80	80	80	80	80	80	80	80	80	\$43
Dionite Playground Fieldhouse	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	\$273
Don Lita Playground - Storage Building	110	110	110	110	110	110	110	110	110	110	\$122
Don Lita Playground Fieldhouse	1,153	1,153	1,153	1,153	1,153	1,153	1,153	1,153	1,153	1,153	\$494

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION

PARKS BUILDINGS CONT'D	# of Square Feet											UNIT COST (\$/sq. ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Downe Park - Storage Building	96	96	96	96	96	96	96	96	96	96		\$125
Downe Playground Fieldhouse	2,179	2,179	2,179	2,179	2,179	2,179	2,179	2,179	2,179	2,179		\$201
Durham Street Park Building	416	416	416	416	416	416	416	416	416	416		\$1,431
East End - Storage Building	96	96	96	96	96	96	96	96	96	96		\$125
East End Playground Fieldhouse	1,136	1,136	1,136	1,136	1,136	1,136	1,136	1,136	1,136	1,136		\$330
Ella Lake - Washroom Building No. 1	102	102	102	102	102	102	102	102	102	102		\$102
Ella Lake - Washroom Building No. 2	102	102	102	102	102	102	102	102	102	102		\$102
Ella Lake - Washroom Building No. 3	102	102	102	102	102	102	102	102	102	102		\$102
Ella Lake - Washroom Building No. 4	102	102	102	102	102	102	102	102	102	102		\$102
Ella Lake - Washroom Building No. 5	102	102	102	102	102	102	102	102	102	102		\$102
Ella Lake Canteen	689	689	689	689	689	689	689	689	689	689		\$149
Ella Lake Park - Storage Building	278	278	278	278	278	278	278	278	278	278		\$53
Ella Lake Park - Storage/Bunkhouse Building	253	253	253	253	253	253	253	253	253	253		\$93
Ella Lake Shower Building	160	160	160	160	160	160	160	160	160	160		\$254
Elm West Playground Fieldhouse	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083		\$272
Elmview Playground Fieldhouse	1,289	1,289	1,289	1,289	1,289	1,289	1,289	1,289	1,289	1,289		\$383
Elmview Playground Storage Shed	192	192	192	192	192	192	192	192	192	192		\$162
Eyre Playground Fieldhouse	1,153	1,153	1,153	1,153	1,153	1,153	1,153	1,153	1,153	1,153		\$234
Farmdale Playground Fieldhouse	815	815	815	815	815	815	815	815	815	-		\$344
Farmdale Playground Storage Shed	199	199	199	199	199	199	199	199	199	199		\$39
Hamner Ball Fieldhouse	540	540	540	540	540	540	540	540	540	540		\$206
James Jerome/Lily Creek Sports Complex	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000		\$320
James Jerome/Lily Creek Fieldhouse	-	-	-	2,553	2,785	2,785	2,785	2,785	2,785	2,785		\$265
Excess capacity				(550)	(550)	(550)	(550)	(550)	(550)	(550)		\$265
Kathleen Street Chemical Storage Building	192	192	192	192	192	192	192	192	192	192		\$65
Kathleen Street Parks Operations Building	17,331	17,331	17,331	17,331	17,331	17,331	17,331	17,331	17,331	17,331		\$93
Kathleen Street Parks Storage Building	2,205	2,205	2,205	2,205	2,205	2,205	2,205	2,205	2,205	2,205		\$63
Kathleen Street Storage Shed	296	296	296	296	296	296	296	296	296	296		\$96
Kinsmen Sports Complex	1,381	1,381	1,381	1,381	1,381	1,381	1,381	1,381	1,381	1,381		\$590
Kinsmen Sports Complex - Storage Shed	80	80	80	80	80	80	80	80	80	80		\$50
Lakeview Playground Building	640	640	640	-	-	-	-	-	-	-		\$99
Lansing Park Fieldhouse	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147		\$227
Lasalle Playground - Field House	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163		\$158
Lebel Playground - Storage Building	100	100	100	100	100	100	100	100	100	100		\$127
Lily Creek Athletic Field Score Booth	63	63	63	63	63	63	63	63	63	63		\$199
Little Britain Tot Lot - Fieldhouse	817	817	817	817	817	817	817	817	817	817		\$195
Lively Tennis Courts - Fieldhouse	1,708	1,708	1,708	1,708	1,708	1,708	1,708	1,708	1,708	1,708		\$355
Loellen Playground Fieldhouse	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775		\$238
Long Lake Change Rooms	168	168	168	168	168	168	168	168	168	168		\$116
Long Lake Playground - Storage Building	100	100	100	100	100	100	100	100	100	100		\$119
Long Lake Playground Fieldhouse	1,419	1,419	1,419	1,419	1,419	1,419	1,419	1,419	1,419	1,419		\$349
Long Lake Rink - Warm-Up Shack	500	500	500	500	500	500	500	500	500	500		\$103
Longdale Playground Fieldhouse	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937		\$129
Lorne Brady Park - Fieldhouse	3,786	3,786	3,786	3,786	3,786	3,786	3,786	3,786	3,786	3,786		\$290
Matson Playground - Storage	96	96	96	96	96	96	96	96	96	96		\$43
Matson Playground Fieldhouse	450	450	450	450	450	450	450	450	450	450		\$190
McFarlane Playground Fieldhouse	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497		\$418

CITY OF GREATER SUBURY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION

PARKS BUILDINGS CONT'D												UNIT COST (\$/sq. ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
McLean Playground Fieldhouse	1,138	1,138	1,138	1,138	1,138	1,138	1,138	1,138	1,138	1,138	\$217	
Meatbird Lake Park - Multi-Use Building	1,103	1,103	1,103	1,103	1,103	1,103	1,103	1,103	1,103	1,103	\$303	
Memorial Park Storage Garage	2,574	2,574	2,574	2,574	2,574	2,574	2,574	2,574	2,574	2,574	\$130	
Moonlight Beach - Lifeguard / Washroom Building	523	523	523	523	523	523	523	523	523	523	\$193	
Moonlight Beach - Main Building	2,762	2,762	2,762	2,762	2,762	2,762	2,762	2,762	2,762	2,762	\$276	
Nepahwin Lake Park - Change Rooms	1,644	1,644	1,644	1,644	1,644	1,644	1,644	1,644	1,644	1,644	\$291	
Northend Change Rooms	1,253	1,253	1,253	1,253	1,253	1,253	1,253	1,253	1,253	1,253	\$221	
O'Connor Park - Storage Shed	96	96	96	96	96	96	96	96	96	96	\$39	
O'Connor Playground - Gazebo #1	196	196	196	196	196	196	196	196	196	196	\$60	
O'Connor Playground - Gazebo #2	196	196	196	196	196	196	196	196	196	196	\$60	
O'Connor Playground Fieldhouse	3,120	3,120	3,120	3,120	3,120	3,120	3,120	3,120	3,120	3,120	\$199	
Oja Sports Complex - Storage Shed	80	80	80	80	80	80	80	80	80	80	\$44	
Oja Sports Complex Fieldhouse	2,075	2,075	2,075	2,075	2,075	2,075	2,075	2,075	2,075	2,075	\$574	
Old Skead Road Rink Building	1,471	1,471	1,471	1,471	1,471	1,471	1,471	1,471	1,471	1,471	\$178	
Percy Park Fieldhouse	1,746	1,746	1,746	1,746	1,746	1,746	1,746	1,746	1,746	1,746	\$257	
Place Hurlbise - Storage Building	100	100	100	100	100	100	100	100	100	100	\$112	
Place Hurlbise Fieldhouse	1,702	1,702	1,702	1,702	1,702	1,702	1,702	1,702	1,702	1,702	\$227	
Queen's Athletic Field - Refreshment Booth	395	395	395	395	395	395	395	395	395	395	\$219	
Queen's Athletic Field - Storage Building #1	120	120	120	120	120	-	-	-	-	-	\$41	
Queen's Athletic Field - Ticket Booth	180	180	180	180	180	180	180	180	180	180	\$50	
Queen's Athletic Field - Fieldhouse	5,240	5,240	5,240	5,240	5,240	5,240	5,240	5,240	5,240	5,240	\$264	
Queen's Athletic Field - Zamboni Shed	-	325	325	325	325	325	325	325	325	325	\$428	
Rayside Parks Services Depot	2,710	2,710	2,710	2,710	2,710	2,710	2,710	2,710	2,710	2,710	\$205	
Rick McDonald Sports Complex - Spotter Booth	96	96	96	96	96	96	96	96	96	96	\$3,260	
Ridgecrest Tot Lot - Storage Building	96	96	96	96	96	96	96	96	96	96	\$125	
Ridgecrest Tot Lot Fieldhouse	2,119	2,119	2,119	2,119	2,119	2,119	2,119	2,119	2,119	2,119	\$208	
Ridgmont Playground - Fieldhouse	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	\$131	
Riverdale Playground Fieldhouse	2,074	2,074	2,074	2,074	2,074	2,074	2,074	2,074	2,074	2,074	\$233	
Robinson - Bocce Shed	80	80	80	80	80	80	80	80	80	80	\$49	
Robinson Playground - Rink Shack	300	300	300	300	300	300	300	300	300	300	\$87	
Robinson Playground Fieldhouse	1,119	1,119	1,119	1,119	1,119	1,119	1,119	1,119	1,119	1,119	\$357	
Rosemarie Playground - Storage	96	96	96	96	96	-	-	-	-	-	\$122	
Rosemarie Playground Fieldhouse	1,166	1,166	1,166	1,166	1,166	1,166	1,166	1,166	1,166	1,166	\$156	
Russel Beaudry Outdoor Rink Building	560	560	560	560	560	560	560	560	560	560	\$396	
Ryan Heights Fieldhouse	1,452	1,452	1,452	1,452	1,452	1,452	1,452	1,452	1,452	1,452	\$191	
Simon Lake Park - Fieldhouse	1,235	1,235	1,235	1,235	1,235	1,235	1,235	1,235	1,235	1,235	\$267	
Skead Outdoor Rink - Storage Shed	103	103	103	103	103	103	103	103	103	103	\$42	
Sunnyside Playground Fieldhouse	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	\$274	
Terry Fox Sports Complex	5,217	5,217	5,217	5,217	5,217	5,217	5,217	5,217	5,217	5,217	\$433	
Terry Fox Sports Complex - Score Booth	63	63	63	63	63	63	63	63	63	63	\$170	
Terry Fox Sports Complex - Storage Building	540	540	540	540	540	540	540	540	540	540	\$106	
Theresa Playground Fieldhouse	362	362	362	362	362	362	362	362	362	362	\$657	
Theresa Playground Storage Shed	80	80	80	80	80	80	80	80	80	80	\$44	
Twin Forks Playground - Storage Building	96	96	96	96	96	96	96	96	96	96	\$120	
Twin Forks Playground Fieldhouse	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	\$303	
V.L.A. Playground Fieldhouse	1,145	1,145	1,145	1,145	1,145	1,145	1,145	1,145	1,145	1,145	\$226	
V.L.A. Playground Storage Shed	80	80	80	80	80	80	80	80	80	80	\$48	

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION

PARKS BUILDINGS CONT'D	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Valley Acres Playground - Fieldhouse	378	378	378	378	378	378	378	378	378	378	378	\$653
Valley Acres Storage Shed	120	120	120	120	120	120	120	120	120	120	120	\$57
Valley East Ambulance Building - used by Parks	1,998	1,998	1,998	1,998	1,998	1,998	1,998	1,998	1,998	1,998	1,998	\$269
Vermillion Lake Road Park Building	858	858	858	858	858	858	858	858	858	858	858	\$127
Victory Playground Fieldhouse	1,112	1,112	1,112	1,112	1,112	1,112	1,112	1,112	1,112	1,112	1,112	\$200
Walden West Library/Den Lou Playground	2,728	2,728	2,728	2,728	2,728	2,728	2,728	2,728	2,728	2,728	2,728	\$202
Westmount/Kipling Playground Fieldhouse	2,613	2,613	2,613	2,613	2,613	2,613	2,613	2,613	2,613	2,613	2,613	\$275
Whitfish Playground Fieldhouse	936	936	936	936	936	936	936	936	936	936	936	\$307
Whitfish Playground Storage Shed	80	80	80	80	80	80	80	80	80	80	80	\$61
Whitwater Lake Canteen	1,184	1,184	1,184	1,184	1,184	1,184	1,184	1,184	1,184	1,184	1,184	\$94
Whitwater Lake Picnic Shelter/Building	1,504	1,504	1,504	1,504	1,504	1,504	1,504	1,504	1,504	1,504	1,504	\$306
Whitwater Lake Storage Building	1,097	1,097	1,097	1,097	1,097	1,097	1,097	1,097	1,097	1,097	1,097	\$71
Azilda - Outdoor Water Building	-	-	-	-	-	-	-	-	-	-	-	\$57
Farmdale - Outdoor Water Building	-	-	-	-	-	-	-	-	-	-	-	\$57
Total (sq. ft.)	158,184	159,239	160,592	162,339	162,571	162,235	162,335	162,335	160,778	160,778		
Total (\$000)	\$39,548.4	\$39,740.5	\$39,950.3	\$40,456.5	\$40,518.1	\$40,497.8	\$40,503.4	\$40,503.4	\$39,787.4	\$39,787.4		

SPECIAL FACILITIES	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Azilda Lions Club Den	2,760	2,760	2,760	2,760	2,760	2,760	2,760	2,760	2,760	2,760	2,760	\$112
Bell Park - Amphitheatre (old)	2,832	-	-	-	-	-	-	-	-	-	-	\$515
Grace Hartman - Amphitheatre	-	-	2,448	4,896	4,896	4,896	4,896	4,896	4,896	4,896	4,896	\$1,379
Ben Moxam Community Centre	14,399	14,399	14,399	14,399	14,399	14,399	14,399	14,399	-	-	-	\$148
Calm Beach Change Rooms	685	685	685	685	685	685	685	685	685	685	685	\$212
Camp Sudaca - Bike Storage	512	512	512	512	512	512	512	512	512	512	512	\$0
Camp Sudaca - Boathouse Building	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	\$213
Camp Sudaca - Canoe Storage	240	240	240	240	240	240	240	240	240	240	240	\$31
Camp Sudaca - Craft Centre	848	848	848	848	848	848	848	848	848	848	848	\$99
Camp Sudaca - Gazebo/Shelter	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	\$52
Camp Sudaca - Rub A Tub	80	80	80	80	80	80	80	80	80	80	80	\$106
Camp Sudaca - Staff Cabin	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	\$120
Camp Sudaca - Cold Storage	720	720	720	720	720	720	720	720	720	720	720	\$71
Camp Wassakwa - Change Cabin #1	222	222	222	222	222	222	222	222	222	222	222	\$120
Camp Wassakwa - Change Cabin #2	222	222	222	222	222	222	222	222	222	222	222	\$116
Camp Wassakwa - Log Cabin	431	431	431	431	431	431	431	431	431	431	431	\$203
Camp Wassakwa - Multi-Purpose Building	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	\$121
Camp Wassakwa - Storage Building	173	173	173	173	173	173	173	173	173	173	173	\$93
Carmichael Community Centre	3,762	3,762	3,762	3,762	3,762	3,762	3,762	3,762	3,762	3,762	3,762	\$236
Carmichael Community Centre - Storage Building	96	96	96	96	96	96	96	96	96	96	96	\$139
Carmichael Community Centre - Warm-Up Shack	256	256	256	256	256	256	-	-	-	-	-	\$105
Carrefour Senator Rheal Belisle	9,513	9,513	9,513	9,513	9,513	9,513	9,513	9,513	9,513	9,513	9,513	\$187
Centennial Youth Centre (Valley East Youth Centre)	2,740	2,740	2,740	2,740	-	-	-	-	-	-	-	\$156
Chelmsford Senior Craft Shop	3,117	3,117	3,117	3,117	3,117	3,117	3,117	3,117	3,117	3,117	3,117	\$141
Chelmsford Seniors Craft Office	2,880	2,880	2,880	2,880	2,880	2,880	2,880	2,880	2,880	2,880	2,880	\$120
Onaping Community Centre Storage Building No. 1	561	561	561	561	561	561	561	561	561	561	561	\$66
Onaping Community Centre Storage Building No. 2	525	525	525	263	-	-	-	-	-	-	-	\$40
Coniston Skating Rink Building	246	246	246	246	246	246	246	246	246	246	246	\$109
Cote Park Youth Centre	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	\$403

CITY OF GREATER SUDBURY
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SPECIAL FACILITIES CONT'D	# of Square Feet										UNIT COST (\$/sq. ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Dovling Lions Club Building	3,011	3,011	3,011	3,011	3,011	3,011	3,011	3,011	3,011	3,011	\$204
Dr. Leclair Community Centre	5,654	5,654	5,654	5,654	5,654	5,654	5,654	5,654	5,654	5,654	\$455
Fiddling Memorial Park	2,582	2,582	2,582	2,582	2,582	2,582	2,582	2,582	2,582	2,582	\$363
Fiddling Memorial Park - Storage Garage	720	720	720	720	720	720	720	720	720	720	\$120
Howard Armstrong Storage	112	112	112	112	112	112	112	112	112	112	\$130
Milennium Resource - Storage Shed	288	288	288	288	288	288	288	288	288	288	\$39
Minor League Hockey Office Building (has been demolished)	1,402	1,402	1,402	1,402	1,402	-	-	-	-	-	\$164
Norman Community Centre	3,342	3,342	3,342	3,342	3,342	3,342	3,342	3,342	3,342	3,342	\$184
Norman Community Centre Storage Building	100	100	100	100	100	100	100	100	100	100	\$135
Onaping Curling Club	12,644	12,644	12,644	12,644	12,644	12,644	12,644	12,644	12,644	12,644	\$166
Ramsey Lake Boat Launch Building	1,359	1,359	1,359	1,359	1,359	1,359	1,359	1,359	1,359	1,359	\$233
St. Joseph Community Centre (Lions Den)	2,435	2,435	2,435	2,435	2,435	2,435	2,435	2,435	2,435	2,435	\$199
Sudbury Rowing/Canoe Club	4,370	4,370	4,370	4,370	4,370	4,370	4,370	4,370	4,370	4,370	\$180
Whitefish Fire Station/Community Centre	5,595	5,595	5,595	5,595	5,595	5,595	5,595	5,595	5,595	5,595	\$174
Total (sq. ft.)	98,435	95,603	98,051	100,237	97,234	95,832	95,576	95,576	81,177	81,177	
Total (\$000)	\$19,533.8	\$18,074.6	\$21,450.2	\$24,815.5	\$24,378.6	\$24,148.6	\$24,121.7	\$24,121.7	\$21,984.8	\$21,984.8	

SPORTS FIELDS	# of Sport Fields										UNIT COST (\$/field)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Soccer Field - Trillium Centre	1	1	1	1	1	1	1	1	1	1	\$139,878
Soccer Field - Hanmer	1	1	1	1	1	1	1	1	1	1	\$193,349
Soccer Field - Howard Armstrong	1	1	1	1	1	1	1	1	1	1	\$319,232
Soccer Field - James Jerome	-	1	1	1	1	1	1	1	1	1	\$187,017
Soccer Field - James Jerome Turf	-	1	1	1	1	1	1	1	1	1	\$2,161,371
Soccer Field - R. H. Murray	1	1	1	1	1	1	1	1	1	1	\$335,709
Full Size Fields-Delki Dozzi	1	1	1	1	1	1	1	1	1	1	\$226,000
Full Size Fields-Queen'S	1	1	1	1	1	1	1	1	1	1	\$226,000
Full Size Fields-Ve Rec Centre	5	5	5	5	5	5	5	5	5	5	\$226,000
Full Size Fields-Kinsmen	3	3	3	3	3	3	3	3	3	3	\$226,000
3/4 Size Field- Adamsdale	1	1	1	1	1	1	1	1	1	1	\$169,500
Mini Soccer Field - James Jerome	-	1	1	1	1	1	1	1	1	1	\$99,158
Mini Soccer Field - Trillium Centre	3	3	3	3	3	3	3	3	3	3	\$40,997
Mini Soccer Field - Delki Dozi	1	1	1	1	1	1	1	1	1	1	\$80,749
Mini Soccer Field-Lansing	1	1	1	1	1	1	1	1	1	1	\$67,235
Mini Soccer Field-McFarlane	1	1	1	1	1	1	1	1	1	1	\$67,235
Mini Soccer Field-Robinson	2	2	2	2	2	2	2	2	2	2	\$67,235
Mini Soccer Field-Rotary Park	5	5	5	5	5	5	5	5	5	5	\$67,235
Mini Soccer Field-Twin Forks	2	2	2	2	2	2	2	2	2	2	\$67,235
Mini Soccer Field-Lionel E. Lalonde	3	3	3	3	3	3	3	3	3	3	\$67,235
Mini Soccer Field-Falconbridge Fields	9	9	9	9	9	9	9	9	9	9	\$67,235
Mini Soccer Field-Coniston	1	1	1	1	1	1	1	1	1	1	\$67,235
Mini Soccer Field-Naughton	1	1	1	1	1	1	1	1	1	1	\$67,235
Mini Soccer Field-Ve Rec Centre	9	9	9	9	9	9	9	9	9	9	\$67,235

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SPORTS FIELDS CONT'D	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Basketball Court - Deiki Dozzi	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - 6th Ave Lively	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - Centennial Whitefish	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Kinsmen	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - Penage	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - VLA	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Cote	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - Dowling OC	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - Vermillion	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Elmwest	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Rick McDonald	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Victory	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Carol Richard Park	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - Kin Park	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - McLean	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Howard Armstrong	1	1	1	1	1	1	1	1	1	1	1	\$69,085
Basketball Court - Valley Acres	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - Valley East Youth Centre	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Falconbridge CC	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Garson Arena	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - Ravine Park	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Carling	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Don Lita	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Coniston Centennial Park	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - McFarlane	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - Loellen	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - York Street	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Downe	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - East End	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - Minnow Lake Place	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Morel	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - Ridgemount	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Cedar Park	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - Eye	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Basketball Court - Ridgcrest	1	1	1	1	1	1	1	1	1	1	1	\$4,000
Basketball Court - Copper St Park	1	1	1	1	1	1	1	1	1	1	1	\$44,762
Basketball Court - Black Lake Playground	1	1	1	1	1	1	1	1	1	1	1	\$44,762
Basketball Court (Half) - Ryan Heights	1	1	1	1	1	1	1	1	1	1	1	\$22,381
Basketball Court (Half) - Capreol Lions Den	1	1	1	1	1	1	1	1	1	1	1	\$22,381
Basketball Court (Half) - Thomas Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$22,381
Basketball Court (Half) - Wahnapitae	1	1	1	1	1	1	1	1	1	1	1	\$24,601
Basketball Court (Half) - Sunrise Ridge	1	1	1	1	1	1	1	1	1	1	1	\$22,381
Basketball Court (Half) - Larchmont	2	2	2	2	2	2	2	2	2	2	2	\$335,708
Baseball Diamond - Hammer Lions Field	1	1	1	1	1	1	1	1	1	1	1	\$335,708
Baseball Diamond - Lions Playground	1	1	1	1	1	1	1	1	1	1	1	\$335,708
Baseball Diamond - Onaping	1	1	1	1	1	1	1	1	1	1	1	\$335,708
Softball Diamond - Inco Ball Field	1	1	1	1	1	1	1	1	1	1	1	\$139,879
Softball Diamond - Barrydowne	2	2	2	2	2	2	2	2	2	2	2	\$139,879

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SPORTS FIELDS CONT'D	# of Sport Fields										UNIT COST (\$/field)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Softball Diamond - Wahnapiatae	1	1	1	1	1	1	1	1	1	1	\$335,708	1
Softball Diamond - Grace Playground	1	1	1	1	1	1	1	1	1	1	\$139,878	1
Softball Diamond - R.H. Murrey	1	1	1	1	1	1	1	1	1	1	\$335,709	1
Softball Diamond - Sekirk Park	1	1	1	1	1	1	1	1	1	1	\$335,708	1
Baseball Diamonds - Delki Dozzi	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - James Jerome	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Coniston Red Sox	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Lorne Brady	2	2	2	2	2	2	2	2	2	2	\$339,000	2
Baseball Diamonds - Rick McDonald	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Cole	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Terry Fox	4	4	4	4	4	4	4	4	4	4	\$395,500	4
Baseball Diamonds - Twin Forks	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Capreol/Doug Mohrs	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Centennial Park	2	2	2	2	2	2	2	2	2	2	\$339,000	2
Baseball Diamonds - Confederation School	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Rh Murray	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Oja	2	2	2	2	2	2	2	2	2	2	\$339,000	2
Baseball Diamonds - Copper Cliff	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Downe	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Elinwest	2	2	2	2	2	2	2	2	2	2	\$339,000	2
Baseball Diamonds - Lansing	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - McFarlane	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Moonlight	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Ridgemount	1	1	1	1	1	1	1	1	1	1	\$148,900	1
Baseball Diamonds - Lorne Brady	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Dowling	2	2	2	2	2	2	2	2	2	2	\$339,000	2
Baseball Diamonds - Rick McDonald	2	2	2	2	2	2	2	2	2	2	\$339,000	2
Baseball Diamonds - Blezard Valley	2	2	2	2	2	2	2	2	2	2	\$339,000	2
Baseball Diamonds - Elmview	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Baseball Diamonds - Farnedale	2	2	2	2	2	2	2	2	2	2	\$339,000	2
Baseball Diamonds - Kinsmen (Hillcrest)	1	1	1	1	1	1	1	1	1	1	\$339,000	1
Tennis Courts - Lions Playground	2	2	2	2	2	2	2	2	2	2	\$53,154	2
Tennis Courts - Capreol Lions Den	1	1	1	1	1	1	1	1	1	1	\$106,308	1
Tennis Courts - Loellen	-	-	1	1	1	1	1	1	1	1	\$180,866	1
Tennis Courts - Quinn Logan Tot Lot	1	1	1	1	1	1	1	1	1	1	\$167,855	1
Tennis Courts - R.H. Murray	1	1	1	1	1	1	1	1	1	1	\$251,782	1
Tennis Courts - Onaping	1	1	1	1	1	1	1	1	1	1	\$167,855	1
Tennis Court- Carmichael Field	2	2	2	2	2	2	2	2	2	2	\$155,000	2
Tennis Court- Coniston	3	3	3	3	3	3	3	3	3	3	\$155,000	3
Tennis Court- Copper Cliff	4	4	4	4	4	4	4	4	4	4	\$155,000	4
Tennis Court- Cole Park	3	3	3	3	3	3	3	3	3	3	\$155,000	3
Tennis Court- Delki Dozzi	2	2	2	2	2	2	2	2	2	2	\$155,000	2
Tennis Court- Dowling CC	3	3	3	3	3	3	3	3	3	3	\$155,000	3
Tennis Court- Elmview	2	2	2	2	2	2	2	2	2	2	\$155,000	2
Tennis Court- James Jerome	4	4	4	4	4	4	4	4	4	4	\$155,000	4
Tennis Court- Kinsmen	2	2	2	2	2	2	2	2	2	2	\$155,000	2
Tennis Court- Lorne Brady	2	2	2	2	2	2	2	2	2	2	\$155,000	2
Tennis Court- O'Connor	2	2	2	2	2	2	2	2	2	2	\$155,000	2

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SPORTS FIELDS CONT'D	# of Sport Fields										UNIT COST (\$/field)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Tennis Court- Sacre Coeur	4	4	4	4	4	4	4	4	4	4		\$155,000
Tennis Court- Twin Forks	2	2	2	2	2	2	2	2	2	2		\$155,000
Tennis Court- Whitefish	2	2	2	2	2	2	2	2	2	2		\$155,000
Outdoor Rink - Central Lane	1	1	1	1	1	1	1	1	1	1		\$55,952
Outdoor Rink - Skead	1	1	1	1	1	1	1	1	1	1		\$55,952
Outdoor Rink - Lebel Playground	1	1	1	1	1	1	1	1	1	1		\$22,381
Outdoor Rink - Wahnapiac	1	1	1	1	1	1	1	1	1	1		\$55,952
Outdoor Rink - Lonsdale Playground	1	1	1	1	1	1	1	1	1	1		\$55,952
Outdoor Rink - Leveck	-	1	1	1	1	1	1	1	1	1		\$33,674
Outdoor Rink - Lively	-	-	1	1	1	1	1	1	1	1		\$56,677
Outdoor Rink - Azilda	-	-	1	1	1	1	1	1	1	1		\$60,177
Outdoor Rink - Ridgcrest Park	-	-	1	1	1	1	1	1	1	1		\$39,599
Outdoor Rink - Algonquin	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Antwerp	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Beaver Lake	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Capreol	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Carmichael	1	1	1	1	1	1	1	1	1	1		\$84,750
Outdoor Rink - Carol Richard	1	1	1	1	1	1	1	1	1	1		\$84,750
Outdoor Rink - Cedar Park	1	1	1	1	1	1	1	1	1	1		\$84,750
Outdoor Rink - Chelmsford	1	1	1	1	1	1	1	1	1	1		\$84,750
Outdoor Rink - Coniston	1	1	1	1	1	1	1	1	1	1		\$84,750
Outdoor Rink - Delki Dozzi	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Den Lou	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Dorite	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Don Lita	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Dowling	1	1	1	1	1	1	1	1	1	1		\$84,750
Outdoor Rink - Downe	1	1	1	1	1	1	1	1	1	1		\$84,750
Outdoor Rink - East End	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Elm West	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Elmview	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Eye	1	1	1	1	1	1	1	1	1	1		\$84,750
Outdoor Rink - Falconbridge	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Farndale	1	1	1	1	1	1	1	1	1	1		\$84,750
Outdoor Rink - Kinmen	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Loellen	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Long Lake	1	1	1	1	1	1	1	1	1	1		\$141,250
Outdoor Rink - Lonsdale	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Watson	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - McFarlane	1	1	1	1	1	1	1	1	1	1		\$84,750
Outdoor Rink - Mclean	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - O'Connor	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Oja	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Old Skead Rd	1	1	1	1	1	1	1	1	1	1		\$84,750
Outdoor Rink - Penage Road	1	1	1	1	1	1	1	1	1	1		\$84,750
Outdoor Rink - Percy	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Queen'S	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Riverdale	1	1	1	1	1	1	1	1	1	1		\$56,500
Outdoor Rink - Robinson	1	1	1	1	1	1	1	1	1	1		\$56,500

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SPORTS FIELDS CONT'D	# of Sport Fields										UNIT COST (\$/field)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Outdoor Rink - Rosemarie	1	1	1	1	1	1	1	1	1	1	\$56,500	1
Outdoor Rink - Russell Beaudry	1	1	1	1	1	1	1	1	1	1	\$84,750	1
Outdoor Rink - Ryan Heights	1	1	1	1	1	1	1	1	1	1	\$84,750	1
Outdoor Rink - Sunnyside	1	1	1	1	1	1	1	1	1	1	\$56,500	1
Outdoor Rink - Theresa	1	1	1	1	1	1	1	1	1	1	\$56,500	1
Outdoor Rink - V.L.A.	1	1	1	1	1	1	1	1	1	1	\$56,500	1
Outdoor Rink - Valley Acres	1	1	1	1	1	1	1	1	1	1	\$56,500	1
Outdoor Rink - Valley East/Kin	1	1	1	1	1	1	1	1	1	1	\$56,500	1
Outdoor Rink - Westmount	1	1	1	1	1	1	1	1	1	1	\$56,500	1
Outdoor Rink - Whitefish	1	1	1	1	1	1	1	1	1	1	\$56,500	1
Splash Park - Morel	-	-	-	-	-	-	-	1	1	1	\$285,400	1
Splash Park - Victory	-	-	-	-	-	-	-	1	1	1	\$201,338	1
Splash Park - Westmount	-	-	-	-	-	1	1	1	1	1	\$168,000	1
Splash Park - DJ Hancock	-	-	-	-	-	-	-	1	1	1	\$0	1
Splash Park - Memorial Park	1	1	1	1	1	1	1	1	1	1	\$169,500	1
Splash Park - Ridgecrest	-	-	-	-	-	1	1	1	1	1	\$186,035	1
Splash Park - Onaping	-	-	-	-	-	-	-	-	-	1	\$267,550	1
Splash Park - Conillon Centennial Park	-	-	-	-	-	-	-	-	-	1	\$282,500	1
Splash Park - O'Conner Athletic Park	1	1	1	1	1	1	1	1	1	1	\$45,953	1
Splash Park - Cote Park	1	1	1	1	1	1	1	1	1	1	\$194,649	1
Splash Park - Kinsmen Park	1	1	1	1	1	1	1	1	1	1	\$173,848	1
Splash Park - Howard Armstrong	1	1	1	1	1	1	1	1	1	1	\$173,997	1
Skate Park - Azilda	1	1	1	1	1	1	1	1	1	1	\$33,090	1
Skate park - Capreol	1	1	1	1	1	1	1	1	1	1	\$17,739	1
Skate Park - Chelmsford	1	1	1	1	1	1	1	1	1	1	\$28,099	1
Skate Park - Garson	1	1	1	1	1	1	1	1	1	1	\$13,032	1
Skate Park - Hammer	1	1	1	1	1	1	-	-	-	-	\$16,254	-
Skate Park - Hammer (improved)							1	1	1	1	\$115,008	1
Skate Park - Levack-Chapling	1	1	1	1	1	1	1	1	1	1	\$11,434	1
Skate Park - Lively	1	1	1	1	1	1	1	1	1	1	\$19,889	1
Skate Park - Minnow Lake	1	1	1	1	1	1	1	1	1	1	\$588,279	1
Skate park - Berthiaume	-	-	-	1	1	1	1	1	1	1	\$66,499	1
BMX Track - Adanac	-	1	1	1	1	1	1	1	1	1	\$113,216	1
Running Track - Laurentian	-	1	1	1	1	1	1	1	1	1	\$3,866,243	1
Volleyball Court - Moonlight Beach	-	1	1	1	1	1	1	1	1	1	\$74,729	1
Boccee Court - Participation Tot Lot	1	1	1	1	1	1	1	1	1	1	\$22,381	1
Misc land improvements to sports fields	2	4	6	8	8	8	8	8	8	8	\$97,410	8
Boat Launch - Wahnapiplae River - Wahnapiplae	1	1	1	1	1	1	1	1	1	1	\$27,975	1
Boat Launch - Kalmo Beach - Capreol	1	1	1	1	1	1	1	1	1	1	\$27,975	1
Boat Launch - Onwatin Lake	1	1	1	1	1	1	1	1	1	1	\$27,975	1
Boat Launch - Wabagishik Lake	1	1	1	1	1	1	1	1	1	1	\$27,975	1
Boat Launch - Centennial Park, Whitewater Lake	1	1	1	1	1	1	1	1	1	1	\$27,975	1
Boat Launch - Centennial Park, Vermillion River	1	1	1	1	1	1	1	1	1	1	\$27,975	1
Boat Launch - Simon Lake Park	1	1	1	1	1	1	1	1	1	1	\$27,975	1
Boat Launch - Ella Lake Park & Playground	1	1	1	1	1	1	1	1	1	1	\$27,975	1
Boat Launch - Gordon Lake Road at Vermillion River Bridge	1	1	1	1	1	1	1	1	1	1	\$27,975	1
Boat Launch - Long Lake	1	1	1	1	1	1	1	1	1	1	\$31,489	1
Total (#)	8,301	8,314	8,324	8,331	8,335	8,341	8,346	8,352	8,356	8,362		
Total (\$000)	\$35,001.7	\$41,521.9	\$42,054.0	\$42,315.4	\$42,315.4	\$42,768.1	\$42,969.5	\$43,254.9	\$43,254.9	\$43,804.9		

CITY OF GREATER SUBURY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION

PARK AND PLAYGROUND EQUIPMENT	# of Equipment										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Adamsdale Playground	-	-	1	1	1	1	1	1	1	1	\$14,154
Anderson Farm Museum Park	1	1	1	1	1	1	1	1	1	1	\$42,781
Atlee St Senior Lot - Fitness	1	1	1	1	1	1	1	1	1	1	\$18,976
Autumnwood Playground	-	1	1	1	1	1	1	1	1	1	\$45,023
Bedford Tot Lot	1	1	1	1	1	1	1	1	1	1	\$47,605
Berthaume Playground Tot Lot	1	1	1	1	1	1	1	1	1	1	\$16,789
Birch Tot Lot	1	1	1	1	1	1	1	1	1	1	\$42,781
Birch Glen Playground	-	-	1	1	1	1	1	1	1	1	\$15,919
Bonaventure Tot Lot	1	1	1	1	1	1	1	1	1	1	\$64,170
Brighton Tot Lot	1	1	1	1	1	1	1	1	1	1	\$16,042
Capred Lion's Den	1	1	1	1	1	1	1	1	1	1	\$42,781
Carling Tot Lot	1	1	1	1	1	1	1	1	1	1	\$64,594
Carmichael Sports Complex Playground	1	1	1	1	1	1	1	1	1	1	\$26,555
Carol Richard Playground	1	1	1	1	1	1	1	1	1	1	\$41,988
Centennial Arena Park	1	1	1	1	1	1	1	1	1	1	\$42,781
Chelmsford parkette	-	-	1	1	1	1	1	1	1	1	\$9,961
Chelsea Park	1	1	1	1	1	1	1	1	1	1	\$64,170
Columbus Playground	1	1	1	1	1	1	1	1	1	1	\$42,781
Daniel Park Tot Lot	1	1	1	1	1	1	1	1	1	1	\$42,781
David St. Playground	1	1	1	1	1	1	1	1	1	1	\$16,546
Douglas Street Playground Tot Lot	1	1	1	1	1	1	1	1	1	1	\$42,781
East End Tot Lot	1	1	1	1	1	1	1	1	1	1	\$42,781
Elmview Playground	1	1	1	1	1	1	1	1	1	1	\$71,609
Eyre Park	-	-	-	1	1	1	1	1	1	1	\$13,587
Flake Playground Tot Lot	1	1	1	1	1	1	1	1	1	1	\$64,170
Fourth at Beach Tot Lot	1	1	1	1	1	1	1	1	1	1	\$42,781
Fraiser St. Tot Lot	-	-	1	1	1	1	1	1	1	1	\$10,467
Gateway Tot Lot	1	1	1	1	1	1	1	1	1	1	\$42,781
Grandview Playground	1	1	1	1	1	1	1	1	1	1	\$42,781
Gravelle Tot Lot	-	-	1	1	1	1	1	1	1	1	\$17,956
Guileville Playground Tot Lot	1	1	1	1	1	1	1	1	1	1	\$42,781
Hillcrest Playground	1	1	1	1	1	1	1	1	1	1	\$16,042
Howard Armstrong Playground	1	1	1	1	1	1	1	1	1	1	\$124,305
James Jerome Complex Playground	1	1	1	1	1	1	1	1	1	1	\$125,272
Laurentian Crescent Playground	1	1	1	1	1	1	1	1	1	1	\$25,339
Laval Tot Lot	1	1	1	1	1	1	1	1	1	1	\$64,170
Lebel Playground	1	1	1	1	1	1	1	1	1	1	\$42,781
Leger Tot Lot	1	1	1	1	1	1	1	1	1	1	\$42,781
Lerack Tot Lot	1	1	1	1	1	1	1	1	1	1	\$42,781
Lion's Club Playground Tot Lot	1	1	1	1	1	1	1	1	1	1	\$26,555
Lion's Playground Tot Lot	1	1	1	1	1	1	1	1	1	1	\$16,874
Lockerby Playground Tot Lot	1	1	1	1	1	1	1	1	1	1	\$42,781
Lo-Ellen Tot Lot	1	1	1	1	1	1	1	1	1	1	\$18,035
Louis Street Tot Lot	1	1	1	1	1	1	1	1	1	1	\$42,781
MacMillan Park Tot Lot	1	1	1	1	1	1	1	1	1	1	\$42,781
Marosi Tot Lot	1	1	1	1	1	1	1	1	1	1	\$12,531
McCrea Heights Playground	-	-	1	1	1	1	1	1	1	1	\$48,740
McNicol Tot Lot	1	1	1	1	1	1	1	1	1	1	\$64,170

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION

PARK AND PLAYGROUND EQUIPMENT CONT'D	# of Equipment											UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Memorial Park Playground	-	-	1	1	1	1	1	1	1	1	1	\$21,876
Metcalfe Park	1	1	1	1	1	1	1	1	1	1	1	\$16,042
Minnow Lake Dog Park	-	-	-	1	1	1	1	1	1	1	1	\$85,411
Mountainview Playground Park	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Onaping Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Onaping Community Centre Park Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$24,612
Orlde Playground	1	2	2	2	2	2	2	2	2	2	2	\$29,031
Paquette Playground Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Parkinson Park Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Participation Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Penman Park	1	1	1	1	1	1	1	1	1	1	1	\$26,633
Percy Playground	1	1	1	1	1	1	1	1	1	1	1	\$21,841
Pine St. Playground	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Pinecrest Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Pineheight park tot lot	-	1	1	1	1	1	1	1	1	1	1	\$33,934
Quinn Logan Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Ray Street Park Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Ravine Park	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Rick McDonald Complex Park	1	1	1	1	1	1	1	1	1	1	1	\$17,936
Rick McDonald Complex Park - Seniors Park	-	-	-	-	1	1	1	1	1	1	1	\$72,998
Ridgecrest Playground	1	1	1	1	1	1	1	1	1	1	1	\$77,419
Rose Court Playground Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Saturn Park Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Selkirk Park	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Shawn Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Shirley Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Silver Birch	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Spruce Meadows	2	2	2	2	2	2	2	2	2	2	2	\$50,540
St. Charles Park	1	1	1	1	1	1	1	1	1	1	1	\$64,170
St. Charles School Playground Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$42,781
St. Christopher Park	1	1	1	1	1	1	1	1	1	1	1	\$42,781
St. Orge Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$42,781
Sudbury Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$16,968
Theresa Playground	-	-	-	1	1	1	1	1	1	1	1	\$77,459
Thomas Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$16,042
Traverse Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$23,693
Trotter Subdivision Park	1	1	1	1	1	1	1	1	1	1	1	\$37,676
Valley Acres Playground	1	1	1	1	1	1	1	1	1	1	1	\$37,538
Victor Playground	1	1	1	1	1	1	1	1	1	1	1	\$14,367
Wahnapiac Community Club Tot Lot	1	1	1	1	1	1	1	1	1	1	1	\$85,561
Westmount Community Centre Park Playground	1	1	1	2	2	2	2	2	2	2	2	\$34,329
Worthington Playground	-	-	1	1	1	1	1	1	1	1	1	\$26,313
York Playground	1	2	2	2	2	2	2	2	2	2	2	\$32,756
Total (#)	78	82	90	94	95	95	95	95	95	95	95	
Total (\$000)	3,257.09	\$3,397.8	\$3,563.2	\$3,774.0	\$3,847.0	\$3,847.0	\$3,847.0	\$3,847.0	\$3,847.0	\$3,847.0	\$3,847.0	

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION

TRAILS	# of Trails										UNIT COST (\$/trail)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Vermillion Road to Black Lake Road	1	1	1	1	1	1	1	1	1	1	\$175,067
Hillfield Trail	1	1	1	1	1	1	1	1	1	1	\$258,255
Kelly Lake Trail	1	1	1	1	1	1	1	1	1	1	\$281,586
Fielding Park Trail	1	1	1	1	1	1	1	1	1	1	\$42,781
Bell Park Trails and Boardwalk	1	1	1	1	1	1	1	1	1	1	\$456,396
Bethel Lake Trail	1	1	1	1	1	1	1	1	1	1	\$263,544
Ramsey Lake Trail to Moonlight Beach	1	1	1	1	1	1	1	1	1	1	\$235,828
Junction Creek Trail	1	1	1	1	1	1	1	1	1	1	\$241,176
Junction Creek Trail - 1982	1	1	1	1	1	1	1	1	1	1	\$176,470
Junction Creek Trail - 2007	1	1	1	1	1	1	1	1	1	1	\$115,803
Junction Creek Trail	1	1	1	1	1	1	1	1	1	1	\$90,909
Junction Creek Trail	1	1	1	1	1	1	1	1	1	1	\$182,353
Junction Creek Trail	1	1	1	1	1	1	1	1	1	1	\$177,004
Meatbird Beach Park	1	1	1	1	1	1	1	1	1	1	\$36,714
Rayside Balfour Leisure Trails	1	1	1	1	1	1	1	1	1	1	\$213,903
Voyageur X-Country Trail	1	1	1	1	1	1	1	1	1	1	\$50,061
A.Y. Jackson Trail	1	1	1	1	1	1	1	1	1	1	\$171,657
Nolin Creek Trail	1	1	1	1	1	1	1	1	1	1	\$36,714
Sekirk Trail - 1982	1	1	1	1	1	1	1	1	1	1	\$15,722
Sekirk Trail - 2007	1	1	1	1	1	1	1	1	1	1	\$18,528
Howard's Nature Trail	1	1	1	1	1	1	1	1	1	1	\$32,620
Valley East & Centennial Arenal Loop Trail	1	1	1	1	1	1	1	1	1	1	\$32,620
Langdon Park Trail	1	1	1	1	1	1	1	1	1	1	\$26,225
Jane Goodall Trail	1	1	1	1	1	1	1	1	1	1	\$16,578
Capreol Trail	1	1	1	1	1	1	1	1	1	1	\$32,620
Garson Park Trail	1	1	1	1	1	1	1	1	1	1	\$23,809
Blueberry Hill Trail	1	1	1	1	1	1	1	1	1	1	\$42,781
Oak Forest Trail	1	1	1	1	1	1	1	1	1	1	\$64,706
Copper Cliff Trail	1	1	1	1	1	1	1	1	1	1	\$297,694
Robinson Lake Trail	1	1	1	1	1	1	1	1	1	1	\$147,860
James Jerome Pathway	-	1	1	1	1	1	1	1	1	1	\$98,429
Cedar Park Playground Trail	-	1	1	1	1	1	1	1	1	1	\$91,013
Ramsey Lake Path	-	1	1	1	1	1	1	1	1	1	\$595,263
Trail in Mallards Landing Subdivision	-	-	1	1	1	1	1	1	1	1	\$7,942
Junction Creek Trail	-	-	-	1	1	1	1	1	1	1	\$113,120
Coniston Jean Tellier Trail	-	-	-	1	1	1	1	1	1	1	\$34,836
Lily Creek Boardwalk	-	-	-	1	1	1	1	1	1	1	\$72,025
Vintage Green Walkway	-	-	-	1	1	1	1	1	1	1	\$5,148
Total (#)	30	33	34	38	38	38	38	38	38	38	
Total (\$000)	\$3,958.0	\$4,742.7	\$4,750.6	\$4,975.8	\$4,975.8	\$4,975.8	\$4,975.8	\$4,975.8	\$4,975.8	\$4,975.8	

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION

SKI HILLS	# of Square Feet										UNIT COST (\$/sq. ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Adanac Ski Hill - Control Room For Lift	801	801	801	801	801	801	801	801	801	801	\$96
Adanac Ski Hill - Patrol Hut	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	\$33
Adanac Ski Hill - Rope Tow/Electrical Building	96	96	96	96	96	96	96	96	96	96	\$130
Adanac Ski Hill - Rental Building	-	-	183	2,196	2,196	2,196	2,196	2,196	2,196	2,196	\$317
Adanac Ski Hill Chalet Building	2,340	2,340	2,340	2,340	2,340	2,340	2,340	2,340	2,340	2,340	\$132
Capreol Ski Chalet & Canteen	1,557	1,557	1,557	1,557	1,557	1,557	1,557	1,557	1,557	1,557	\$147
Capreol Ski Hill Garage	576	576	576	576	576	576	576	576	576	576	\$53
Capreol Ski Hill Lift Station	270	270	270	270	270	270	270	270	270	270	\$603
Levack Ski Hill - Chalet	864	864	864	864	864	864	864	864	864	864	\$116
Levack Ski Hill - Tow Building	64	64	64	64	64	-	-	-	-	-	\$68
Lively Ski Hill - Lift Building	160	160	160	160	160	160	160	160	160	160	\$99
Lively Ski Hill- Chalet	1,590	1,590	1,590	1,590	1,590	1,590	1,590	1,590	1,590	1,590	\$153
Groomer Building - Adanac	-	-	-	-	-	1,700	1,700	1,700	2,180	2,180	\$196
Total (sq. ft.)	9,396	9,396	9,579	11,592	11,592	13,228	13,228	13,228	13,708	13,708	
Total (\$000)	1,221	\$1,220.6	\$1,278.6	\$1,916.2	\$1,916.2	\$2,244.8	\$2,244.8	\$2,244.8	\$2,338.8	\$2,338.8	

RELATED EQUIPMENT (for specific facility)	# of Equipment										UNIT COST (\$/unit)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Ski Lift Chairs - Adanac	1	1	1	1	1	1	1	1	1	1	\$90,745
Ski Lift Conveyer - Adanac	1	1	1	1	1	1	1	1	1	1	\$148,112
Snowmaking Equipment - Adanac	1	1	1	1	1	1	1	1	1	1	\$86,808
Additional Snow Guns - Adanac	1	1	1	1	1	1	1	1	1	1	\$22,998
Lights - Adanac	1	1	1	1	1	1	1	1	1	1	\$47,224
Additional Lights - Adanac	1	1	1	1	1	1	1	1	1	1	\$39,124
Snowboard Hill Lights - Adanac	1	1	1	1	1	1					\$47,735
Snow Groomer - Adanac	1	1	1	1	1	1	1	1	1	1	\$100,115
T-Bar Ski Lift - Lively	1	1	1	1	1	1	1	1	1	1	\$110,393
Lights - Lively	1	1	1	1	1	1	1	1	1	1	\$42,866
Snowmaking Equipment - Lively	1	1	1	1	1	2	2	2	2	2	\$32,219
Snowmaking Equipment - Capreol	1	1	1	1	1	-	-	-	-	-	\$32,219
Lights - Capreol	1	1	1	1	1	1	1	1	1	1	\$54,756
Rope Tow Ski Lift - Capreol	1	1	1	1	1	1	-	-	-	-	\$277,370
James Jerome Field Equipment	-	1	1	1	1	2	2	2	2	2	\$812,701
LU Track equipment and Display System	-	1	1	1	1	1	1	1	1	1	\$265,667
Bell Park Presentation System	-	-	1	1	1	1	1	1	1	1	\$578,217
Skidoo - Adanac / Lively Ski Hill	-	-	3	3	3	6	6	6	6	6	\$11,220
Rock Climbing Wall - Camp Sudaca	-	-	1	1	1	1	1	1	1	1	\$54,322
Rock Climbing Wall - Camp Wassakwa			1	1	1	1	1	1	1	1	\$54,322
Total (#)	14	16	22	22	22	24	24	24	24	24	
Total (\$000)	\$1,132.7	\$2,211.1	\$2,931.6	\$2,931.6	\$2,931.6	\$3,452.8	\$3,452.8	\$3,452.8	\$3,452.8	\$3,452.8	\$3,452.8

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION

FLEET and EQUIPMENT	# of Fleet and Equipment											UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Forklift	1	1	1	1	1	1	1	1	1	1	\$75,665	
Snow Blower	64	64	64	64	64	64	64	64	64	64	\$81,626	
Loader	1	1	1	1	1	1	1	1	1	1	\$101,310	
Utility Trailer	13	13	13	13	13	19	19	19	19	19	\$4,498	
Ford 4x4 Tractor	7	7	7	7	7	7	3	3	3	3	\$37,433	
Ford 4x4 Loader	2	2	2	2	2	2	2	2	2	2	\$74,866	
Kubota Tractor	4	4	5	5	5	5	5	5	5	5	\$39,599	
Front Mower	5	5	5	5	5	4	4	4	4	4	\$26,738	
Multi Deck Mower	2	2	2	2	2	5	5	5	5	5	\$85,561	
Riding Mower	5	5	5	10	10	10	10	10	10	10	\$71,051	
Triplex Mower	3	3	3	3	3	3	3	3	3	3	\$23,340	
John Deere - Medium Mower	3	3	3	3	3	3	3	3	3	3	\$16,043	
John Deere Garor - Tractor 6 wheeler	1	1	1	1	1	1	1	1	1	1	\$16,042	
Sweeper	2	2	2	2	2	2	2	2	2	2	\$52,172	
Back Hoe	1	1	1	1	1	1	2	2	2	2	\$128,342	
Wood Chipper	1	1	1	1	1	1	1	1	1	1	\$19,550	
Small Tractor	1	1	1	1	1	1	1	1	1	1	\$10,695	
Top Dresser	2	2	2	3	3	3	3	3	3	3	\$20,762	
Chemical Sprayer	1	1	1	1	1	1	1	1	1	1	\$11,764	
Aerator	1	1	1	1	1	4	4	4	4	4	\$26,119	
John Deere Tractor with Cab	1	1	1	1	1	2	2	2	2	2	\$85,245	
John Deere Tractor	-	2	2	2	2	5	5	5	5	5	\$18,686	
Seadoo	3	3	3	3	3	3	3	3	3	3	\$12,502	
Lawn Mowers	85	85	85	85	85	85	85	85	85	85	\$4,665	
Grinder	-	-	1	1	1	1	1	1	1	1	\$13,502	
Rotary Tractor	-	-	1	1	1	1	1	1	1	1	\$20,310	
Overseeder	-	-	-	2	2	3	3	3	3	3	\$11,553	
Beach Cleaner	-	-	-	1	1	1	1	1	1	1	\$44,415	
Turf Cleaner	-	-	-	1	1	1	1	1	1	1	\$32,834	
Plow/Dump/Sander	1	1	1	1	1	3	3	3	3	3	\$197,028	
Chevy Silverado	3	3	5	5	5	5	5	5	5	5	\$19,565	
Ford F150	8	8	8	8	8	5	5	5	5	5	\$28,735	
Ford F250	10	10	10	10	10	10	10	10	10	10	\$34,896	
Ford F350	4	4	4	4	4	3	3	3	3	3	\$61,901	
Ford F450	2	3	3	5	5	5	5	5	5	5	\$60,329	
Ford Crown Vic	1	1	1	1	1	1	1	1	-	-	\$12,652	
Chevy 2500	2	2	2	2	2	2	2	2	2	2	\$35,096	
Dodge Ram	1	1	5	5	5	5	5	5	5	5	\$26,139	
Dodge Grand Caravan	1	1	1	1	1	1	1	1	-	-	\$26,000	
Toyota Prius Hybrid	1	1	1	1	1	-	-	-	-	-	\$37,929	
Ford Escape Hybrid	-	-	1	1	1	1	1	1	1	1	\$39,855	
Snow Trail Groomer	1	1	1	1	1	2	2	2	2	2	\$55,580	

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION

FLEET and EQUIPMENT CONT'D	# of Fleet and Equipment										UNIT COST	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		(\$/unit)
Snowmobile	1	1	1	1	1	1	6	6	6	6	6	\$16,356
Dethatcher	2	2	2	2	2	2	2	2	2	2	2	\$15,120
Trimmers	75	75	75	75	75	75	75	75	75	75	75	\$540
Blower	12	12	12	12	12	12	12	12	12	12	12	\$594
Boat Motor	2	2	2	2	2	2	2	2	2	2	2	\$10,800
Sod Cutter	2	2	2	2	2	2	2	2	2	2	2	\$6,480
Chainsaws	6	6	6	6	6	6	6	6	6	6	6	\$1,080
Tiller	9	9	9	9	9	9	9	9	9	9	9	\$1,620
Side by Side 4X4	3	3	3	3	3	3	3	3	3	3	3	\$15,120
Total (#)	2,365	2,369	2,380	2,393	2,394	2,411	2,412	2,413	2,412	2,413		
Total (\$000)	\$9,312.0	\$9,409.7	\$9,666.7	\$10,263.7	\$10,263.7	\$11,075.8	\$11,075.8	\$11,075.8	\$11,037.2	\$11,037.2		

MAJOR FACILITIES	# of Square Feet										UNIT COST	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		(\$/sq. ft.)
Barrydowne Arena	26,381	26,381	26,381	26,381	26,381	26,381	26,381	26,381	26,381	26,381	26,381	\$222
Cambrian Arena	29,511	29,511	29,511	29,511	29,511	29,511	29,511	29,511	29,511	29,511	29,511	\$229
Capreol Community Centre & Arena	54,117	54,117	54,117	54,117	54,117	54,117	54,117	54,117	54,117	54,117	54,117	\$221
Carmichael Arena	29,366	29,366	29,366	29,366	29,366	29,366	29,366	29,366	29,366	29,366	29,366	\$233
Centennial Community Centre & Arena	40,250	40,250	40,250	40,250	40,250	40,250	40,250	40,250	40,250	40,250	40,250	\$221
Chelmsford Community Centre & Arena	36,750	36,750	36,750	36,750	36,750	36,750	36,750	36,750	36,750	36,750	36,750	\$208
Coniston Arena	30,599	30,599	30,599	30,599	30,599	30,599	30,599	30,599	30,599	30,599	30,599	\$256
Countryside Arena	40,641	40,641	50,541	80,241	80,241	80,241	80,241	80,241	80,241	80,241	80,241	\$294
Excess Capacity				(21,986)	(21,986)	(21,986)	(21,986)	(21,986)	(21,986)	(21,986)	(21,986)	\$294
Dow Pool	10,085	10,085	10,085	10,085	10,085	10,085	10,085	10,085	10,085	10,085	10,085	\$397
Dowling Civic Leisure Centre & Library	28,569	28,569	28,569	28,569	28,569	28,569	28,569	28,569	28,569	28,569	28,569	\$226
Dr. Leclair Arena	22,703	22,703	22,703	22,703	22,703	22,703	22,703	22,703	22,703	22,703	22,703	\$228
Falconbridge Community Centre	13,750	13,750	13,750	13,750	13,750	13,750	13,750	13,750	13,750	13,750	13,750	\$255
Garson Community Centre & Arena	42,890	42,890	42,890	42,890	42,890	42,890	42,890	42,890	42,890	42,890	42,890	\$228
Gatchell Pool	14,796	14,796	14,796	14,796	14,796	14,796	14,796	14,796	14,796	14,796	14,796	\$365
Howard Armstrong Recreation Centre	51,857	51,857	51,857	51,857	51,857	51,857	51,857	51,857	51,857	51,857	51,857	\$267
Jim Cody Memorial Arena	29,883	29,883	29,883	29,883	29,883	29,883	29,883	29,883	29,883	29,883	29,883	\$237
McClelland Community Centre & Arena	41,543	41,543	41,543	41,543	41,543	41,543	41,543	41,543	41,543	41,543	41,543	\$228
Millenium Resource Centre	39,125	39,125	39,125	39,125	39,125	39,125	39,125	39,125	39,125	39,125	39,125	\$235
Minnow Lake Place	28,289	28,289	28,289	28,289	28,289	28,289	28,289	28,289	28,289	28,289	28,289	\$210
Naughton Community Centre	17,940	17,940	17,940	17,940	17,940	17,940	17,940	17,940	17,940	17,940	17,940	\$219
Nickel District Pool	8,763	8,763	8,763	8,763	8,763	8,763	8,763	8,763	8,763	8,763	8,763	\$366
Onaping Community Centre & Pool	33,709	33,709	33,709	33,709	33,709	33,709	33,709	33,709	33,709	33,709	33,709	\$255
Raymond Plourde Community Centre & Arena	35,316	35,316	35,316	35,316	35,316	35,316	35,316	35,316	35,316	35,316	35,316	\$209
Sudbury Community Centre & Arena	88,630	88,630	88,630	88,630	88,630	88,630	88,630	88,630	88,630	88,630	88,630	\$294
Tom Davies Community Centre & Arena	37,760	37,760	37,760	37,760	37,760	37,760	37,760	37,760	37,760	37,760	37,760	\$241
Total (sq. ft.)	833,223	833,223	843,123	850,837	850,837	850,837	850,837	850,837	850,837	850,837	850,837	
Total (\$000)	\$205,919.6	\$205,919.6	\$208,828.5	\$211,095.1	\$211,095.1	\$211,095.1	\$211,095.1	\$211,095.1	\$211,095.1	\$211,095.1	\$211,095.1	

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION

LAND - MAJOR FACILITIES	# of Acres										UNIT COST (\$/acre)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Cambrian Arena	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	\$5,642
Capitol Community Centre & Arena	11.68	11.68	11.68	11.68	11.68	11.68	11.68	11.68	11.68	11.68	\$4,597
Carmichael Arena	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	\$37,800
Centennial Community Centre & Arena	51.00	51.00	51.00	51.00	51.00	51.00	51.00	51.00	51.00	51.00	\$3,320
Chelmsford Community Centre & Arena	10.39	10.39	10.39	10.39	10.39	10.39	10.39	10.39	10.39	10.39	\$8,907
Dowling Civic Leisure Centre & Library	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	\$3,697
Coniston Arena	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	\$2,171
Countryside Arena	31.22	31.22	31.22	31.22	31.22	31.22	31.22	31.22	31.22	31.22	\$10,536
Dow Pool	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	\$39,774
Dr. Leclair Arena	12.02	12.02	12.02	12.02	12.02	12.02	12.02	12.02	12.02	12.02	\$11,174
Falconbridge Community Centre	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	\$19,207
Garson Community Centre & Arena	15.73	15.73	15.73	15.73	15.73	15.73	15.73	15.73	15.73	15.73	\$7,662
Gatchell Pool	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	\$212,941
Howard Armstrong Recreation Centre	61.72	61.72	61.72	61.72	61.72	61.72	61.72	61.72	61.72	61.72	\$4,000
Jim Cody Memorial Arena	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	\$5,587
McClelland Community Centre & Arena	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	\$30,490
Millenium Resource Centre	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	\$9,195
Minnow Lake Place	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	\$70,843
Naughton Community Centre	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	\$14,367
Onaping Community Centre & Pool	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	\$7,015
Raymond Plourde Community Centre & Arena	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$57,468
Sudbury Community Centre & Arena	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	\$834,430
Tom Davies Community Centre & Arena	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	\$38,312
Total (acre)	295.70	295.70	295.70	295.70	295.70	295.70	295.70	295.70	295.70	295.70	
Total (\$000)	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4	

FLEET AND EQUIPMENT - MAJOR FACILITIES	# of Fleet and Equipment										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Zamboni - All Locations	16	16	17	17	17	17	19	19	19	19	\$105,306
Sudbury Arena - Stage and flooring	1	1	1	1	1	1	1	1	1	1	\$249,497
Aquatic Disabled Chair Lift - Gatchell Pool	1	1	1	1	1	1	1	1	1	1	\$19,228
Fitness Equipment for all Fitness Centres (HARC, LEL, Falconbridge, Dowling)	1	1	1	1	1	1	1	1	1	1	\$403,410
Total (#)	19	19	20	20	20	22	22	22	22	22	
Total (\$000)	\$2,357.0	\$2,357.0	\$2,462.3	\$2,462.3	\$2,462.3	\$2,672.9	\$2,672.9	\$2,672.9	\$2,672.9	\$2,672.9	

CITY OF GREATER SUBURBY
CALCULATION OF SERVICE LEVELS
PARKS AND RECREATION

Historic Population

INVENTORY SUMMARY (\$000)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	159,389	159,884	160,380	160,628	160,877	161,126	161,375	161,625	161,948	162,272
Parks Buildings	\$39,548.4	\$39,740.5	\$39,950.3	\$40,456.5	\$40,518.1	\$40,497.8	\$40,503.4	\$40,503.4	\$39,787.4	\$39,787.4
Special Facilities	\$19,533.8	\$18,074.6	\$21,450.2	\$24,815.5	\$24,378.6	\$24,148.6	\$24,121.7	\$24,121.7	\$21,984.8	\$21,984.8
Sports Fields	\$35,001.7	\$41,521.9	\$42,054.0	\$42,315.4	\$42,315.4	\$42,768.1	\$42,969.5	\$43,254.9	\$43,254.9	\$43,804.9
Park And Playground Equipment	\$3,257.1	\$3,397.8	\$3,563.2	\$3,774.0	\$3,847.0	\$3,847.0	\$3,847.0	\$3,847.0	\$3,847.0	\$3,847.0
Trails	\$3,958.0	\$4,742.7	\$4,750.6	\$4,975.8	\$4,975.8	\$4,975.8	\$4,975.8	\$4,975.8	\$4,975.8	\$4,975.8
Ski Hills	\$1,220.6	\$1,220.6	\$1,278.6	\$1,916.2	\$1,916.2	\$2,244.8	\$2,244.8	\$2,244.8	\$2,338.8	\$2,338.8
Related Equipment (For Specific Facility)	\$1,132.7	\$2,211.1	\$2,931.6	\$2,931.6	\$2,931.6	\$3,452.8	\$3,452.8	\$3,452.8	\$3,452.8	\$3,452.8
Fleet And Equipment	\$9,312.0	\$9,409.7	\$9,666.7	\$10,263.7	\$10,263.7	\$11,075.8	\$11,075.8	\$11,075.8	\$11,037.2	\$11,037.2
Major Facilities	\$205,919.6	\$205,919.6	\$208,828.5	\$211,095.1	\$211,095.1	\$211,095.1	\$211,095.1	\$211,095.1	\$211,095.1	\$211,095.1
Land - Major Facilities	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4	\$4,961.4
Fleet And Equipment - Major Facilities	\$2,357.0	\$2,357.0	\$2,462.3	\$2,462.3	\$2,462.3	\$2,672.9	\$2,672.9	\$2,672.9	\$2,672.9	\$2,672.9
Total (\$000)	\$326,202.3	\$333,556.9	\$341,897.4	\$349,967.4	\$349,665.0	\$351,740.2	\$351,920.3	\$352,205.7	\$349,408.1	\$349,958.1

Average
Service
Level

SERVICE LEVEL (\$/Capita)

Parks Buildings	\$248.12	\$248.56	\$249.10	\$251.86	\$251.86	\$251.34	\$250.99	\$250.60	\$245.68	\$245.19
Special Facilities	\$122.55	\$113.05	\$133.75	\$164.49	\$151.54	\$149.87	\$149.48	\$149.24	\$135.75	\$135.48
Sports Fields	\$219.60	\$259.70	\$262.21	\$263.44	\$263.03	\$265.43	\$266.27	\$267.62	\$267.09	\$269.95
Park And Playground Equipment	\$20.43	\$21.25	\$22.22	\$23.50	\$23.91	\$23.88	\$23.84	\$23.80	\$23.75	\$23.71
Trails	\$24.83	\$29.66	\$29.62	\$30.98	\$30.93	\$30.88	\$30.83	\$30.79	\$30.72	\$30.66
Ski Hills	\$7.66	\$7.63	\$7.97	\$11.93	\$11.91	\$13.93	\$13.91	\$13.89	\$14.44	\$14.41
Related Equipment (For Specific Facility)	\$7.11	\$13.83	\$18.28	\$18.25	\$18.22	\$21.43	\$21.40	\$21.36	\$21.32	\$21.28
Fleet And Equipment	\$58.42	\$58.85	\$60.27	\$63.90	\$63.80	\$68.74	\$68.63	\$68.53	\$68.15	\$68.02
Major Facilities	\$1,291.93	\$1,287.93	\$1,302.09	\$1,314.19	\$1,312.15	\$1,310.12	\$1,308.10	\$1,306.08	\$1,303.47	\$1,300.87
Land - Major Facilities	\$31.1	\$31.0	\$30.9	\$30.9	\$30.8	\$30.8	\$30.7	\$30.7	\$30.6	\$30.6
Fleet And Equipment - Major Facilities	\$14.8	\$14.7	\$15.4	\$15.3	\$15.3	\$16.6	\$16.6	\$16.5	\$16.5	\$16.5
Total (\$/capita)	\$2,046.58	\$2,086.24	\$2,131.80	\$2,178.74	\$2,173.49	\$2,183.01	\$2,180.76	\$2,179.15	\$2,157.53	\$2,156.61

CITY OF GREATER SUBURBY
CALCULATION OF MAXIMUM ALLOWABLE
PARKS AND RECREATION

10-Year Funding Envelope Calculation	
10 Year Average Service Level (2009-2018)	\$2,147.39
Population Growth (2019-2028)	2.918
Maximum Allowable Funding Envelope	\$6,266.093
Less Legislated 10% Discount	\$626.609
Discounted Maximum Allowable Funding Envelope	\$5,639.484

**APPENDIX B.6
TABLE 2**

**CITY OF GREATER SUDBURY
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		
	Start	Finish				BTE %	Replacement & BTE Shares		Prior DCs	Available DC Reserves	2019 - 2028
6.0 PARKS AND RECREATION											
6.1 Indoor Recreation											
Gerry McCrory Countryside Sports Complex											
6.1.1 2nd Ice Pad	2012	2012	\$ 10,375,315	\$ 11,200	\$ 10,364,115	0.0%	\$ -	\$ 1,036,412	\$ 2,720,753	\$ 147,161	\$ 3,229,895
Subtotal Indoor Recreation			\$ 10,375,315	\$ 11,200	\$ 10,364,115		\$ -	\$ 1,036,412	\$ 2,720,753	\$ 147,161	\$ 3,229,895
6.2 Outdoor Recreation											
James Jerome Sports Complex Renewal Program											
6.2.1 Program	2012	2012	\$ 3,584,492	\$ 2,505,598	\$ 1,078,894	70.0%	\$ 755,226	\$ 32,367	\$ -	\$ 145,651	\$ 145,651
6.2.2 Val Caron Skate Park	2020	2020	\$ 750,000	\$ -	\$ 750,000	98.2%	\$ 736,500	\$ 1,350	\$ -	\$ -	\$ 12,150
6.2.3 Walden Mini Soccer Fields	2019	2023	\$ 210,000	\$ -	\$ 210,000	50.0%	\$ 105,000	\$ 10,500	\$ -	\$ -	\$ 94,500
6.2.4 Rayside Balfour Soccer Field	2019	2023	\$ 125,000	\$ -	\$ 125,000	50.0%	\$ 62,500	\$ 6,250	\$ -	\$ -	\$ 56,250
Subtotal Outdoor Recreation			\$ 4,669,492	\$ 2,505,598	\$ 2,163,894		\$ 1,659,226	\$ 50,467	\$ -	\$ 145,651	\$ 308,551
TOTAL PARKS AND RECREATION			\$ 15,044,807	\$ 2,516,798	\$ 12,528,009		\$ 1,659,226	\$ 1,086,878	\$ 2,720,753	\$ 292,812	\$ 3,538,445
											\$ 3,229,895

Residential Development Charge Calculation

Residential Share of 2019 - 2028 DC Eligible Costs
10-Year Growth in Population in New Units
Unadjusted Development Charge Per Capita

100%
\$3,538,445
7,402
\$478.04

Non-Residential Development Charge Calculation

Non-Residential Share of 2019 - 2028 DC Eligible Costs
10-Year Growth in Square Feet
Unadjusted Development Charge Per Square Foot

0%
\$0
1,804,390
\$0.00

2019 - 2028 Net Funding Envelope

\$5,639,484

Notional Reserve Fund Balance

Balance as at December 31, 2018
Revenue Losses

\$0
\$292,812

Total

\$292,812

CITY OF GREATER SUDBURY
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	(\$2,959.7)	(\$2,620.1)	(\$2,237.7)	(\$1,982.5)	(\$1,704.4)	(\$1,368.1)	(\$1,003.5)	(\$608.8)	(\$316.2)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$3,405.7	\$42.3	\$30.2	\$30.2	\$30.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,538.4
- General Government: Inflated	\$3,405.7	\$43.1	\$31.4	\$32.0	\$32.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,544.8
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	962	964	966	697	699	701	703	705	501	504	7,402
REVENUE											
- DC Receipts: Inflated	\$525.3	\$536.9	\$548.7	\$403.9	\$413.1	\$422.6	\$432.3	\$442.2	\$320.5	\$328.9	\$4,374.2
INTEREST											
- Interest on Opening Balance	\$0.0	(\$162.8)	(\$144.1)	(\$123.1)	(\$109.0)	(\$93.7)	(\$75.2)	(\$55.2)	(\$33.5)	(\$17.4)	(\$814.1)
- Interest on In-year Transactions	(\$79.2)	\$8.6	\$9.1	\$6.5	\$6.7	\$7.4	\$7.6	\$7.7	\$5.6	\$5.8	(\$14.3)
TOTAL REVENUE	\$446.0	\$382.7	\$413.7	\$287.3	\$310.7	\$336.2	\$364.6	\$394.7	\$292.6	\$317.2	\$3,545.9
CLOSING CASH BALANCE	(\$2,959.7)	(\$2,620.1)	(\$2,237.7)	(\$1,982.5)	(\$1,704.4)	(\$1,368.1)	(\$1,003.5)	(\$608.8)	(\$316.2)	\$1.0	

2019 Adjusted Charge Per Capita	\$546
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Allocation of Capital Program	
Residential Sector	100%
Non-Residential Sector	0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix B.7

Ambulance Services

Appendix B.7

Ambulance Services

The Paramedic Services Division is the provider of ambulance services in the City of Greater Sudbury and is responsible for providing primary and advanced medical care to ill and injured persons to, from and between medical treatment facilities.

Table 1 Historical Service Levels

The ten-year historical inventory of capital assets for Ambulance Services includes 21,111 square feet of building space with a replacement value of \$7.39 million. The 4.21 acres of land associated with Ambulance Services is valued at \$355,100. The value of vehicles totals \$4.92 million, and machinery and equipment adds another \$4.11 million to the value of the inventory.

The total value of the Ambulance Services capital infrastructure is estimated to be \$16.77 million. The average service level attained in the ten-year historical period 2009-2018 is \$67.70 per population and employment. This service level multiplied by the ten-year projected growth in population and employment leads to a maximum allowable funding envelope of \$357,333. After discounting for the ten per cent legislated reduction, the net maximum allowable funding envelope to be carried forward totals \$321,600.

Table 2 2019-2028 Development-Related Capital Program & Calculation Of The Unadjusted Development Charges

The 2019-2028 Ambulance Services capital program provides for the Station Redevelopment at a total cost of \$1.53 million, as well as \$5,000 in equipment for two additional paramedics. No grants or subsidies have been identified. A 25 per cent replacement share, or \$383,000, has been allocated to the Station Redevelopment costs, and another \$115,400 is deducted for the legislated ten per cent reduction.

The remaining development-related capital program totals \$1.04 million. The notional reserve fund balance of \$301,306 is first applied. Due to the funding envelope restriction, another \$415,694 is allocated to development occurring beyond 2028. The remaining \$321,600 is brought forward to the development charges calculation.

The \$321,600 is allocated 76 per cent (\$244,416) to residential development and 24 per cent (\$77,184) to non-residential development. This yields unadjusted development charges of \$33.02 per capita and \$0.04 per square foot.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential charge increases to \$35 per capita and the non-residential charge increases to \$0.05 per square foot.

AMBULANCE SERVICES SUMMARY						
10-Year Hist.	2019-2028		Unadjusted		Adjusted	
Service Level	Development-Related	Capital Program	Development Charge		Development Charge	
\$/pop & emp	Total	Net DC Recoverable	\$/capita	\$/sq.ft.	\$/capita	\$/sq.ft.
\$67.70	\$1,537,000	\$321,600	\$33.02	\$0.04	\$35	\$0.05

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
AMBULANCE SERVICES

BUILDINGS	# of Square Feet										UNIT COST (\$/sq. ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Van Horne Emergency Services Station	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	\$350
Leon Street Emergency Services Station	900	900	900	900	900	900	900	900	900	900	\$350
Long Lake Road Emergency Services Station	852	852	852	852	852	852	852	852	852	852	\$350
Nickel Centre (Garson) Fire Station	788	788	788	788	788	788	788	788	788	788	\$350
Capreol - Ambulance, Old Hydro Building	7,487	7,487	7,487	7,487	7,487	7,487	7,487	7,487	7,487	7,487	\$350
Levack Fire Station	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	\$350
Black Lake Rd (Waters)	2,452	2,452	2,452	2,452	2,452	2,452	2,452	2,452	2,452	2,452	\$350
Val Therese Fire Station	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	\$350
Chelmsford Fire and EMS Station	4,320	4,320	4,320	4,320	4,320	4,320	4,320	4,320	4,320	4,320	\$350
Second Avenue Fire Station	830	830	830	830	830	830	830	830	830	830	\$350
Total (sq.ft.)	21,111	21,111	21,111	21,111	21,111	21,111	21,111	21,111	21,111	21,111	
Total (\$000)	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9	

LAND	# of Acres										UNIT COST (\$/acre)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Van Horne Emergency Services Station	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	\$834,404
Leon Street Emergency Services Station	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$382,921
Long Lake Road Emergency Services Station	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	\$253,108
Nickel Centre (Garson) Fire Station	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$146,849
Capreol - Ambulance, Old Hydro Building	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$116,816
Levack Fire Station	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	\$31,157
Black Lake Rd (Waters)	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	\$19,156
Val Therese Fire Station	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	\$10,402
Chelmsford Fire and EMS Station	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	\$126,833
Second Avenue Station	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	\$79,815
Total (acre)	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	
Total (\$000)	\$355.1	\$355.1	\$355.1	\$355.1	\$355.1	\$355.1	\$355.1	\$355.1	\$355.1	\$355.1	

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
AMBULANCE SERVICES

AMBULANCES & OTHER VEHICLES	# of Ambulances & Other Vehicles										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Ambulances	20	20	21	22	22	22	22	23	23	23	\$157,173
Primary Response Units (PRU's)	12	12	12	12	10	10	10	8	8	8	\$69,903
ERV Command	3	3	3	3	3	3	3	4	5	5	\$55,414
Support Unit (CFC)	2	2	2	2	2	2	2	-	-	-	\$153,998
Emergency Support Unit (pulls Argo Trailer wh	1	1	1	1	1	1	1	1	1	1	\$228,529
Argo Avenger	1	1	1	1	1	1	1	1	1	1	\$51,927
Trailer for Argo Avenger	1	1	1	1	1	1	1	1	1	1	\$16,050
Gator									1	1	\$63,312
Gator Trailer										1	\$17,665
Ford 4X4									1	1	\$87,266
Total (#)	40	40	41	42	40	40	40	40	42	42	
Total (\$000)	\$4,753.0	\$4,753.0	\$4,910.2	\$5,067.4	\$4,927.6	\$4,927.6	\$5,000.4	\$4,835.0	\$4,916.0	\$4,916.0	

MACHINERY & EQUIPMENT (excluding computers)	# of Machinery & Equipment										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Toughbooks	35	35	35	35	35	39	39	41	41	41	\$4,763
Cardiac Defibrillators Monitors	32	38	38	38	38	38	38	38	37	37	\$36,204
Defib Batteries	32	81	111	111	111	110	110	110	108	108	\$612
Battery Chargers - Units	10	10	10	10	10	10	11	11	11	11	\$3,387
AED Units (Various City Facilities)	44	52	53	61	67	65	65	65	63	63	\$2,342
CPAP Breathing System - Units	-	34	34	34	34	34	34	-	-	-	\$2,102
Stretcher (9C) - Units	16	24	28	28	28	-	-	-	-	-	\$1,034
Stretcher (Proflex) - Units	33	33	33	33	33	33	-	-	-	-	\$6,033
Stretcher (Power) Stryker	-	-	-	-	-	-	24	26	26	26	\$20,000
Power Load Stryker	-	-	1	1	1	1	23	23	24	24	\$26,000
AVL (Automatic Vehicle Locator)	37	37	37	37	37	37	37	37	38	38	\$5,200
Suction Units	39	39	39	39	39	39	39	39	39	39	\$630
Regulator (Breathing) D	35	35	75	75	75	75	75	75	75	75	\$110
Regulator (Breathing) M	24	24	27	27	27	27	27	27	27	27	\$184
Flo Meter	27	42	42	45	45	45	52	52	52	52	\$124
Scoop	28	28	28	28	28	28	28	28	28	28	\$1,232
Stair Chairs	23	28	27	27	27	27	27	28	28	28	\$1,740
Server for Kronos software	1	1	1	1	1	1	1	1	1	1	\$15,032
Kronos	1	1	1	1	1	1	1	1	1	1	\$128,825
Kronos-Teleslaff	-	-	-	-	-	-	-	-	1	1	\$81,000
Access Control System at LEL Centre	1	1	1	1	1	1	1	1	1	1	\$251,436
iMedic Software	-	1	1	1	1	1	1	1	1	1	\$175,000
Mannequin - Patient Training Equipment	-	-	-	1	1	1	1	1	1	1	\$38,051
Automatic Car Wash System	-	-	-	-	1	1	1	1	1	1	\$96,191
Pulse Point Software	-	-	-	-	-	-	-	-	1	1	\$10,400
Video Laryngoscopes	-	-	-	-	-	-	-	-	32	32	\$2,000
Total (#)	418	544	622	634	641	614	635	606	637	637	
Total (\$000)	\$2,395.7	\$2,927.0	\$2,981.1	\$3,038.2	\$3,148.5	\$3,133.3	\$3,990.4	\$3,970.2	\$4,114.7	\$4,114.7	

CITY OF GREATER SUDBURY
CALCULATION OF SERVICE LEVELS
AMBULANCE SERVICES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historic Population	159,389	159,884	160,380	160,628	160,877	161,126	161,375	161,625	161,948	162,272
Historic Employment	74,525	74,854	75,185	75,400	75,616	75,833	76,050	76,268	76,559	76,851
Total Population & Employment	233,914	234,738	235,565	236,028	236,493	236,959	237,425	237,893	238,507	239,123

INVENTORY SUMMARY (\$000)

Buildings	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9	\$7,388.9
Land	\$355.1	\$355.1	\$355.1	\$355.1	\$355.1	\$355.1	\$355.1	\$355.1	\$355.1	\$355.1
Ambulances & Other Vehicles	\$4,753.0	\$4,753.0	\$4,910.2	\$5,067.4	\$4,927.6	\$4,927.6	\$5,000.4	\$4,835.0	\$4,916.0	\$4,916.0
Machinery & Equipment (Excluding Computers)	\$2,395.7	\$2,927.0	\$2,981.1	\$3,038.2	\$3,148.5	\$3,133.3	\$3,990.4	\$3,970.2	\$4,114.7	\$4,114.7
Total (\$000)	\$14,892.7	\$15,423.9	\$15,635.2	\$15,849.5	\$15,820.0	\$15,804.8	\$16,734.7	\$16,549.2	\$16,774.7	\$16,774.7

Average
Service
Level

SERVICE LEVEL (\$/pop & emp)

Buildings	\$31.59	\$31.48	\$31.37	\$31.30	\$31.24	\$31.18	\$31.12	\$31.06	\$30.98	\$30.90
Land	\$1.52	\$1.51	\$1.51	\$1.50	\$1.50	\$1.50	\$1.50	\$1.49	\$1.49	\$1.48
Ambulances & Other Vehicles	\$20.32	\$20.25	\$20.84	\$21.47	\$20.84	\$20.80	\$21.06	\$20.32	\$20.61	\$20.56
Machinery & Equipment (Excluding Computers)	\$10.24	\$12.47	\$12.65	\$12.87	\$13.31	\$13.22	\$16.81	\$16.69	\$17.25	\$17.21
Total (\$/pop & emp)	\$63.67	\$65.71	\$66.37	\$67.15	\$66.89	\$66.70	\$70.48	\$69.57	\$70.33	\$70.15

CITY OF GREATER SUDBURY
CALCULATION OF MAXIMUM ALLOWABLE
AMBULANCE SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level (2009-2018)	\$67.70
Net Population and Employment Growth (2019-2028)	5,278
Maximum Allowable Funding Envelope	\$357,333
Less Legislated 10% Discount	\$35,733
Discounted Maximum Allowable Funding Envelope	\$321,600

CITY OF GREATER SUDBURY
DEVELOPMENT-RELATED CAPITAL PROGRAM
AMBULANCE SERVICES

Project Description	Timing		Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs				
	Start	Finish				BTE %	Replacement & BTE Shares		10% Reduction	Prior DCs	Available DC Reserves	2019 - 2028	Post 2028
7.0 AMBULANCE SERVICES													
7.1 Buildings, Land & Equipment													
7.1.1 Station Redevelopment	2022	2023	\$ 1,532,000	\$ -	\$ 1,532,000	25.0%	\$ 383,000	\$ 114,900	\$ 1,034,100	\$ -	\$ 296,806	\$ 321,600	\$ 415,694
7.1.2 Equipment for Two FTE's - ACP and PCP	2016	2016	\$ 5,000	\$ -	\$ 5,000	0.0%	\$ -	\$ 500	\$ 4,500	\$ -	\$ 4,500	\$ -	\$ -
Subtotal Buildings, Land & Equipment			\$ 1,537,000	\$ -	\$ 1,537,000		\$ 383,000	\$ 115,400	\$ 1,038,600	\$ -	\$ 301,306	\$ 321,600	\$ 415,694
TOTAL AMBULANCE SERVICES			\$ 1,537,000	\$ -	\$ 1,537,000		\$ 383,000	\$ 115,400	\$ 1,038,600	\$ -	\$ 301,306	\$ 321,600	\$ 415,694

Residential Development Charge Calculation				
Residential Share of 2019 - 2028 DC Eligible Costs	76%	\$244,416		\$321,600
10-Year Growth in Population in New Units		7,402		
Unadjusted Development Charge Per Capita		\$33.02		
Non-Residential Development Charge Calculation				
Non-Residential Share of 2019 - 2028 DC Eligible Costs	24%	\$77,184		\$287,975
10-Year Growth in Square Feet		1,804,390		\$13,331
Unadjusted Development Charge Per Square Foot		\$0.04		\$301,306

CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
AMBULANCE SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(In \$000)

AMBULANCE SERVICES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	\$34.3	\$70.5	\$108.7	\$5.9	(\$102.6)	(\$80.7)	(\$56.9)	(\$31.2)	(\$12.1)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$0.0	\$0.0	\$0.0	\$122.2	\$122.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$244.4
- General Government: Inflated	\$0.0	\$0.0	\$0.0	\$129.7	\$132.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$262.0
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	962	964	966	697	699	701	703	705	501	504	7,402
REVENUE											
- DC Receipts: Inflated	\$33.7	\$34.4	\$35.2	\$25.9	\$26.5	\$27.1	\$27.7	\$28.3	\$20.5	\$21.1	\$280.4
INTEREST											
- Interest on Opening Balance	\$0.0	\$1.2	\$2.5	\$3.8	\$0.2	(\$5.6)	(\$4.4)	(\$3.1)	(\$1.7)	(\$0.7)	(\$7.9)
- Interest on In-year Transactions	\$0.6	\$0.6	\$0.6	(\$2.9)	(\$2.9)	\$0.5	\$0.5	\$0.5	\$0.4	\$0.4	(\$1.8)
TOTAL REVENUE	\$34.3	\$36.2	\$38.3	\$26.8	\$23.8	\$21.9	\$23.8	\$25.7	\$19.2	\$20.8	\$270.7
CLOSING CASH BALANCE	\$34.3	\$70.5	\$108.7	\$5.9	(\$102.6)	(\$80.7)	(\$56.9)	(\$31.2)	(\$12.1)	\$8.7	

2019 Adjusted Charge Per Capita	\$35
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Allocation of Capital Program	
Residential Sector	76%
Non-Residential Sector	24%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

CITY OF GREATER SUBBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
AMBULANCE SERVICES
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

AMBULANCE SERVICES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	\$11.3	\$23.1	\$35.8	\$5.8	(\$25.7)	(\$15.9)	(\$5.2)	\$6.4	\$10.6	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$0.0	\$0.0	\$0.0	\$38.6	\$38.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$77.2
- General Government: Inflated	\$0.0	\$0.0	\$0.0	\$41.0	\$41.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$82.7
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square feet	221,390	221,390	222,970	199,820	200,820	200,820	201,820	203,360	66,000	66,000	1,804,390
REVENUE											
- DC Receipts: Inflated	\$11.1	\$11.3	\$11.6	\$10.6	\$10.9	\$11.1	\$11.4	\$11.7	\$3.9	\$3.9	\$97.4
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.4	\$0.8	\$1.3	\$0.2	(\$1.4)	(\$0.9)	(\$0.3)	\$0.2	\$0.4	\$0.7
- Interest on In-year Transactions	\$0.2	\$0.2	\$0.2	(\$0.8)	(\$0.8)	\$0.2	\$0.2	\$0.2	\$0.1	\$0.1	(\$0.4)
TOTAL REVENUE	\$11.3	\$11.9	\$12.6	\$11.0	\$10.2	\$9.9	\$10.7	\$11.6	\$4.2	\$4.4	\$97.7
CLOSING CASH BALANCE	\$11.3	\$23.1	\$35.8	\$5.8	(\$25.7)	(\$15.9)	(\$5.2)	\$6.4	\$10.6	\$15.0	

2019 Adjusted Charge Per Square Foot \$0.05

Allocation of Capital Program	
Residential Sector	76%
Non-Residential Sector	24%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix B.8

Emergency Preparedness

Appendix B.8

Emergency Preparedness

Emergency Preparedness Services ensures that the City and its partners in emergency preparedness will work together to respond to a variety of situations. This service operates out of Lionel E. Lalonde Centre.

Table 1 Historical Service Levels

The ten year historical inventory of capital assets for Emergency Preparedness includes 137,598 square feet of building space. A portion of this space is deemed excess capacity as it continues to be recovered for through the capital program. The current value of the remaining building space is estimated at \$47.46 million. The 42.68 hectares of land associated with the building is valued at \$106,000, and Emergency Preparedness vehicles and equipment are valued at \$1.53 million.

In total, the value of the 2018 inventory of capital assets is \$49.10 million. The calculated average historical service level over the ten-year period is \$207.42 per population and employment. The historical service level multiplied by the forecast ten-year population and employment growth results in a ten-year maximum allowable charge of \$1.09 million. After the legislated ten per cent reduction is applied, the revised maximum allowable funding envelope is \$985,279.

Table 2 2019-2028 Development-Related Capital Program & Calculation Of The Unadjusted Development Charges

The 2019-2028 development-related capital program for Emergency Preparedness continues to recover for the second phase of the Centre Lionel E. Lalonde Centre (CLELC) expansion as well as a Garage for the mobile command unit. It also includes additional Community Evacuation Centre generators. The gross capital costs amount to \$3.04 million.

\$1.00 million in grants have been applied to the CLELC Phase II project. A benefit to existing share of \$391,200 is attributed to the generators, and the ten per cent legislated deduction amounts to \$164,764. Approximately \$1.48 million remains in development-related costs.

\$432,676 in DC revenues has already been collected and applied to the CLEC Phase II project. The notional reserve fund balance of \$25,040 is additionally applied. Due to the funding envelope restrictions, a further \$39,879 is attributed to development occurring after 2028. This leaves \$985,279 to be brought forward to the development charges calculation.

Of these remaining costs, \$748,812 (76 per cent) is allocated to residential development and \$236,467 (24 per cent) is allocated to non-residential development. This ratio is based on each sector's share of ten-year population and employment growth. The residential share of the net development-related capital cost is divided by the ten-year forecast growth in population in new units to derive an unadjusted charge of \$101.16 per capita. The non-residential share of the net development-related capital cost is divided by the ten-year forecast growth in floor space to derive an unadjusted charge of \$0.13 per square foot.

Table 3 Cash Flow Analysis

After conducting a cash flow analysis, the residential charge increases to \$116 per capita and the non-residential charge increases to \$0.15 per square foot.

EMERGENCY PREPAREDNESS SUMMARY						
10-Year Hist.	2019-2028		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
\$/pop & emp	Total	Net DC Recoverable	\$/capita	\$/sq.ft.	\$/capita	\$/sq.ft.
\$207.42	\$3,038,837	\$985,279	\$101.16	\$0.13	\$116	\$0.15

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
EMERGENCY PREPAREDNESS

BUILDINGS	# of Square Feet										UNIT COST (\$/sq. ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Lionel E. Lalonde Centre	137,598	137,598	137,598	137,598	137,598	137,598	137,598	137,598	137,598	137,598	\$350
Excess Capacity	(1,996)	(1,996)	(1,996)	(1,996)	(1,996)	(1,996)	(1,996)	(1,996)	(1,996)	(1,996)	\$350
Total (sq.ft.)	135,602	135,602	135,602	135,602	135,602	135,602	135,602	135,602	135,602	135,602	
Total (\$000)	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7	

LAND	# of Acres										UNIT COST (\$/acre)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Lionel E. Lalonde Centre	42.68	42.68	42.68	42.68	42.68	42.68	42.68	42.68	42.68	42.68	\$2,485
Total (acre)	42.68	42.68	42.68	42.68	42.68	42.68	42.68	42.68	42.68	42.68	
Total (\$000)	\$106.0	\$106.0	\$106.0	\$106.0	\$106.0	\$106.0	\$106.0	\$106.0	\$106.0	\$106.0	

VEHICLES AND EQUIPMENT	# of Vehicles and Equipment										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Mobile Command Unit	1	1	1	1	1	1	1	1	1	1	\$644,618
Mobile Command Unit Tow Vehicle	1	1	1	1	1	1	1	1	1	1	\$113,157
Fleet Vehicle (Toyota Prius F925) (EM)	1	1	1	1	1	1	1	1	-	-	\$22,099
Riding Mower - Series II 1435	1	1	1	1	1	1	1	1	1	1	\$17,294
Utility Vehicle w/ RTV Blade	1	1	1	1	1	1	1	1	1	1	\$29,533
Printer (Emergency Management)	-	-	1	1	1	1	1	1	1	1	\$14,593
EOC Mapping Software (Emergency Management)	1	1	1	1	1	-	-	-	-	-	\$122,105
Office Furniture - per office	51	51	51	51	51	51	51	51	51	51	\$2,490
Battery Charger	1	1	1	1	1	1	1	1	1	1	\$833
Coffee Maker - Commercial	1	1	1	1	1	1	1	1	1	1	\$1,640
Coffee Maker - Commercial	1	1	1	1	1	1	1	1	1	1	\$1,640
Deep Fryer - Commercial	1	1	1	1	1	1	1	1	1	1	\$3,279
Dishwasher - Commercial	1	1	1	1	1	1	1	1	1	1	\$3,279
Dryer	1	1	1	1	1	1	1	1	1	1	\$1,640
Dryer	1	1	1	1	1	1	1	1	1	1	\$1,640
Electric Drain Cleaner	1	1	1	1	1	1	1	1	1	1	\$765
Floor Buffer	-	-	1	1	1	1	1	1	1	1	\$8,745
Floor Buffer	1	1	1	1	1	1	1	1	1	1	\$1,306
Floor Buffer	1	1	1	1	1	1	1	1	1	1	\$8,745
Floor Burnisher	1	1	1	1	1	1	1	1	1	1	\$13,117
Floor Burnisher	1	1	1	1	1	1	1	1	1	1	\$9,795
Floor Scrubber	1	1	1	1	1	1	1	1	1	1	\$9,838
Floor Scrubber	-	-	1	1	1	1	1	1	1	1	\$5,597
Floor Scrubber	1	1	1	1	1	1	1	1	1	1	\$11,894
Floor Sweeper	1	1	1	1	1	1	1	1	1	1	\$6,555

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
EMERGENCY PREPAREDNESS

VEHICLES AND EQUIPMENT (CONT'D)	# of Vehicles and Equipment												UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018			
Freezer - Commercial	1	1	1	1	1	1	1	1	1	1		1	\$9,838
Lawn Mower - Gas Power	1	1	1	1	1	1	1	1	1	1		1	\$656
Ice Machine	1	1	1	1	1	1	1	1	1	1		1	\$13,293
Power Washer	1	1	1	1	1	1	1	1	1	1		1	\$547
Refrigerator	1	1	1	1	1	1	1	1	1	1		1	\$1,640
Refrigerator	1	1	1	1	1	1	1	1	1	1		1	\$1,640
Refrigerator - Commercial	1	1	1	1	1	1	1	1	1	1		1	\$8,745
Shop Vac	1	1	1	1	1	1	1	1	1	1		1	\$1,059
Shop Vac	1	1	1	1	1	1	1	1	1	1		1	\$1,177
Snowblower	1	1	1	1	1	1	1	1	1	1		1	\$1,640
Snowthrower	1	1	1	1	1	1	1	1	1	1		1	\$328
Stove	1	1	1	1	1	1	1	1	1	1		1	\$1,093
Stove	1	1	1	1	1	1	1	1	1	1		1	\$1,093
Stove - Commercial	1	1	1	1	1	1	1	1	1	1		1	\$10,931
Vacuum - Canister	1	1	1	1	1	1	1	1	1	1		1	\$547
Vacuum - Canister	1	1	1	1	1	1	1	1	1	1		1	\$547
Vacuum - Canister	-	1	1	1	1	1	1	1	1	1		1	\$589
Vacuum - Canister	-	-	1	1	1	1	1	1	1	1		1	\$795
Vacuum - Canister	-	-	1	1	1	1	1	1	1	1		1	\$795
Washing Machine	1	1	1	1	1	1	1	1	1	1		1	\$1,504
Dryer	1	1	1	1	1	1	1	1	1	1		1	\$1,346
Washing Machine	1	1	1	1	1	1	1	1	1	1		1	\$1,640
Whipper Snipper	1	1	1	1	1	1	1	1	1	1		1	\$437
Whipper Snipper	1	1	1	1	1	1	1	1	1	1		1	\$219
Whipper Snipper with Sweeper	1	1	1	1	1	1	1	1	1	1		1	\$1,082
Tables	135	155	207	207	218	238	238	238	238	238		238	\$630
Chairs	52	52	312	312	312	312	312	312	312	312		312	\$102
Chairs	185	185	217	217	239	239	239	239	239	239		239	\$352
Chairs	-	-	4	4	4	4	4	4	4	4		4	\$841

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
EMERGENCY PREPAREDNESS

VEHICLES AND EQUIPMENT (CONT'D)	# of Vehicles and Equipment										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Chairs	215	215	215	215	215	215	215	215	215	215	\$102
Floor Scrubber	1	1	1	1	1	1	1	1	1	1	\$5,465
Carpet Cleaner	-	-	1	1	1	1	1	1	1	1	\$3,378
Snowblower	-	1	1	1	1	1	1	1	1	1	\$2,226
Lawn Mower - Gas Power	-	-	1	1	1	1	1	1	1	1	\$526
Barbeque	-	-	1	1	1	1	1	1	1	1	\$309
Air Conditioners - Portable (26)	-	-	1	1	1	26	26	26	26	26	\$4,000
Stove - Commercial	-	-	1	1	1	1	1	1	1	1	\$3,245
Freezer - Chest	1	1	1	1	1	1	1	1	1	1	\$547
Loveseat (2)	1	1	1	1	1	2	2	2	2	2	\$1,484
Lounge Chairs (2)	1	1	1	1	1	2	2	2	2	2	\$1,076
Lounge Chairs (2)	1	1	1	1	1	2	2	2	2	2	\$1,076
Loveseat (2)	1	1	1	1	1	2	2	2	2	2	\$1,150
Sofas (2)	1	1	1	1	1	2	2	2	2	2	\$1,175
Loveseat (1)	1	1	1	1	1	1	1	1	1	1	\$587
Refrigerator - Commercial	-	1	1	1	1	1	1	1	1	1	\$4,828
Freezer - Commercial	-	1	1	1	1	1	1	1	1	1	\$3,958
Total (#)	689	713	1,071	1,071	1,104	1,153	1,153	1,153	1,152	1,152	
Total (\$000)	\$1,402.8	\$1,427.0	\$1,542.9	\$1,542.9	\$1,557.6	\$1,554.0	\$1,554.0	\$1,554.0	\$1,531.9	\$1,531.9	

APPENDIX B.8
TABLE 1CITY OF GREATER SUDBURY
CALCULATION OF SERVICE LEVELS
EMERGENCY PREPAREDNESS

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historic Population	159,389	159,884	160,380	160,628	160,877	161,126	161,375	161,625	161,948	162,272
Historic Employment	74,525	74,854	75,185	75,400	75,616	75,833	76,050	76,268	76,559	76,851
total Population & Employment	233,914	234,738	235,565	236,028	236,493	236,959	237,425	237,893	238,507	239,123

INVENTORY SUMMARY (\$000)

Buildings	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7	\$47,460.7
Land	\$106.0	\$106.0	\$106.0	\$106.0	\$106.0	\$106.0	\$106.0	\$106.0	\$106.0	\$106.0
Vehicles And Equipment	\$1,402.8	\$1,427.0	\$1,542.9	\$1,542.9	\$1,557.6	\$1,554.0	\$1,554.0	\$1,554.0	\$1,531.9	\$1,531.9
Total (\$000)	\$48,969.5	\$48,993.7	\$49,109.7	\$49,109.7	\$49,124.3	\$49,120.8	\$49,120.8	\$49,120.8	\$49,098.7	\$49,098.7

SERVICE LEVEL (\$/pop & emp)

Buildings	\$202.90	\$202.19	\$201.48	\$201.08	\$200.69	\$200.29	\$199.90	\$199.50	\$198.99	\$198.48	\$200.55
Land	\$0.45	\$0.45	\$0.45	\$0.45	\$0.45	\$0.45	\$0.45	\$0.45	\$0.44	\$0.44	\$0.45
Vehicles And Equipment	\$6.00	\$6.08	\$6.55	\$6.54	\$6.59	\$6.56	\$6.55	\$6.53	\$6.42	\$6.41	\$6.42
Total (\$/pop & emp)	\$209.35	\$208.72	\$208.48	\$208.07	\$207.72	\$207.30	\$206.89	\$206.48	\$205.86	\$205.33	\$207.42

CITY OF GREATER SUDBURY
CALCULATION OF MAXIMUM ALLOWABLE
EMERGENCY PREPAREDNESS

10-Year Funding Envelope Calculation	
10 Year Average Service Level (2009-2018)	\$207.42
Net Population and Employment Growth (2019-2028)	5,278
Maximum Allowable Funding Envelope	\$1,094,754
Less Legislated 10% Discount	\$109,475
Discounted Maximum Allowable Funding Envelop	\$985,279

CITY OF GREATER SUDBURY
DEVELOPMENT-RELATED CAPITAL PROGRAM
EMERGENCY PREPAREDNESS

Project Description	Timing		Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
	Start	Finish				BTE %	Replacement & BTE Shares		10% Reduction	Prior DCs	Available DC Reserves	2019 - 2028
8.0 EMERGENCY PREPAREDNESS												
8.1 Buildings, Land & Equipment												
8.1.1 CLELC Phase II	2009	2009	\$ 2,284,795	\$ 1,000,000	\$ 1,284,795	0.0%	\$ -	\$ 128,480	\$ 432,676	\$ 25,040	\$ 698,600	\$ -
8.1.2 Garage for mobile command unit	2009	2009	\$ 354,042	\$ -	\$ 354,042	0.0%	\$ -	\$ 35,404	\$ -	\$ -	\$ 286,679	\$ 31,959
8.1.3 (Generators)	2020	2023	\$ 400,000	\$ -	\$ 400,000	97.8%	\$ 391,200	\$ 880	\$ 7,920	\$ -	\$ -	\$ 7,920
Subtotal Buildings, Land & Equipment			\$ 3,038,837	\$ 1,000,000	\$ 2,038,837		\$ 391,200	\$ 164,764	\$ 432,676	\$ 25,040	\$ 985,279	\$ 39,879
TOTAL EMERGENCY PREPAREDNESS			\$ 3,038,837	\$ 1,000,000	\$ 2,038,837		\$ 391,200	\$ 164,764	\$ 432,676	\$ 25,040	\$ 985,279	\$ 39,879

Residential Development Charge Calculation				
Residential Share of 2019 - 2028 DC Eligible Costs	76%	\$748,812		\$985,279
10-Year Growth in Population in New Units		7,402		
Unadjusted Development Charge Per Capita		\$101.16		
Non-Residential Development Charge Calculation				
Non-Residential Share of 2019 - 2028 DC Eligible Costs	24%	\$236,467		\$0
10-Year Growth in Square Feet		1,804,390		\$25,040
Unadjusted Development Charge Per Square Foot		\$0.13		\$25,040

CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
EMERGENCY PREPAREDNESS
RESIDENTIAL DEVELOPMENT CHARGE
(In \$000)

EMERGENCY PREPAREDNESS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$654.7)	(\$574.7)	(\$487.7)	(\$427.2)	(\$361.4)	(\$289.9)	(\$212.4)	(\$128.5)	(\$66.3)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$748.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$748.8
- General Government: Inflated	\$748.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$748.8
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	962	964	966	697	699	701	703	705	501	504	7,402
REVENUE											
- DC Receipts: Inflated	\$111.6	\$114.1	\$116.6	\$85.8	\$87.8	\$89.8	\$91.8	\$93.9	\$68.1	\$69.9	\$929.3
INTEREST											
- Interest on Opening Balance	\$0.0	(\$36.0)	(\$31.6)	(\$26.8)	(\$23.5)	(\$19.9)	(\$15.9)	(\$11.7)	(\$7.1)	(\$3.6)	(\$176.2)
- Interest on In-year Transactions	(\$17.5)	\$2.0	\$2.0	\$1.5	\$1.5	\$1.6	\$1.6	\$1.6	\$1.2	\$1.2	(\$3.2)
TOTAL REVENUE	\$94.1	\$80.0	\$87.0	\$60.5	\$65.8	\$71.5	\$77.5	\$83.9	\$62.2	\$67.4	\$749.9
CLOSING CASH BALANCE	(\$654.7)	(\$574.7)	(\$487.7)	(\$427.2)	(\$361.4)	(\$289.9)	(\$212.4)	(\$128.5)	(\$66.3)	\$1.1	

2019 Adjusted Charge Per Capita	\$116
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Allocation of Capital Program	
Residential Sector	76%
Non-Residential Sector	24%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

CITY OF GREATER SUBBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
EMERGENCY PREPAREDNESS
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

EMERGENCY PREPAREDNESS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$208.8)	(\$185.9)	(\$160.7)	(\$137.2)	(\$111.5)	(\$83.8)	(\$53.7)	(\$21.0)	(\$10.4)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$236.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$236.5
- General Government: Inflated	\$236.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$236.5
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square feet	221,390	221,390	222,970	199,820	200,820	200,820	201,820	203,360	66,000	66,000	1,804,390
REVENUE											
- DC Receipts: Inflated	\$33.2	\$33.9	\$34.8	\$31.8	\$32.6	\$33.3	\$34.1	\$35.0	\$11.6	\$11.8	\$292.1
INTEREST											
- Interest on Opening Balance	\$0.0	(\$11.5)	(\$10.2)	(\$8.8)	(\$7.5)	(\$6.1)	(\$4.6)	(\$3.0)	(\$1.2)	(\$0.6)	(\$53.5)
- Interest on In-year Transactions	(\$5.6)	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	\$0.2	\$0.2	(\$1.1)
TOTAL REVENUE	\$27.6	\$23.0	\$25.2	\$23.5	\$25.6	\$27.7	\$30.1	\$32.7	\$10.6	\$11.5	\$237.5
CLOSING CASH BALANCE	(\$208.8)	(\$185.9)	(\$160.7)	(\$137.2)	(\$111.5)	(\$83.8)	(\$53.7)	(\$21.0)	(\$10.4)	\$1.1	

2019 Adjusted Charge Per Square Foot	\$0.15
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Allocation of Capital Program	
Residential Sector	76%
Non-Residential Sector	24%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix B.9

Transit

Appendix B.9

Transit

The Transit Services Division provides safe, reliable and affordable transportation services to over four million passengers each year. Public transportation includes both conventional transit and the transportation of persons with physical disabilities.

Transit Ridership

In accordance with the *Development Charges Act*, transit services must be based on a “planned level of service” rather than the “10-year historical average level of service”. For the purposes of determining the “planned level of service” for transit, the City’s Transit development-related capital program has been informed by capital budget documents and discussions with staff.

A transit ridership forecast was prepared for Greater Sudbury Transit using historical annual ridership figures provided by City staff for the years 2009-2017. The forecast assumes that an average annual ridership of 18.21 trips per population and employment will continue over the ten-year planning period. As such, it is estimated that annual ridership will grow from 4.06 million trips in 2017 to 4.45 million trips in 2028. The forecast to 2041 is 4.53 million trips annually.

City of Greater Sudbury Transit Ridership Forecast			
Year	Total Annual Ridership	DC Forecast Population & Employment	Annual Ridership per Population & Employment
2009	4,250,000	233,914	18.17
2010	4,260,000	234,738	18.15
2011	4,470,000	235,565	18.98
2012	4,440,000	236,028	18.81
2013	4,360,000	236,493	18.44
2014	4,460,000	236,959	18.82
2015	4,260,000	237,425	17.94
2016	4,180,000	237,893	17.57
2017	4,060,000	238,507	17.02
2018	4,354,638	239,123	18.21
2019	4,365,892	239,741	18.21
2020	4,377,165	240,360	18.21
2021	4,388,528	240,984	18.21
2022	4,398,799	241,548	18.21
2023	4,409,106	242,114	18.21
2024	4,419,432	242,681	18.21
2025	4,429,776	243,249	18.21
2026	4,440,192	243,821	18.21
2027	4,445,474	244,111	18.21
2028	4,450,755	244,401	18.21
2029	4,456,036	244,691	18.21
2030	4,461,317	244,981	18.21
2031	4,466,726	245,278	18.21
2032	4,474,666	245,714	18.21
2033	4,482,642	246,152	18.21
2034	4,490,636	246,591	18.21
2035	4,498,649	247,031	18.21
2036	4,506,644	247,470	18.21
2037	4,511,852	247,756	18.21
2038	4,517,097	248,044	18.21
2039	4,522,360	248,333	18.21
2040	4,527,623	248,622	18.21
2041	4,532,886	248,911	18.21

Transit Development Charges Capital Program Allocations

The following table provides a summary of the allocations used to arrive at the benefit to existing, in-period, and post-period share calculations for the Transit projects identified in the capital program.

Using the ridership forecast shown in the previous table, the benefit to existing share is calculated based on the calculated 2018 ridership (4.35 million) as a share of the forecasted 2041 ridership (4,532,886). This results in a 96.1 per cent share attributed to the existing population in the City. A further 1.8 per cent share is attributed to post-period development based on ridership growth projected over the 2029 to 2041 period as a share of total 2041 ridership. The remaining 2.1 per cent is attributed to new development occurring over the ten-year DC planning period from 2019 to 2028.

Transit DC Capital Program Allocations			
Allocation	Year	Annual Ridership	Allocation %
BTE	2018	4,354,638	96.1%
In-period	2019-2028	96,117	2.1%
Post-Period	2029-2041	82,131	1.8%
Total		4,532,886	100%

It is noted that not all Transit capital projects are assigned benefit to existing shares and growth shares based on the ridership forecast. For example, the Transit Garage Expansion project is attributed a benefit to existing share based on the replacement portion of the project.

Table 1 2019-2028 Development-Related Capital Program & Calculation Of The Unadjusted Development Charges

The 2019-2028 development-related capital program for Transit includes continued recoveries for the Transit Garage Expansion at a total cost of \$18.10 million. It also includes a \$10.00 million provision for future Transit projects to be funded primarily through the Public Transit Infrastructure Fund (PTIF).

A total of \$16.07 million in grants has been identified to help fund the Transit capital program. Benefit to existing shares of have been calculated at a total of \$7.87 million. There is no longer a legislated ten per cent reduction for this service under the recent changes to the *Development Charges Act* and as such, the remaining \$4.16 million is considered to be development-related. Of this amount, \$1.14 million in DCs has already been collected and applied to

the Garage Expansion. A further \$190,237 is applied to this project based on the notional reserve fund balance.

The ridership-based post-period share calculation results in \$1.30 million being attributed to development occurring beyond 2028. The remaining \$1.52 million is brought forward to the development charges calculation.

The \$1.52 million is allocated 76 per cent to residential development (\$1.16 million) and 24 per cent to non-residential development (\$365,728). This ratio is based on each sector's share of ten-year population and employment growth. The residential share of the net development-related capital cost is divided by the ten-year forecast growth in population in new units to derive an unadjusted charge of \$156.46 per capita. The non-residential share of the net development-related capital cost is divided by the ten-year forecast growth in floor space to derive an unadjusted charge of \$0.20 per square foot.

Table 2 Cash Flow Analysis

After cash flow consideration, the residential charge increases to \$179 per capita and the non-residential charge increases to \$0.24 per square foot.

2019-2028		TRANSIT SUMMARY		Adjusted	
Development-Related Capital Program		Unadjusted		Development Charge	
Total	Net DC Recoverable	Development Charge			
		\$/capita	\$/sq.ft.	\$/capita	\$/sq.ft.
\$28,098,787	\$1,523,867	\$156.46	\$0.20	\$179	\$0.24

CITY OF GREATER SUBURBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
TRANSIT

Project Description	Timing		Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
	Start	Finish				BTE %	Replacement & BTE Shares		0% Reduction	Prior DCs	Available DC Reserves	2019 - 2028
9.0 TRANSIT												
9.1 Buildings, Land & Equipment												
9.1.1 Transit Garage Expansion	2013	2014	\$ 18,098,787	\$ 8,667,158	\$ 9,431,629	57.0%	\$ 5,376,029	\$ -	\$ 1,141,607	\$ 190,237	\$ 1,468,736	\$ 1,255,020
Subtotal Buildings, Land & Equipment			\$ 18,098,787	\$ 8,667,158	\$ 9,431,629		\$ 5,376,029	\$ -	\$ 1,141,607	\$ 190,237	\$ 1,468,736	\$ 1,255,020
9.2 Growth Projects												
9.2.1 PTIF Phase 2 Growth Projects	2019	2027	\$ 10,000,000	\$ 7,400,000	\$ 2,600,000	96.1%	\$ 2,497,759	\$ -	\$ -	\$ -	\$ 55,131	\$ 47,109
Subtotal Growth Projects			\$ 10,000,000	\$ 7,400,000	\$ 2,600,000		\$ 2,497,759	\$ -	\$ -	\$ -	\$ 55,131	\$ 47,109
TOTAL TRANSIT			\$ 28,098,787	\$ 16,067,158	\$ 12,031,629		\$ 7,873,788	\$ -	\$ 1,141,607	\$ 190,237	\$ 1,523,867	\$ 1,302,130

Residential Development Charge Calculation	
Residential Share of 2019 - 2028 DC Eligible Costs	76%
10-Year Growth in Population in New Units	\$1,158,139
Unadjusted Development Charge Per Capita	7,402
	\$156.46
Non-Residential Development Charge Calculation	
Non-Residential Share of 2019 - 2028 DC Eligible Costs	24%
10-Year Growth in Square Feet	\$365,728
Unadjusted Development Charge Per Square Foot	1,804,390
	\$0.20

Notional Reserve Fund BalanceBalance as at December 31, 2018
Revenue Losses**Total**\$129,190
\$61,047
\$190,237**Transit Ridership Analysis - DC Allocations**

Timing	Ridership	Allocation	DC Allocation
2018	4,354,638	96.1%	BTE
2019-2028	96,117	2.1%	In-Period
2029-2041	82,131	1.8%	Post-Period
Total	4,532,886	100%	

CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
TRANSIT
RESIDENTIAL DEVELOPMENT CHARGE
(In \$000)

TRANSIT	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$974.8)	(\$854.1)	(\$723.0)	(\$633.1)	(\$535.2)	(\$428.9)	(\$313.7)	(\$188.9)	(\$97.9)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$1,120.9	\$4.7	\$4.7	\$4.7	\$4.7	\$4.7	\$4.7	\$4.7	\$4.7	\$0.0	\$1,168.1
- General Government: Inflated	\$1,120.9	\$4.7	\$4.8	\$4.9	\$5.0	\$5.1	\$5.2	\$5.3	\$5.5	\$0.0	\$1,161.7
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	962	964	966	697	699	701	703	705	501	504	7,402
REVENUE											
- DC Receipts: Inflated	\$172.2	\$176.0	\$179.9	\$132.4	\$135.4	\$138.5	\$141.7	\$145.0	\$105.1	\$107.8	\$1,434.0
INTEREST											
- Interest on Opening Balance	\$0.0	(\$53.6)	(\$47.0)	(\$39.8)	(\$34.8)	(\$29.4)	(\$23.6)	(\$17.3)	(\$10.4)	(\$5.4)	(\$261.2)
- Interest on In-year Transactions	(\$26.1)	\$3.0	\$3.1	\$2.2	\$2.3	\$2.3	\$2.4	\$2.4	\$1.7	\$1.9	(\$4.7)
TOTAL REVENUE	\$146.1	\$125.4	\$136.0	\$94.9	\$102.9	\$111.4	\$120.5	\$130.2	\$96.4	\$104.3	\$1,168.1
CLOSING CASH BALANCE	(\$974.8)	(\$854.1)	(\$723.0)	(\$633.1)	(\$535.2)	(\$428.9)	(\$313.7)	(\$188.9)	(\$97.9)	\$6.4	

2019 Adjusted Charge Per Capita	\$179
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Allocation of Capital Program	
Residential Sector	76%
Non-Residential Sector	24%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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

TRANSIT	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$309.1)	(\$272.5)	(\$232.4)	(\$195.0)	(\$154.2)	(\$110.2)	(\$62.5)	(\$10.6)	\$6.0	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$354.0	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5	\$0.0	\$365.7
- General Government: Inflated	\$354.0	\$1.5	\$1.5	\$1.6	\$1.6	\$1.6	\$1.7	\$1.7	\$1.7	\$0.0	\$366.8
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square feet	221,390	221,390	222,970	199,820	200,820	200,820	201,820	203,360	66,000	66,000	1,804,390
REVENUE											
- DC Receipts: Inflated	\$53.1	\$54.2	\$55.7	\$50.9	\$52.2	\$53.2	\$54.5	\$56.1	\$18.6	\$18.9	\$467.4
INTEREST											
- Interest on Opening Balance	\$0.0	(\$17.0)	(\$15.0)	(\$12.8)	(\$10.7)	(\$8.5)	(\$6.1)	(\$3.4)	(\$0.6)	\$0.2	(\$73.8)
- Interest on In-year Transactions	(\$8.3)	\$0.9	\$0.9	\$0.9	\$0.9	\$0.9	\$0.9	\$1.0	\$0.3	\$0.3	(\$1.2)
TOTAL REVENUE	\$44.9	\$38.1	\$41.6	\$39.0	\$42.3	\$45.6	\$49.4	\$53.6	\$18.3	\$19.5	\$392.3
CLOSING CASH BALANCE	(\$309.1)	(\$272.5)	(\$232.4)	(\$195.0)	(\$154.2)	(\$110.2)	(\$62.5)	(\$10.6)	\$6.0	\$25.4	

2019 Adjusted Charge Per Square Foot	\$0.24
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Allocation of Capital Program	
Residential Sector	76%
Non-Residential Sector	24%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix C

Engineering Services Technical Appendix

Appendix C

Engineered Services

Technical Appendix

This appendix provides the detailed analysis undertaken to establish the development charge rates for the engineered services category in the City of Greater Sudbury. Four engineered services have been analysed herein as part of the Development Charges Background Study:

Appendix C.1	Roads and Related
Appendix C.2	Water Services
Appendix C.3	Wastewater Services
Appendix C.4	Drains

The following pages set out the development-related capital program and the calculation of the development charge for each service. The project details included in the capital programs have been provided by City staff, in collaboration with Hemson Consulting Ltd., and are based on the City's budgets, master servicing studies, and other capital planning documents. The development-related capital programs are recovered over a ten-year planning period from 2019 to 2028 and the post-period benefit shares are identified in each individual appendix.

This report identifies the necessary engineering infrastructure to allow the municipality to meet the servicing needs of the forecast development. It is noted that the City's Transportation Master Plan and Water/Wastewater Master Plan, which planned for the City's servicing needs to 2041, predate the *Growth Outlook to 2046*, which forms the basis of the development forecast presented in Appendix A of this Development Charges Background Study. This was a key consideration in the determination of benefit to existing and post-period benefit shares of the capital projects. Where appropriate, these shares have been adjusted by Hemson to align with the City's current development forecast as well as the planned capacity of each capital project.

Appendix C.1

Roads And Related

This appendix provides a brief outline of the development charges calculation for the City's Roads and Related engineered services. The following tables set out the 2019-2028 development-related capital program and the calculation of the development charges for Roads and Related services. The development-related capital project details were provided by City staff and informed by the City's capital budget documents and Transportation Master Plan. The projects identified in the capital program are required to service the demands of new development between 2019 and 2028, subject to annual capital budget reviews. Consistent with s.5.(1)7. of the *Development Charges Act* (DCA), there is no legislated percentage reduction in the eligible development-related capital cost for the provision of transportation infrastructure.

Tables 1 – 3 provide details of the projects included in the City-wide Roads and Related engineered infrastructure development charges calculation. The content of the tables is as follows:

Table 1 Roads and Related Inventory of Capital Assets, 2009-2018

Table 2 Roads and Related Capital Program: 2019-2028

Table 3 Residential and Non-Residential Cash Flow Analysis

Based on the City's asset management inventory and discussions with staff, the Roads and Related inventory is valued at \$2.08 billion in 2018 (Table 1). This includes \$1.75 billion in arterial and collector roads as well as related infrastructure such as bridges and culverts, traffic lights, and streetlights. It also includes the land value associated with the roads infrastructure, estimated at \$332.93 million as calculated by Hemson.

The ten-year average service level is calculated at \$8,800.07 per population and employment. This translates to a maximum allowable funding envelope of \$46.45 million.

The total cost of the roads capital program is \$338.93 million (Table 2) and provides for the undertaking of various road widening and expansion projects throughout the City, including a number of continued recoveries for past and

ongoing roads projects. It also includes property acquisition costs related to future roads projects, active transportation projects, and growth-related transportation studies.

The entire \$338.93 million development-related capital program is not to be fully recovered from future development charges. Approximately \$140.48 million in grants has been identified. A significant benefit to existing share of \$127.73 million has also been identified. After these deductions, \$70.71 million remains in development-related costs.

Prior DC revenues that have already been applied to various projects in the capital program, in the amount of \$9.94 million, are accounted for, and the \$907,210 notional reserve fund balance is also applied. The notional reserve fund balance accounts for DC revenue losses associated with the phase-in of the current DC rates over the 2014-2018 period.

A further \$38.71 million share has been allocated to development occurring beyond 2028 and has been removed from the DC calculation. The calculation of this post-period share considers the planned capacity of the roads projects as well as the DC development forecast derived from the City's *Growth Outlook to 2046*. Since a lower rate of development is currently forecasted as compared with the forecast included within the current Transportation Master Plan, a significant post-period share has been applied to most Roads and Related projects.

The remaining 2019-2028 development charge recoverable share of the capital program is \$21.15 million. The development-related costs are then allocated 76 per cent (\$16.08 million) to new residential development and 24 per cent (\$5.08 million) to new non-residential development based on shares of population and employment growth over the 2019-2028 planning period. The \$5.08 million attributed to non-residential development is further allocated 58 per cent to industrial development and 42 per cent to non-industrial development based on the forecasted shares of employment growth within each of these sectors. These calculations result in unadjusted charges of \$2,172.08 per capita for residential development, \$2.16 per square foot of industrial development, and \$4.84 per square foot of non-industrial development.

The long-term cash-flow analysis presented in Table 3 takes into consideration expenditure timing and revenue projections. The effect of the

analysis is to increase the calculated unadjusted development charge rates. The reason for the increase in the rates is the timing of the development-related expenditures often occurs before benefitting development, in that the infrastructure needs to be in place prior to the growth occurring, and as such the City will incur financing costs. Financing costs are an eligible development charge recoverable cost under the DCA.

The following is a summary of the Roads and Related calculated unadjusted and cash flow adjusted development charge rates:

ROADS AND RELATED SUMMARY							
2019-2028		Unadjusted Charge			Adjusted Charge		
Development-Related Capital Program		Residential	Industrial	Non-Industrial	Residential	Industrial	Non-Industrial
Total	Net DC Recoverable	\$/capita	\$/sq.ft.	\$/sq.ft.	\$/capita	\$/sq.ft.	\$/sq.ft.
\$338,926,264	\$21,154,947	\$2,172.08	\$2.16	\$4.84	\$2,417	\$2.40	\$5.37

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
ROADS

ROAD COMPONENTS	# of Road Components										UNIT COST
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Arterial - Urban (lane kms)	244.90	244.90	244.90	244.90	244.90	227.61	238.51	238.51	243.59	243.59	\$1,017,000
Arterial - Rural (HCB) (lane kms)	486.40	486.40	486.40	486.40	486.40	459.15	459.15	459.15	459.15	459.15	\$989,000
Arterial - Rural (LCB) (lane kms)	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	\$339,000
Collector - Urban (lane kms)	241.36	241.36	241.36	241.36	241.36	245.81	251.43	251.43	257.07	257.07	\$1,548,000
Collector - Rural (HCB) (lane kms)	274.39	274.39	274.39	274.39	274.39	269.95	269.95	269.95	269.95	269.95	\$938,000
Collector - Rural (LCB) (lane kms)	100.40	100.40	100.40	100.40	99.17	99.17	99.17	99.17	99.17	99.17	\$322,000
Collector - Gravel (lane kms)	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40	\$316,000
Square Metres of Surface Area on Bridges and Culverts	46,772	46,772	47,119	46,856	46,856	46,856	46,856	46,856	46,856	46,856	\$6,400
Traffic Lights	116	118	119	121	121	121	121	121	121	121	\$192,000
Streetlights	14,297	14,365	14,403	14,523	14,605	14,685	14,710	14,761	14,855	14,855	\$2,500
Total (#)	62,551	62,621	63,007	62,866	62,947	62,982	63,024	63,075	63,179	63,179	
Total (\$)	\$1,756,844.5	\$1,757,396.5	\$1,759,906.3	\$1,758,907.1	\$1,758,716.0	\$1,717,107.0	\$1,736,954.6	\$1,737,082.1	\$1,751,214.2	\$1,751,214.2	

ROAD LAND VALUE	Acres of Right of Way										UNIT COST
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Arterial - Urban	302.58	302.58	302.58	302.58	302.58	281.22	294.69	294.69	300.96	300.96	\$200,000
Arterial - Rural (HCB)	600.96	600.96	600.96	600.96	600.96	567.29	567.29	567.29	567.29	567.29	\$200,000
Arterial - Rural (LCB)	12.36	12.36	12.36	12.36	12.36	12.36	12.36	12.36	12.36	12.36	\$200,000
Collector - Urban	298.21	298.21	298.21	298.21	298.21	303.70	310.65	310.65	317.62	317.62	\$200,000
Collector - Rural (HCB)	339.02	339.02	339.02	339.02	339.02	333.53	333.53	333.53	333.53	333.53	\$200,000
Collector - Rural (LCB)	124.05	124.05	124.05	124.05	122.53	122.53	122.53	122.53	122.53	122.53	\$200,000
Collector - Gravel	10.38	10.38	10.38	10.38	10.38	10.38	10.38	10.38	10.38	10.38	\$200,000
Total (#)	1,688	1,688	1,688	1,688	1,686	1,631	1,651	1,651	1,665	1,665	
Total (\$)	\$337,508.4	\$337,508.4	\$337,508.4	\$337,508.4	\$337,204.4	\$326,201.8	\$330,284.0	\$330,284.0	\$332,933.0	\$332,933.0	

CITY OF GREATER SUDBURY
CALCULATION OF SERVICE LEVELS
ROADS

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historic Population	159,389	159,884	160,380	160,628	160,877	161,126	161,375	161,625	161,948	162,272
Historic Employment	74,525	74,854	75,185	75,400	75,616	75,833	76,050	76,268	76,559	76,851
total Population & Employment	233,914	234,738	235,565	236,028	236,493	236,959	237,425	237,893	238,507	239,123

INVENTORY SUMMARY (\$000)

Road Components	\$1,756,844.5	\$1,757,398.5	\$1,759,906.3	\$1,758,907.1	\$1,758,716.0	\$1,717,107.0	\$1,736,954.6	\$1,737,082.1	\$1,751,214.2	\$1,751,214.2
Road Land Value	\$337,508.4	\$337,508.4	\$337,508.4	\$337,508.4	\$337,204.4	\$326,201.8	\$330,284.0	\$330,284.0	\$332,933.0	\$332,933.0
Total (\$000)	\$2,094,352.9	\$2,094,906.9	\$2,097,414.7	\$2,096,415.5	\$2,095,920.5	\$2,043,308.9	\$2,067,238.6	\$2,067,366.1	\$2,084,147.1	\$2,084,147.1
SERVICE LEVEL (\$/pop & emp)										
Road Components	\$7,510.64	\$7,486.64	\$7,471.00	\$7,452.11	\$7,436.65	\$7,246.43	\$7,315.80	\$7,301.95	\$7,342.40	\$7,323.49
Road Land Value	\$1,442.87	\$1,437.81	\$1,432.76	\$1,429.95	\$1,425.85	\$1,376.62	\$1,391.11	\$1,388.37	\$1,395.90	\$1,392.31
Total (\$/pop & emp)	\$8,953.52	\$8,924.45	\$8,903.76	\$8,882.06	\$8,862.51	\$8,623.05	\$8,706.91	\$8,690.32	\$8,738.31	\$8,715.80
Average Service Level										\$8,800.07

CITY OF GREATER SUDBURY
CALCULATION OF MAXIMUM ALLOWABLE
ROADS

10-Year Funding Envelope Calculation	
10 Year Average Service Level (2009-2018)	\$8,800.07
Net Population and Employment Growth (2019-2028)	5.278
Maximum Allowable Funding Envelope	\$46,446,756
Discounted Maximum Allowable Funding Envelope	\$46,446,756

CITY OF GREATER SUDBURY
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED

Project Description	Timing		Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	BTE %	Ineligible Costs Replacement & BTE Shares	Total DC Eligible Costs	Prior DCs	Available DC Reserves	DC Eligible Costs		
	Start	Finish									2019 - 2028	%	
1.0 ROADS AND RELATED													
1.1 Property Acquisition - future projects	2014	2028	\$ 9,000,000	\$ -	\$ 9,000,000	50.0%	\$ 4,500,000	\$ 4,500,000	\$ 1,349,763	\$ -	\$ 1,540,279	51%	\$ 1,609,958
1.2 Lasalle Notre Dame Intersection Improvements	2013	2014	\$ 8,051,462	\$ 38,630	\$ 8,012,832	75.0%	\$ 6,009,624	\$ 2,003,208	\$ 1,342,151	\$ -	\$ 323,218	51%	\$ 337,639
1.3 Lasalle Notre Dame Intersection - Engineering/Property Acquisition/Utilities	2013	2014	\$ 2,273,907	\$ -	\$ 2,273,907	0.0%	\$ -	\$ 2,273,907	\$ 1,523,518	\$ -	\$ 368,886	51%	\$ 383,493
1.4 MR80: Valleyview to Donaldson	2009	2009	\$ 10,745,020	\$ 3,350,401	\$ 7,394,619	30.0%	\$ 2,218,386	\$ 5,176,233	\$ 2,795,995	\$ 907,210	\$ 720,223	51%	\$ 752,805
1.5 Maley Drive - Phase 1	2009	2023	\$ 86,176,000	\$ 53,427,500	\$ 32,748,500	50.0%	\$ 16,374,250	\$ 16,374,250	\$ 815,547	\$ -	\$ 6,844,386	56%	\$ 8,714,317
1.6 Maley Drive - Phase 2	2023	2028	\$ 45,050,000	\$ 30,033,333	\$ 15,016,667	50.0%	\$ 7,508,334	\$ 7,508,334	\$ -	\$ -	\$ -	100%	\$ 7,508,334
1.7 MR 15 MR 30 Intersection Improvements	2014	2014	\$ 2,859,068	\$ 64,210	\$ 2,794,858	75.0%	\$ 2,096,144	\$ 698,715	\$ 223,741	\$ -	\$ 232,234	51%	\$ 242,740
1.8 Barry Downe Road from Westmount Road to Kingsway	2018	2019	\$ 5,100,000	\$ -	\$ 5,100,000	94.2%	\$ 4,803,360	\$ 296,640	\$ -	\$ -	\$ 145,040	51%	\$ 151,801
1.9 MR 35 Widening from Azilda to Chelmsford	2018	2022	\$ 39,400,000	\$ -	\$ 39,400,000	94.2%	\$ 37,108,307	\$ 2,291,693	\$ -	\$ -	\$ 1,120,502	51%	\$ 1,171,191
1.10 Lasalle Barry Downe Intersection Improvements	2024	2028	\$ 4,900,000	\$ -	\$ 4,900,000	94.2%	\$ 4,614,993	\$ 285,007	\$ -	\$ -	\$ 139,352	51%	\$ 145,656
1.11 MR 4 from Highway 17 to C. Johnson Road	2012	2014	\$ 19,636,493	\$ 16,847,463	\$ 2,789,010	80.0%	\$ 2,231,208	\$ 557,802	\$ 373,727	\$ -	\$ -	51%	\$ 94,073
1.12 Four Lining MR 80 - Frost to Glenn	2010	2010	\$ 6,965,587	\$ 1,485,838	\$ 5,479,749	40.0%	\$ 2,191,899	\$ 3,287,849	\$ -	\$ -	\$ 1,446,349	56%	\$ 1,841,501
1.13 Second Ave (Sudbury) Dornia Drive to Kenwood Road	2014	2014	\$ 5,400,000	\$ 152,987	\$ 5,247,013	30.0%	\$ 1,574,104	\$ 3,672,909	\$ -	\$ -	\$ 1,795,834	51%	\$ 1,877,075
1.14 Clean Hill Road from MR 4 to Victoria Mine	2014	2018	\$ 10,513,057	\$ 7,969,378	\$ 2,543,679	80.0%	\$ 2,034,943	\$ 508,736	\$ -	\$ -	\$ 248,742	51%	\$ 259,994
1.15 Moonlight Ave from Kingsway to Bancroft Drive	2015	2015	\$ 2,623,001	\$ -	\$ 2,623,001	94.2%	\$ 2,470,435	\$ 152,566	\$ -	\$ -	\$ -	51%	\$ 77,970
1.16 Kingsway Realignment - EA and Design	2020	2023	\$ 2,500,000	\$ -	\$ 2,500,000	93.7%	\$ 2,341,842	\$ 158,158	\$ -	\$ -	\$ -	100%	\$ 158,158
1.17 Kingsway Realignment	2024	2028	\$ 26,190,000	\$ 16,399,836	\$ 9,790,164	93.7%	\$ 9,170,807	\$ 619,357	\$ -	\$ -	\$ -	100%	\$ 619,357
1.18 Remington	2028	2028	\$ 5,075,000	\$ 1,268,750	\$ 3,806,250	33.3%	\$ 1,267,481	\$ 2,538,769	\$ -	\$ -	\$ -	100%	\$ 2,538,769
1.19 Marilla	2028	2019	\$ 5,225,000	\$ 1,306,250	\$ 3,918,750	33.3%	\$ 1,304,944	\$ 2,613,806	\$ -	\$ -	\$ -	100%	\$ 2,613,806
1.20 Silver Hills (extension to Bancroft Drive)	2015	2019	\$ 8,600,000	\$ 2,150,000	\$ 6,450,000	33.3%	\$ 2,147,850	\$ 4,302,150	\$ -	\$ -	\$ 2,103,496	51%	\$ 2,198,854
1.21 Silver Hills Drive (extension to Bancroft Drive)	2012	2012	\$ 3,267,169	\$ -	\$ 3,267,169	0.0%	\$ -	\$ 3,267,169	\$ 914,274	\$ -	\$ 1,150,426	51%	\$ 1,202,469
1.22 Montrose Avenue	2015	2028	\$ 5,362,500	\$ 1,340,625	\$ 4,021,875	33.3%	\$ 1,339,284	\$ 2,682,591	\$ 602,000	\$ -	\$ 1,017,285	51%	\$ 1,063,305
1.23 John Street (Valley East, Easterly Extension)	2028	2028	\$ 2,185,000	\$ 546,250	\$ 1,638,750	33.3%	\$ 545,704	\$ 1,093,046	\$ -	\$ -	\$ -	100%	\$ 1,093,046
1.24 Traffic System Improvements (New Traffic Lights)	2019	2028	\$ 4,000,000	\$ -	\$ 4,000,000	94.2%	\$ 3,767,341	\$ 232,659	\$ -	\$ -	\$ 113,757	51%	\$ 118,903
1.25 Elgin Greenway from Nelson Street to Cedar Street	2018	2020	\$ 3,878,000	\$ 2,548,000	\$ 1,330,000	94.2%	\$ 1,252,641	\$ 77,359	\$ -	\$ -	\$ 37,824	51%	\$ 39,535
1.26 Active Transportation	2017	2023	\$ 7,500,000	\$ -	\$ 7,500,000	94.2%	\$ 7,063,764	\$ 436,236	\$ -	\$ -	\$ 213,293	51%	\$ 222,943
1.27 Transportation Master Plan Update	2023	2024	\$ 250,000	\$ -	\$ 250,000	97.8%	\$ 244,500	\$ 5,500	\$ -	\$ -	\$ 5,500	0%	\$ -
1.28 Event Centre Roads Infrastructure - Street C	2019	2021	\$ 3,700,000	\$ 925,000	\$ 2,775,000	33.3%	\$ 924,075	\$ 1,850,925	\$ -	\$ -	\$ 814,235	56%	\$ 1,036,690
1.29 Auger Extension	2019	2024	\$ 2,500,000	\$ 625,000	\$ 1,875,000	33.3%	\$ 624,375	\$ 1,250,625	\$ -	\$ -	\$ 611,481	51%	\$ 639,144
Subtotal			\$ 338,926,264	\$ 140,479,471	\$ 198,446,793		\$ 127,730,593	\$ 70,716,199	\$ 9,940,716	\$ 907,210	\$ 21,154,947		\$ 38,713,326
TOTAL ROADS AND RELATED			\$ 338,926,264	\$ 140,479,471	\$ 198,446,793		\$ 127,730,593	\$ 70,716,199	\$ 9,940,716	\$ 907,210	\$ 21,154,947		\$ 38,713,326

Residential Development Charge Calculation	76%
Residential Share of 2019 - 2028 DC Eligible Costs	\$16,077,760
Growth in Population in New Units to 2028	7,402
Unadjusted Development Charge Per Capita	\$2,172.08
Non-Residential Development Charge Calculations	24%
Non-Residential Share of 2019 - 2028 DC Eligible Costs	\$5,077,187
Growth in Non-Residential Square Feet to 2028	1,804,390
Unadjusted Development Charge Per Square Foot	\$2.81
Growth in Industrial Square Feet to 2028	58%
Unadjusted Development Charge Per Square Foot	1,364,000
Growth in Non-Industrial Square Feet to 2028	42%
Unadjusted Development Charge Per Square Foot	\$2.16
	440,390
	\$4.84

2019 - 2028 Net Funding Envelope	\$46,446,756
Notional Reserve Fund Balance	\$0
Balance as at December 31, 2018	\$507,210
Revenue Losses	\$907,210
Total	\$907,210

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

ROADS AND RELATED	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$9,828.3)	(\$8,963.0)	(\$8,006.8)	(\$7,448.4)	(\$6,648.6)	(\$5,383.5)	(\$3,919.5)	(\$2,334.1)	(\$1,213.3)	
2019 - 2041 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$11,890.4	\$975.5	\$965.9	\$759.6	\$591.4	\$242.6	\$163.1	\$163.1	\$163.1	\$163.1	\$16,077.8
- General Government: Inflated	\$11,890.4	\$995.0	\$1,004.9	\$806.1	\$640.1	\$267.9	\$183.7	\$187.3	\$191.1	\$194.9	\$16,361.4
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	962	964	966	697	699	701	703	705	501	504	7,402
REVENUE											
- DC Receipts: Inflated	\$2,325.2	\$2,376.6	\$2,429.1	\$1,787.8	\$1,828.8	\$1,870.7	\$1,913.5	\$1,957.3	\$1,418.8	\$1,455.8	\$19,363.5
INTEREST											
- Interest on Opening Balance	\$0.0	(\$540.6)	(\$493.0)	(\$440.4)	(\$409.7)	(\$365.7)	(\$296.1)	(\$215.6)	(\$128.4)	(\$66.7)	(\$2,956.0)
- Interest on In-year Transactions	(\$263.0)	\$24.2	\$24.9	\$17.2	\$20.8	\$28.0	\$30.3	\$31.0	\$21.5	\$22.1	(\$43.1)
TOTAL REVENUE	\$2,062.1	\$1,860.2	\$1,961.1	\$1,364.6	\$1,439.9	\$1,533.0	\$1,647.7	\$1,772.7	\$1,311.9	\$1,411.2	\$16,364.4
CLOSING CASH BALANCE	(\$9,828.3)	(\$8,963.0)	(\$8,006.8)	(\$7,448.4)	(\$6,648.6)	(\$5,383.5)	(\$3,919.5)	(\$2,334.1)	(\$1,213.3)	\$3.0	

2019 Adjusted Charge Per Capita	\$2,417
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Allocation of Capital Program	
Residential Sector	76%
Non-Residential Sector	24%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

CITY OF GREATER SUBBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS AND RELATED
INDUSTRIAL DEVELOPMENT CHARGE
(in \$000)

ROADS AND RELATED	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$1,838.2)	(\$1,721.2)	(\$1,589.0)	(\$1,417.2)	(\$1,194.2)	(\$881.1)	(\$523.8)	(\$135.9)	(\$64.5)	
2019 - 2041 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$2,177.8	\$178.7	\$176.9	\$139.1	\$108.3	\$44.4	\$29.9	\$29.9	\$29.9	\$29.9	\$2,944.8
- General Government: Inflated	\$2,177.8	\$182.2	\$184.1	\$147.6	\$117.2	\$49.1	\$33.6	\$34.3	\$35.0	\$35.7	\$2,996.7
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square feet	162,000	162,000	163,000	158,000	159,000	159,000	160,000	161,000	40,000	40,000	1,364,000
REVENUE											
- DC Receipts: Inflated	\$388.8	\$396.6	\$407.0	\$402.4	\$413.1	\$421.3	\$432.4	\$443.9	\$112.5	\$114.7	\$3,532.7
INTEREST											
- Interest on Opening Balance	\$0.0	(\$101.1)	(\$94.7)	(\$87.4)	(\$77.9)	(\$65.7)	(\$48.5)	(\$28.8)	(\$7.5)	(\$3.5)	(\$515.1)
- Interest on In-year Transactions	(\$49.2)	\$3.8	\$3.9	\$4.5	\$5.2	\$6.5	\$7.0	\$7.2	\$1.4	\$1.4	(\$8.5)
TOTAL REVENUE	\$339.6	\$299.2	\$316.2	\$319.5	\$340.3	\$362.2	\$391.0	\$422.2	\$106.4	\$112.6	\$3,009.1
CLOSING CASH BALANCE	(\$1,838.2)	(\$1,721.2)	(\$1,589.0)	(\$1,417.2)	(\$1,194.2)	(\$881.1)	(\$523.8)	(\$135.9)	(\$64.5)	\$12.4	

2019 Adjusted Charge Per Square Foot

\$2.40

Allocation of Capital Program

Residential Sector	76%
Non-Residential Sector	24%
Industrial	58%
Non-Industrial	42%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

CITY OF GREATER SUBURBY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS AND RELATED
NON-INDUSTRIAL DEVELOPMENT CHARGE
(in \$000)

ROADS AND RELATED	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$1,292.7)	(\$1,167.1)	(\$1,026.0)	(\$948.7)	(\$839.9)	(\$670.0)	(\$474.3)	(\$259.8)	(\$133.4)	
2019 - 2041 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$1,577.0	\$129.4	\$128.1	\$100.7	\$78.4	\$32.2	\$21.6	\$21.6	\$21.6	\$21.6	\$2,132.4
- General Government: Inflated	\$1,577.0	\$132.0	\$133.3	\$106.9	\$84.9	\$35.5	\$24.4	\$24.8	\$25.3	\$25.9	\$2,170.0
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square feet	59,390	59,390	59,970	41,820	41,820	41,820	41,820	42,360	26,000	26,000	440,390
REVENUE											
- DC Receipts: Inflated	\$318.9	\$325.3	\$335.0	\$238.3	\$243.1	\$247.9	\$252.9	\$261.3	\$163.6	\$166.9	\$2,553.3
INTEREST											
- Interest on Opening Balance	\$0.0	(\$71.1)	(\$64.2)	(\$56.4)	(\$52.2)	(\$46.2)	(\$36.9)	(\$26.1)	(\$14.3)	(\$7.3)	(\$374.7)
- Interest on In-year Transactions	(\$34.6)	\$3.4	\$3.5	\$2.3	\$2.8	\$3.7	\$4.0	\$4.1	\$2.4	\$2.5	(\$5.9)
TOTAL REVENUE	\$284.3	\$257.6	\$274.4	\$184.2	\$193.7	\$205.5	\$220.1	\$239.3	\$151.7	\$162.0	\$2,172.7
CLOSING CASH BALANCE	(\$1,292.7)	(\$1,167.1)	(\$1,026.0)	(\$948.7)	(\$839.9)	(\$670.0)	(\$474.3)	(\$259.8)	(\$133.4)	\$2.7	

2019 Adjusted Charge Per Square Foot

\$5.37

Allocation of Capital Program

Residential Sector	76%
Non-Residential Sector	24%
Industrial	58%
Non-Industrial	42%

Rates for 2019

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

Appendix C.2

Water Services

The following section sets out the 2019-2028 development-related capital program and the calculation of the development charge for Water Services in the City of Greater Sudbury. The project details included in the forecast have been provided by City staff and are based on the City's budgets and the Water/Wastewater Master Plan.

Tables 1 – 2 provide details of the projects included in the Water engineered infrastructure development charges calculation. The content of the tables is as follows:

Table 1 Water Services Development-related Capital Projects: 2019-2028

Table 2 Residential and Non-Residential Cash Flow Analysis

The development-related capital program for the water distribution system is \$56.83 million to service development occurring over the planning period. The program provides for extension of watermains, wells, and booster stations, as well as future Water Master Plan updates and related studies.

No grants or subsidies have been identified for the Water Services capital program. However, a significant benefit to existing or replacement share of \$47.69 million has been identified, leaving \$9.14 million in development-related costs.

Approximately \$523,823 in previous DC revenues have already been applied to projects within the Water Services capital program. Another \$109,214 notional reserve fund balance has been calculated based on past revenue losses. These amounts are deducted from the capital program.

Finally, a post-period share of \$6.03 million has been allocated to development occurring beyond 2028, based on the planned capacity of the projects and the development forecast used for this study (as per Appendix A).

The result is the development charge recoverable share of the capital program of \$2.48 million. The development-related cost has been allocated

72 per cent (\$1.78 million) to new residential development and 28 per cent (\$693,567) to new non-residential development. The allocation of costs is based on shares of water-serviced population and employment growth over the planning period.

The long-term cash-flow analysis presented in Table 2 takes into consideration expenditure timing and revenue projections. The effect of the analysis is to increase the calculated unadjusted development charge rates. The reason for the increase in the rates is the timing of the development-related expenditures often occurs before benefitting development, in that the infrastructure needs to be in place prior to the growth occurring, and as such the City will incur financing costs. Financing costs are an eligible development charge recoverable cost under the DCA.

The following is a summary of the calculated Water Services development charges:

WATER SERVICES SUMMARY					
2019-2028		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.ft.	\$/capita	\$/sq.ft.
\$56,830,389	\$2,477,025	\$296.26	\$0.38	\$329	\$0.43

Project Description	Timing		Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
	Start	Finish				BTE %	Replacement & BTE Shares		Prior DCs	Available DC Reserves	2019 - 2028	Post-2028
2.0 WATER												
2.1 New Valley Wells	2011	2012	\$ 7,195,923	\$ -	\$ 7,195,923	50.0%	\$ 3,597,962	\$ 3,597,962	\$ 506,041	\$ 109,214	\$ 1,439,954	\$ 1,542,753
2.2 Valley Water Looping	2020	2024	\$ 11,300,000	\$ -	\$ 11,300,000	94.9%	\$ 10,728,161	\$ 571,839	\$ -	\$ -	\$ 276,065	\$ 295,774
2.3 Wanspeler Trunk Watermain - Preliminary Design Geotechnical Study	2019	2020	\$ 690,000	\$ -	\$ 690,000	94.8%	\$ 654,377	\$ 35,623	\$ 17,782	\$ -	\$ 8,613	\$ 9,228
2.4 Regent Street - Bouchard St to Walford Rd and Bouchard - Regent St to Southview Dr	2013	2015	\$ 2,234,533	\$ -	\$ 2,234,533	94.8%	\$ 2,119,168	\$ 115,365	\$ -	\$ -	\$ 55,694	\$ 59,670
2.5 Update to W/WW Master Plan/General Studies	2019	2023	\$ 3,100,000	\$ -	\$ 3,100,000	97.6%	\$ 3,024,739	\$ 75,261	\$ -	\$ -	\$ 45,989	\$ 29,272
2.6 MR 35	2018	2022	\$ 2,150,000	\$ -	\$ 2,150,000	94.9%	\$ 2,041,199	\$ 108,801	\$ -	\$ -	\$ 47,258	\$ 61,543
2.7 Second Avenue Sudbury	2014	2017	\$ 710,933	\$ -	\$ 710,933	94.8%	\$ 674,229	\$ 36,704	\$ -	\$ -	\$ 15,943	\$ 20,762
2.8 Lorne Street	2016	2018	\$ 2,524,000	\$ -	\$ 2,524,000	94.8%	\$ 2,393,691	\$ 130,309	\$ -	\$ -	\$ 56,600	\$ 73,709
2.9 Maley Drive (Barrydowne to Railway Tracks)	2018	2019	\$ 2,450,000	\$ -	\$ 2,450,000	94.8%	\$ 2,323,511	\$ 126,489	\$ -	\$ -	\$ 54,941	\$ 71,548
2.10 Lorne Street (Kelly Lake to Elm)	2019	2020	\$ 5,525,000	\$ -	\$ 5,525,000	94.8%	\$ 5,239,755	\$ 285,245	\$ -	\$ -	\$ 123,897	\$ 161,348
2.11 Notre Dame - Wilma to Cambrian Heights Drive	2021	2022	\$ 1,000,000	\$ -	\$ 1,000,000	94.8%	\$ 948,372	\$ 51,628	\$ -	\$ -	\$ 22,425	\$ 29,203
2.12 Garson - Various Water Upgrades for Growth (booster/wells)	2020	2025	\$ 14,700,000	\$ -	\$ 14,700,000	94.8%	\$ 13,941,067	\$ 758,933	\$ -	\$ -	\$ 329,645	\$ 429,288
2.13 Lo-Ellen Booster Station	2028	2028	\$ 1,500,000	\$ -	\$ 1,500,000	0.0%	\$ -	\$ 1,500,000	\$ -	\$ -	\$ -	\$ 1,500,000
2.14 Maley Drive Watermain	2028	2028	\$ 1,750,000	\$ -	\$ 1,750,000	0.0%	\$ -	\$ 1,750,000	\$ -	\$ -	\$ -	\$ 1,750,000
Subtotal			\$ 56,830,389	\$ -	\$ 56,830,389		\$ 47,686,228	\$ 9,144,161	\$ 523,823	\$ 109,214	\$ 2,477,025	\$ 6,034,099
TOTAL WATER			\$ 56,830,389	\$ -	\$ 56,830,389		\$ 47,686,228	\$ 9,144,161	\$ 523,823	\$ 109,214	\$ 2,477,025	\$ 6,034,099

Residential Development Charge Calculation	72%
Residential Share of 2019 - 2028 DC Eligible Costs	\$1,783,458
Growth in Serviced Population in New Units to 2028	6,020
Unadjusted Development Charge Per Capita	\$296.26
Non-Residential Development Charge Calculation	28%
Non-Residential Share of 2019 - 2028 DC Eligible Costs	\$693,567
Growth in Non-Residential Square Feet to 2028	1,804,390
Unadjusted Development Charge Per Square Foot	\$0.38

Notional Reserve Fund Balance	\$0
Balance as at December 31, 2018	\$109,214
Revenue Losses	\$109,214
Total	

CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

WATER	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$1,006.2)	(\$939.6)	(\$824.3)	(\$777.1)	(\$708.6)	(\$626.0)	(\$490.2)	(\$296.8)	(\$153.5)	
2019 - 2041 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$1,236.6	\$140.4	\$100.8	\$100.8	\$85.9	\$79.3	\$39.6	\$0.0	\$0.0	\$0.0	\$1,783.5
- General Government: Inflated	\$1,236.6	\$143.3	\$104.9	\$107.0	\$93.0	\$87.6	\$44.5	\$0.0	\$0.0	\$0.0	\$1,816.8
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	782	784	786	567	568	570	572	573	407	410	9,984
REVENUE											
- DC Receipts: Inflated	\$257.3	\$263.1	\$269.0	\$198.0	\$202.3	\$207.0	\$211.9	\$216.5	\$156.9	\$161.2	\$3,905.7
INTEREST											
- Interest on Opening Balance	\$0.0	(\$55.3)	(\$51.7)	(\$45.3)	(\$42.7)	(\$39.0)	(\$34.4)	(\$27.0)	(\$16.3)	(\$8.4)	\$161.6
- Interest on In-year Transactions	(\$26.9)	\$2.1	\$2.9	\$1.6	\$1.9	\$2.1	\$2.9	\$3.8	\$2.7	\$2.8	\$26.8
TOTAL REVENUE	\$230.3	\$209.8	\$220.2	\$154.2	\$161.4	\$170.2	\$180.4	\$193.4	\$143.3	\$155.6	\$4,094.0
CLOSING CASH BALANCE	(\$1,006.2)	(\$939.6)	(\$824.3)	(\$777.1)	(\$708.6)	(\$626.0)	(\$490.2)	(\$296.8)	(\$153.5)	\$2.1	

2019 Adjusted Charge Per Capita	\$329
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Allocation of Capital Program	
Residential Sector	72%
Non-Residential Sector	28%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

CITY OF GREATER SUBURBY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

WATER	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$396.3)	(\$376.0)	(\$336.7)	(\$304.7)	(\$263.2)	(\$215.3)	(\$145.3)	(\$51.1)	(\$20.1)	
2019 - 2041 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$480.9	\$54.6	\$39.2	\$39.2	\$33.4	\$30.8	\$15.4	\$0.0	\$0.0	\$0.0	\$693.6
- General Government: Inflated	\$480.9	\$55.7	\$40.8	\$41.6	\$36.2	\$34.1	\$17.3	\$0.0	\$0.0	\$0.0	\$706.5
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square feet	221,390	221,390	222,970	199,820	200,820	200,820	201,820	203,360	66,000	66,000	1,804,390
REVENUE											
- DC Receipts: Inflated	\$95.2	\$97.1	\$99.8	\$91.2	\$93.5	\$95.3	\$97.7	\$100.4	\$33.3	\$33.9	\$837.4
INTEREST											
- Interest on Opening Balance	\$0.0	(\$21.8)	(\$20.7)	(\$18.5)	(\$16.8)	(\$14.5)	(\$11.8)	(\$8.0)	(\$2.8)	(\$1.1)	(\$116.0)
- Interest on In-year Transactions	(\$10.6)	\$0.7	\$1.0	\$0.9	\$1.0	\$1.1	\$1.4	\$1.8	\$0.6	\$0.6	(\$1.6)
TOTAL REVENUE	\$84.6	\$76.0	\$80.1	\$73.5	\$77.7	\$81.9	\$87.3	\$94.2	\$31.0	\$33.4	\$719.8
CLOSING CASH BALANCE	(\$396.3)	(\$376.0)	(\$336.7)	(\$304.7)	(\$263.2)	(\$215.3)	(\$145.3)	(\$51.1)	(\$20.1)	\$13.3	

2019 Adjusted Charge Per Square Foot \$0.43

Allocation of Capital Program	
Residential Sector	72%
Non-Residential Sector	28%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix C.3

Wastewater Services

The following tables set out the 2019-2028 development-related capital forecast and the calculation of the development charge for Greater Sudbury's Wastewater treatment systems. The capital project details have been provided by City staff and are based on the City's budgets and the Water/Wastewater Master Plan.

The following tables form the basis of the development charges calculation;

Table 1 Wastewater Services Development-related Capital Program:
2019-2028

Table 2 Residential and Non-Residential Cash Flow Analysis

The cost of providing Wastewater Services in the City is extensive; the development-related capital program totals \$196.36 million to service growth between 2019 and 2028 and beyond. The program provides for various wastewater treatment plant upgrades, lift stations, sanitary sewer extensions or upgrades, and recoveries for the BioSolids Management Facility, as well as Wastewater Master Plan updates and related studies.

Of the total \$196.36 million development-related capital program, grants or subsidies account for \$12.30 million. Approximately \$144.36 million of the program has been allocated as replacement or benefit to existing shares, leaving \$39.70 million in development-related costs.

Approximately \$2.55 million in DCs have already been collected and applied to Wastewater Services capital projects, and a further \$351,895 in notional reserve funds is applied to the development-related costs. Finally, a post-period share of \$24.91 million has been allocated to development occurring beyond 2028, based on the planned capacity of the projects and the development forecast used for this study (as per Appendix A).

The result is a development charge recoverable share of \$11.89 million. The development-related costs have been allocated 72 per cent (\$8.56 million) to new residential development and 28 per cent (\$3.33 million) to new non-residential development. The allocation of costs is based on shares of

wastewater-serviced population and employment growth over the planning period.

The long-term cash-flow analysis takes into consideration expenditure timing and revenue projections. The effect of the cash-flow analysis is an increase in the calculated residential and non-residential DC rates.

The following is a summary of the calculated Wastewater Services development charges:

WASTEWATER SERVICES SUMMARY					
2019-2028		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.ft.	\$/capita	\$/sq.ft.
\$196,355,793	\$11,890,322	\$1,422.10	\$1.85	\$1,537	\$1.99

Project Description	Timing		Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs				
	Start	Finish				BTE %	Replacement & BTE Shares		Prior DCs	Available DC Reserves	2019 - 2028	Post-2028	
													\$
3.0 WASTEWATER													
3.1 BioSolids Management Facility	2013	2015	\$ 70,049,434	\$ 11,475,645	\$ 58,573,789	86.0%	\$ 50,373,459	\$ 8,200,330	\$ -	\$ -	\$ 3,391,315	\$ 4,809,016	59%
3.2 Walden WWTP - Design	2014	2023	\$ 2,000,000	\$ -	\$ 2,000,000	62.0%	\$ 1,240,000	\$ 760,000	\$ 211,464	\$ -	\$ 124,532	\$ 424,004	77%
3.3 Walden WWTP - Construction & Contract Administration	2024	2028	\$ 27,400,000	\$ -	\$ 27,400,000	62.0%	\$ 16,988,000	\$ 10,412,000	\$ -	\$ -	\$ 2,363,788	\$ 8,048,212	77%
3.4 WWTP Upgrades for Azilda	2019	2028	\$ 16,894,000	\$ -	\$ 16,894,000	97.8%	\$ 16,519,674	\$ 374,326	\$ 124,853	\$ -	\$ 114,672	\$ 134,802	54%
3.5 WWTP Upgrades for Chelmsford	2025	2028	\$ 14,690,000	\$ -	\$ 14,690,000	97.8%	\$ 14,364,508	\$ 325,492	\$ -	\$ -	\$ 149,614	\$ 175,878	54%
3.6 Helene Lift Station Upgrades	2025	2028	\$ 3,231,000	\$ -	\$ 3,231,000	80.0%	\$ 2,584,800	\$ 646,200	\$ -	\$ -	\$ 297,029	\$ 349,171	54%
3.7 Update to W/WW Master Plan/General Studies	2019	2023	\$ 5,600,000	\$ -	\$ 5,600,000	97.5%	\$ 5,460,992	\$ 139,308	\$ -	\$ -	\$ 85,126	\$ 54,182	39%
3.8 Sudbury WWTP Upgrades Phase 1	2009	2011	\$ 10,184,732	\$ -	\$ 10,184,732	59.0%	\$ 6,008,992	\$ 4,175,740	\$ 2,210,105	\$ 351,895	\$ 667,376	\$ 946,365	59%
3.9 Sudbury WWTP Upgrades Phase 2	2013	2016	\$ 16,808,436	\$ -	\$ 16,808,436	59.0%	\$ 9,916,977	\$ 6,891,459	\$ -	\$ -	\$ 2,850,020	\$ 4,041,439	59%
3.10 Sudbury WWTP Upgrades Phase 3	2019	2021	\$ 5,750,000	\$ -	\$ 5,750,000	78.0%	\$ 4,485,000	\$ 1,265,000	\$ -	\$ -	\$ 523,151	\$ 741,849	59%
3.11 Jacob St Sewer (Lively Phase I)	2018	2019	\$ 4,000,000	\$ -	\$ 4,000,000	62.0%	\$ 2,480,000	\$ 1,520,000	\$ -	\$ -	\$ 345,079	\$ 1,174,921	77%
3.12 Gatchell Outfall Sewer	2014	2021	\$ 8,975,000	\$ -	\$ 8,975,000	94.8%	\$ 8,511,638	\$ 463,362	\$ -	\$ -	\$ 191,627	\$ 271,735	77%
3.13 Lively Phase II - Upgrade Sanitary Sewer Pipes	2016	2022	\$ 5,078,000	\$ -	\$ 5,078,000	62.0%	\$ 3,148,360	\$ 1,929,640	\$ -	\$ -	\$ 438,077	\$ 1,491,563	59%
3.14 Algonquin Foremain	2017	2018	\$ 1,245,191	\$ 824,289	\$ 420,922	50.0%	\$ 210,461	\$ 210,461	\$ -	\$ -	\$ 87,038	\$ 123,423	59%
3.15 Laurier Lift Station	2018	2019	\$ 1,500,000	\$ -	\$ 1,500,000	97.8%	\$ 1,466,764	\$ 33,236	\$ -	\$ -	\$ 13,745	\$ 19,491	59%
3.16 Ramsey Lift Station	2019	2022	\$ 1,200,000	\$ -	\$ 1,200,000	50.0%	\$ 600,000	\$ 600,000	\$ -	\$ -	\$ 248,135	\$ 351,865	59%
3.17 Maley Drive Sanitary Sewer	2028	2028	\$ 1,750,000	\$ -	\$ 1,750,000	0.0%	\$ -	\$ 1,750,000	\$ -	\$ -	\$ -	\$ 1,750,000	100%
Subtotal			\$ 196,355,793	\$ 12,299,914	\$ 184,055,879		\$ 144,359,324	\$ 39,696,555	\$ 2,546,422	\$ 351,895	\$ 11,890,322	\$ 24,907,916	
TOTAL WASTEWATER			\$ 196,355,793	\$ 12,299,914	\$ 184,055,879		\$ 144,359,324	\$ 39,696,555	\$ 2,546,422	\$ 351,895	\$ 11,890,322	\$ 24,907,916	

Residential Development Charge Calculation	72%
Residential Share of 2019 - 2028 DC Eligible Costs	\$8,561,032
Growth in Serviced Population in New Units to 2028	6,020
Unadjusted Development Charge Per Capita	\$1,422.10
Non-Residential Development Charge Calculation	28%
Non-Residential Share of 2019 - 2028 DC Eligible Costs	\$3,329,290
Growth in Non-Residential Square Feet to 2028	1,804,390
Unadjusted Development Charge Per Square Foot	\$1.85

Notional Reserve Fund Balance	\$0
Balance as at December 31, 2018	\$351,895
Revenue Losses	
Total	\$351,895

CITY OF GREATER SUBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

WASTEWATER	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$4,748.7)	(\$4,031.2)	(\$3,251.4)	(\$2,617.9)	(\$1,832.9)	(\$1,341.1)	(\$899.1)	(\$420.6)	(\$209.5)	
2019 - 2041 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$5,823.5	\$262.0	\$262.0	\$119.2	\$29.5	\$348.6	\$429.0	\$429.0	\$429.0	\$429.0	\$8,561.0
- General Government: Inflated	\$5,823.5	\$267.2	\$272.6	\$126.5	\$31.9	\$384.9	\$483.2	\$492.8	\$502.7	\$512.7	\$8,898.1
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Serviced Units	782	784	786	567	568	570	572	573	407	410	9,984
REVENUE											
- DC Receipts: Inflated	\$1,201.9	\$1,229.1	\$1,256.9	\$924.8	\$945.0	\$967.3	\$990.1	\$1,011.6	\$732.9	\$753.1	\$18,246.3
INTEREST											
- Interest on Opening Balance	\$0.0	(\$261.2)	(\$221.7)	(\$178.8)	(\$144.0)	(\$100.8)	(\$73.8)	(\$49.5)	(\$23.1)	(\$11.5)	\$1,194.0
- Interest on In-year Transactions	(\$127.1)	\$16.8	\$17.2	\$14.0	\$16.0	\$10.2	\$8.9	\$9.1	\$4.0	\$4.2	\$117.4
TOTAL REVENUE	\$1,074.8	\$984.8	\$1,052.4	\$760.0	\$817.0	\$876.7	\$925.2	\$971.3	\$713.8	\$745.8	\$19,557.7
CLOSING CASH BALANCE	(\$4,748.7)	(\$4,031.2)	(\$3,251.4)	(\$2,617.9)	(\$1,832.9)	(\$1,341.1)	(\$899.1)	(\$420.6)	(\$209.5)	\$23.6	

2019 Adjusted Charge Per Capita	\$1,537
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Allocation of Capital Program	
Residential Sector	72%
Non-Residential Sector	28%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

CITY OF GREATER SUBBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

WASTEWATER	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$1,874.3)	(\$1,625.9)	(\$1,353.5)	(\$1,048.6)	(\$678.8)	(\$419.5)	(\$173.5)	\$94.9	\$55.5	
2019 - 2041 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$2,264.7	\$101.9	\$101.9	\$46.4	\$11.5	\$135.6	\$166.8	\$166.8	\$166.8	\$166.8	\$3,329.3
- General Government: Inflated	\$2,264.7	\$103.9	\$106.0	\$49.2	\$12.4	\$149.7	\$187.9	\$191.7	\$195.5	\$199.4	\$3,460.4
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square feet	221,390	221,390	222,970	199,820	200,820	200,820	201,820	203,360	66,000	66,000	1,804,390
REVENUE											
- DC Receipts: Inflated	\$440.6	\$449.4	\$461.6	\$422.0	\$432.6	\$441.2	\$452.3	\$464.9	\$153.9	\$157.0	\$3,875.4
INTEREST											
- Interest on Opening Balance	\$0.0	(\$103.1)	(\$89.4)	(\$74.4)	(\$57.7)	(\$37.3)	(\$23.1)	(\$9.5)	\$3.3	\$1.9	(\$389.3)
- Interest on In-year Transactions	(\$50.2)	\$6.0	\$6.2	\$6.5	\$7.4	\$5.1	\$4.6	\$4.8	(\$1.1)	(\$1.2)	(\$11.8)
TOTAL REVENUE	\$390.4	\$352.3	\$378.4	\$354.1	\$382.3	\$409.0	\$433.8	\$460.1	\$156.1	\$157.7	\$3,474.2
CLOSING CASH BALANCE	(\$1,874.3)	(\$1,625.9)	(\$1,353.5)	(\$1,048.6)	(\$678.8)	(\$419.5)	(\$173.5)	\$94.9	\$55.5	\$13.8	

2019 Adjusted Charge Per Square Foot

\$1.99

Allocation of Capital Program
Residential Sector
Non-Residential Sector

72%
28%

Rates for 2019

Inflation Rate
Interest Rate on Positive Balances
Interest Rate on Negative Balances

2.0%
3.5%
5.5%

Appendix C.4

Drains

The following tables set out the 2019-2028 development-related capital program and the calculation of the development charge for Greater Sudbury's Drains system. The capital project details have been informed by City staff.

The following tables form the basis of the development charges calculation:

Table 1 Drains Development-related Capital Program: 2019-2028

Table 2 Residential and Non-Residential Cash Flow Analysis

The cost of providing drainage services in the City over the planning period is \$76.40 million. The capital program provides for various subwatershed study implementation projects, conveyance improvements, ponds and channels, storm sewers and drains, and a stormwater treatment station at Minnow Lake.

Approximately \$43.77 million has been identified as grants or other sources of funding. A non-growth or replacement share of \$26.37 million has also been identified, leaving a development-related cost of \$6.26 million. The notional reserve fund balance of \$69,560 is applied to this amount. A further \$3.76 million has been allocated to development occurring beyond 2028, based on the planned capacity of the projects.

The net development-related and development charge recoverable share brought forward is \$2.43 million. The development-related cost has been allocated 76 per cent (\$1.85 million) to new residential development and 24 per cent (\$582,719) to new non-residential development. The allocation of costs is based on shares of population and employment growth over the planning period.

The long-term cash-flow analysis (Table 2) takes into consideration expenditure timing and revenue projections. The effect of the analysis is to increase the calculated unadjusted development charge rates. The reason for the increase in the rates is the timing of the development-related expenditures occurs before benefitting development, in that the infrastructure needs to be in place prior to the growth occurring, and as such the City will incur financing costs. Financing costs are an eligible development charge recoverable cost under the DCA.

The following is a summary of the calculated Drains development charges:

DRAINS SUMMARY					
2019-2028		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.ft.	\$/capita	\$/sq.ft.
\$76,398,626	\$2,427,998	\$249.29	\$0.32	\$277	\$0.36

CITY OF GREATER SUDBURY
DEVELOPMENT-RELATED CAPITAL PROGRAM
DRAINS

Project Description	Timing		Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
	Start	Finish				BTE %	Replacement & BTE Shares		Prior DCs	Available DC Reserves	2019 - 2028
											%
4.0 DRAINS											
4.1 Implement results of Ramey Lake Subwatershed Study (multiple projects - investment in new projects/assets) - PHASE 1	2019	2028	\$ 12,500,000	\$ 8,333,250	\$ 4,166,750	93.7%	\$ 3,903,148	\$ 263,602	-	\$ -	62%
4.2 Implement results of Junction Creek Subwatershed Study (multiple projects) - PHASE 1	2019	2028	\$ 20,000,000	\$ 13,333,200	\$ 6,666,800	93.7%	\$ 6,245,037	\$ 421,763	-	\$ -	62%
4.3 Implement results of Whitewater Lake Subwatershed Study (multiple projects) - PHASE 1	2019	2028	\$ 7,500,000	\$ 4,999,950	\$ 2,500,050	93.7%	\$ 2,341,889	\$ 158,161	-	\$ -	62%
4.4 Implement results of Whitson River Subwatershed Study (multiple projects) - PHASE 1	2020	2028	\$ 25,000,000	\$ 16,666,500	\$ 8,333,500	93.7%	\$ 7,806,296	\$ 527,204	-	\$ -	62%
4.5 Green Ave Stormwater Conveyance Improvements	2018	2019	\$ 3,500,000	\$ 440,000	\$ 3,060,000	50.0%	\$ 1,530,000	\$ 1,530,000	-	\$ -	58%
4.6 Countryside Stormwater Pond and Channel	2018	2019	\$ 3,200,000	-	\$ 3,200,000	25.0%	\$ 800,000	\$ 2,400,000	-	\$ -	62%
4.7 Lavalee Drain F	2019	2019	\$ 250,000	-	\$ 250,000	50.0%	\$ 125,000	\$ 125,000	-	\$ -	62%
4.8 Minnow Lake Stormwater Treatment Station	2014	2014	\$ 3,643,442	-	\$ 3,643,442	93.7%	\$ 3,412,946	\$ 230,496	-	\$ -	62%
4.9 Rockwood Storm Sewer	2010	2014	\$ 805,184	-	\$ 805,184	25.0%	\$ 201,296	\$ 603,888	-	\$ 69,560	62%
Subtotal			\$ 76,398,626	\$ 43,772,900	\$ 32,625,726		\$ 26,365,613	\$ 6,260,113	-	\$ 69,560	
TOTAL DRAINS			\$ 76,398,626	\$ 43,772,900	\$ 32,625,726		\$ 26,365,613	\$ 6,260,113	\$ -	\$ 69,560	\$ 2,427,998

Residential Development Charge Calculation

Residential Share of 2019 - 2028 DC Eligible Costs
Growth in Population in New Units to 2028
Unadjusted Development Charge Per Capita

\$1,845,278
7,402
\$249.29

76%

Non-Residential Development Charge Calculation

Non-Residential Share of 2019 - 2028 DC Eligible Costs
Growth in Non-Residential Square Feet to 2028
Unadjusted Development Charge Per Square Foot

\$582,719
1,804,390
\$0.32

24%

Notional Reserve Fund Balance

Balance as at December 31, 2018
Revenue Losses

\$0
\$69,560
\$69,560

Total

CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
DRAINS
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

DRAINS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$1,238.8)	(\$1,072.8)	(\$892.5)	(\$777.8)	(\$653.0)	(\$517.4)	(\$370.2)	(\$210.8)	(\$106.4)	
2019 - 2041 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$1,472.1	\$41.5	\$41.5	\$41.5	\$41.5	\$41.5	\$41.5	\$41.5	\$41.5	\$41.5	\$1,845.3
- General Government: Inflated	\$1,472.1	\$42.3	\$43.1	\$44.0	\$44.9	\$45.8	\$46.7	\$47.6	\$48.6	\$49.6	\$1,884.7
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	962	964	966	697	699	701	703	705	501	504	12,275
REVENUE											
- DC Receipts: Inflated	\$266.5	\$272.4	\$278.4	\$204.9	\$209.6	\$214.4	\$219.3	\$224.3	\$162.6	\$166.8	\$4,042.8
INTEREST											
- Interest on Opening Balance	\$0.0	(\$68.1)	(\$59.0)	(\$49.1)	(\$42.8)	(\$35.9)	(\$28.5)	(\$20.4)	(\$11.6)	(\$5.9)	\$180.2
- Interest on In-year Transactions	(\$33.2)	\$4.0	\$4.1	\$2.8	\$2.9	\$3.0	\$3.0	\$3.1	\$2.0	\$2.1	\$25.7
TOTAL REVENUE	\$233.3	\$208.3	\$223.5	\$158.6	\$169.7	\$181.4	\$193.9	\$207.1	\$153.0	\$163.0	\$4,248.7
CLOSING CASH BALANCE	(\$1,238.8)	(\$1,072.8)	(\$892.5)	(\$777.8)	(\$653.0)	(\$517.4)	(\$370.2)	(\$210.8)	(\$106.4)	\$7.1	

2019 Adjusted Charge Per Capita	\$277
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Allocation of Capital Program	
Residential Sector	76%
Non-Residential Sector	24%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
DRAINS
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

DRAINS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$395.8)	(\$348.4)	(\$296.5)	(\$249.2)	(\$197.7)	(\$142.1)	(\$81.7)	(\$15.9)	(\$4.1)	
2019 - 2041 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$464.9	\$13.1	\$13.1	\$13.1	\$13.1	\$13.1	\$13.1	\$13.1	\$13.1	\$13.1	\$582.7
- General Government: Inflated	\$464.9	\$13.4	\$13.6	\$13.9	\$14.2	\$14.5	\$14.7	\$15.0	\$15.3	\$15.6	\$595.2
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square feet	221,390	221,390	222,970	199,820	200,820	200,820	201,820	203,360	66,000	66,000	1,804,390
REVENUE											
- DC Receipts: Inflated	\$79.7	\$81.3	\$83.5	\$76.3	\$78.3	\$79.8	\$81.8	\$84.1	\$27.8	\$28.4	\$701.1
INTEREST											
- Interest on Opening Balance	\$0.0	(\$21.8)	(\$19.2)	(\$16.3)	(\$13.7)	(\$10.9)	(\$7.8)	(\$4.5)	(\$0.9)	(\$0.2)	(\$95.2)
- Interest on In-year Transactions	(\$10.6)	\$1.2	\$1.2	\$1.1	\$1.1	\$1.1	\$1.2	\$1.2	\$0.2	\$0.2	(\$2.0)
TOTAL REVENUE	\$69.1	\$60.7	\$65.6	\$61.1	\$65.7	\$70.1	\$75.2	\$80.8	\$27.2	\$28.4	\$603.8
CLOSING CASH BALANCE	(\$395.8)	(\$348.4)	(\$296.5)	(\$249.2)	(\$197.7)	(\$142.1)	(\$81.7)	(\$15.9)	(\$4.1)	\$8.7	

2019 Adjusted Charge Per Square Foot \$0.36

Allocation of Capital Program	
Residential Sector	76%
Non-Residential Sector	24%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix D

Reserve Funds

Appendix D

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 2018 year-end. As shown on Table 1, the 2018 year-end total DC reserve fund balance was just over \$2.01 million.

Notional revenue losses have also been calculated based on the phase-in of the 2014 Development Charges Background Study maximum permissible rates. Revenue losses associated with this phase-in period total another \$2.01 million. This results in a total notional development charges reserve fund balance of \$4.02 million.

The application of the notional 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 each service. This has the effect of reducing and deferring capital costs brought forward to the development charge calculation and the cash flow analysis.

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APPENDIX D
TABLE 1

CITY OF GREATER SUDBURY
DEVELOPMENT CHARGES RESERVE FUND BALANCES
AS OF DECEMBER 31, 2018

Service	Notional Revenue Losses	DCs Previously Collected	Total Prior Growth
General Government	\$11,371.56	\$11,767.00	\$23,138.56
Library Services	\$89,126.52	\$0.00	\$89,126.52
Fire Services	\$43,010.49	\$1,277,082.00	\$1,320,092.49
Police Services	\$22,630.58	\$304,345.00	\$326,975.58
Public Safety	\$9,524.87	\$0.00	\$9,524.87
Parks And Recreation	\$292,812.14	\$0.00	\$292,812.14
Ambulance Services	\$13,330.77	\$287,975.00	\$301,305.77
Emergency Preparedness	\$25,039.93	\$0.00	\$25,039.93
Transit	\$61,047.44	\$129,190.00	\$190,237.44
Roads And Related	\$907,210.41	\$0.00	\$907,210.41
Water Services	\$109,214.23	\$0.00	\$109,214.23
Wastewater Services	\$351,894.90	\$0.00	\$351,894.90
Drains	\$69,559.51	\$0.00	\$69,559.51
TOTAL	\$2,005,773.37	\$2,010,359.00	\$4,016,132.37

Appendix E

Long-Term Capital And Operating Costs

APPENDIX E
TABLE 1

CITY OF GREATER SUDBURY
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	
GENERAL GOVERNMENT None				\$0 \$0	\$0 \$0	\$0 \$0
LIBRARY SERVICES South Branch Expansion	\$50.00	per sq.ft. added	No additional operating costs arising from undertaking studies	\$127,457 \$127,457	\$260,852 \$260,852	\$388,309 \$388,309
FIRE SERVICES Facilities Vehicles and Equipment	\$0.10 \$0.10	per \$1.00 added per \$1.00 added		\$14,157 \$14,157 \$0	\$0 \$0 \$0	\$14,157 \$14,157 \$0
POLICE SERVICES Headquarters Expansion	\$35.00	per sq.ft. added		\$890,725 \$890,725	\$136,153 \$136,153	\$1,026,878 \$1,026,878
PUBLIC SAFETY None			No additional operating costs arising from radio infrastructure upgrades	\$0 \$0	\$0 \$0	\$0 \$0
PARKS AND RECREATION Indoor Recreation Outdoor Recreation	\$0.10 \$0.05	per \$1.00 added per \$1.00 added		\$338,417 \$322,989 \$15,428	\$322,989 \$322,989 \$0	\$661,406 \$645,979 \$15,428
AMBULANCE SERVICES Station Redevelopment	\$90.00	per sq.ft. added		\$91,134 \$91,134	\$117,798 \$117,798	\$208,932 \$208,932
EMERGENCY PREPAREDNESS Buildings, Land & Equipment	\$0.10	per \$1.00 added		\$98,528 \$98,528	\$3,988 \$3,988	\$102,516 \$102,516
TRANSIT Transit Garage Expansion PTIF Phase 2 Growth Projects	\$0.05 \$0.10	per \$1.00 added per \$1.00 added		\$78,950 \$73,437 \$5,513	\$67,461.94 \$62,751 \$4,711	\$146,412 \$136,188 \$10,224
ROADS AND RELATED WATER	\$50.00	per capita + employment	Rate supported service	\$263,900 \$263,900	\$0 \$0	\$263,900 \$263,900
WASTEWATER DRAINS	\$10.00	per capita + employment	Rate supported service	\$52,780 \$52,780	\$0 \$0	\$52,780 \$52,780
TOTAL ESTIMATED OPERATING COSTS				\$1,956,047	\$909,242	\$2,865,289

**APPENDIX E
TABLE 2**

**CITY OF GREATER SUDBURY
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)
GENERAL GOVERNMENT											
Total Net Cost (1)	1,421.0	1,060.0	1,085.0	1,090.0	104.7	79.7	39.2	39.2	39.2	64.2	5,022.0
Net Cost From Development Charges (2)	186.9	65.0	76.2	87.6	76.6	54.1	17.6	17.6	17.6	28.9	628.1
Net Cost From Non-DC Sources	1,234.1	995.0	1,008.8	1,002.4	28.1	25.6	21.5	21.5	21.5	35.3	4,393.9
- Discount Portion (3)	34.0	7.2	8.5	9.7	8.5	6.0	2.0	2.0	2.0	3.2	83.0
- Available DC Reserves & Prior Growth (4)	118.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	118.9
- Replacement & Benefit to Existing	1,081.3	987.8	1,000.3	992.7	19.6	19.6	19.6	19.6	19.6	32.1	4,192.0
- 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
LIBRARY SERVICES											
Total Net Cost (1)	10,165.5	832.5	832.5	832.5	832.5	832.5	832.5	832.5	832.5	832.5	17,658.1
Net Cost From Development Charges (2)	875.4	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	981.4
Net Cost From Non-DC Sources	9,290.1	820.7	820.7	820.7	820.7	820.7	820.7	820.7	820.7	820.7	16,676.7
- Discount Portion (3)	383.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	396.6
- Available DC Reserves & Prior Growth (4)	979.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	979.5
- Replacement & Benefit to Existing	6,334.5	817.5	817.5	817.5	817.5	817.5	817.5	817.5	817.5	817.5	13,692.2
- For Post 2028 Development (5)	1,593.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1,608.3
FIRE SERVICES											
Total Net Cost (1)	729.8	20.0	0.0	4,630.0	0.0	0.0	0.0	1,230.5	0.0	0.0	6,610.3
Net Cost From Development Charges (2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	141.6	0.0	0.0	141.6
Net Cost From Non-DC Sources	729.8	20.0	0.0	4,630.0	0.0	0.0	0.0	1,088.9	0.0	0.0	6,468.8
- 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 & Prior Growth (4)	57.6	0.4	0.0	1,157.5	0.0	0.0	0.0	104.5	0.0	0.0	1,320.1
- Replacement & Benefit to Existing	672.2	19.6	0.0	3,472.5	0.0	0.0	0.0	984.4	0.0	0.0	5,148.7
- 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
POLICE SERVICES											
Total Net Cost (1)	38,214.9	5,487.6	5,454.5	5,454.5	5,454.5	0.0	0.0	0.0	0.0	0.0	60,066.1
Net Cost From Development Charges (2)	581.2	111.4	78.3	78.3	78.3	0.0	0.0	0.0	0.0	0.0	927.5
Net Cost From Non-DC Sources	37,633.7	5,376.2	5,376.2	5,376.2	5,376.2	0.0	0.0	0.0	0.0	0.0	59,138.6
- 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)	208.1	29.7	29.7	29.7	29.7	0.0	0.0	0.0	0.0	0.0	327.0
- Replacement & Benefit to Existing	37,341.8	5,334.5	5,334.5	5,334.5	5,334.5	0.0	0.0	0.0	0.0	0.0	58,680.0
- For Post 2028 Development (5)	83.8	12.0	12.0	12.0	12.0	0.0	0.0	0.0	0.0	0.0	131.7

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 prior DCs or present DC 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
TABLE 2**

**CITY OF GREATER SUDBURY
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)
PUBLIC SAFETY											
Total Net Cost (1)	12,403.0	175.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12,578.0
Net Cost From Development Charges (2)	295.4	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	297.3
Net Cost From Non-DC Sources	12,107.7	173.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12,280.7
- 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 & Prior Growth (4)	535.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	535.6
- Replacement & Benefit to Existing	11,298.7	171.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11,469.8
- For Post 2028 Development (5)	273.4	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	275.3
PARKS AND RECREATION											
Total Net Cost (1)	11,510.0	817.0	67.0	67.0	67.0	0.0	0.0	0.0	0.0	0.0	12,528.0
Net Cost From Development Charges (2)	3,405.7	42.3	30.2	30.2	30.2	0.0	0.0	0.0	0.0	0.0	3,538.4
Net Cost From Non-DC Sources	8,104.3	774.7	36.9	36.9	36.9	0.0	0.0	0.0	0.0	0.0	8,989.6
- Discount Portion (3)	1,072.1	4.7	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	1,086.9
- Available DC Reserves & Prior Growth (4)	3,013.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,013.6
- Replacement & Benefit to Existing	788.7	770.0	33.5	33.5	33.5	0.0	0.0	0.0	0.0	0.0	1,659.2
- For Post 2028 Development (5)	3,229.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,229.9
AMBULANCE SERVICES											
Total Net Cost (1)	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
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	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
- Discount Portion (3)	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
- Available DC Reserves & Prior Growth (4)	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
- 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
EMERGENCY PREPAREDNESS											
Total Net Cost (1)	1,638.8	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	2,038.8
Net Cost From Development Charges (2)	985.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	985.3
Net Cost From Non-DC Sources	653.6	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	1,053.6
- Discount Portion (3)	163.9	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	164.8
- Available DC Reserves & Prior Growth (4)	457.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	457.7
- Replacement & Benefit to Existing	0.0	97.8	97.8	97.8	97.8	0.0	0.0	0.0	0.0	0.0	391.2
- For Post 2028 Development (5)	32.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	39.9

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 prior DCs or present DC reserve fund balances).

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**APPENDIX E
TABLE 2**

**CITY OF GREATER SUDBURY
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)
TRANSIT											
Total Net Cost (1)	9,720.5	288.9	288.9	288.9	288.9	288.9	288.9	288.9	288.9	0.0	12,031.6
Net Cost From Development Charges (2)	1,474.9	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	0.0	1,523.9
Net Cost From Non-DC Sources	8,245.7	282.8	282.8	282.8	282.8	282.8	282.8	282.8	282.8	0.0	10,507.8
- 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 & Prior Growth (4)	1,331.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,331.8
- Replacement & Benefit to Existing	5,653.6	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	0.0	7,873.8
- For Post 2028 Development (5)	1,260.3	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	0.0	1,302.1
ROADS AND RELATED											
Total Net Cost (1)	104,526.2	14,727.8	14,284.4	13,359.4	8,107.2	7,165.6	6,728.1	6,728.1	6,728.1	16,091.8	198,446.8
Net Cost From Development Charges (2)	15,645.2	1,283.5	1,270.9	999.5	778.2	319.3	214.6	214.6	214.6	214.6	21,154.9
Net Cost From Non-DC Sources	88,881.0	13,444.3	13,013.5	12,359.9	7,329.1	6,846.3	6,513.5	6,513.5	6,513.5	15,877.2	177,291.8
- 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 & Prior Growth (4)	9,433.6	187.4	187.4	187.4	187.4	133.0	133.0	133.0	133.0	133.0	10,847.9
- Replacement & Benefit to Existing	61,558.6	11,709.9	11,292.3	10,984.3	4,936.3	5,007.3	4,780.9	4,780.9	4,780.9	7,899.1	127,730.6
- For Post 2028 Development (5)	17,888.8	1,547.0	1,533.8	1,188.3	2,205.4	1,706.1	1,599.6	1,599.6	1,599.6	7,845.2	38,713.3
DRAINS											
Total Net Cost (1)	12,292.0	2,259.3	2,259.3	2,259.3	2,259.3	2,259.3	2,259.3	2,259.3	2,259.3	2,259.3	32,625.7
Net Cost From Development Charges (2)	1,937.0	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	2,428.0
Net Cost From Non-DC Sources	10,355.0	2,204.7	2,204.7	2,204.7	2,204.7	2,204.7	2,204.7	2,204.7	2,204.7	2,204.7	30,197.7
- 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 & Prior Growth (4)	69.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.6
- Replacement & Benefit to Existing	7,318.2	2,116.4	2,116.4	2,116.4	2,116.4	2,116.4	2,116.4	2,116.4	2,116.4	2,116.4	26,365.6
- For Post 2028 Development (5)	2,967.2	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	3,762.6
TOTAL MUNICIPAL SERVICES											
Total Net Cost (1)	202,626.8	25,768.1	24,371.7	28,081.7	17,214.1	10,626.0	10,148.0	11,378.5	10,148.0	19,247.8	359,610.6
Net Cost From Development Charges (2)	25,386.9	1,576.6	1,528.1	1,268.0	1,035.6	445.8	304.7	446.3	304.7	309.8	32,606.4
Net Cost From Non-DC Sources	177,239.9	24,191.5	22,843.6	26,813.7	16,178.5	10,180.2	9,843.3	10,932.2	9,843.3	18,938.0	327,004.1
- Discount Portion (3)	1,653.6	13.6	13.5	14.8	13.6	7.5	3.5	3.5	3.5	4.7	1,731.7
- Available DC Reserves & Prior Growth (4)	16,210.5	217.5	217.1	1,374.6	217.1	133.0	133.0	237.5	133.0	133.0	19,006.2
- Replacement & Benefit to Existing	132,047.6	22,302.1	20,969.9	24,126.8	13,633.1	8,238.3	8,012.0	8,996.4	8,012.0	10,865.1	257,203.1
- For Post 2028 Development (5)	27,328.3	1,658.2	1,643.1	1,297.5	2,314.7	1,801.4	1,694.9	1,694.9	1,694.9	7,935.3	49,063.1

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

(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 prior DCs or present DC 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 F

Asset Management Plan

Appendix F

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 and Table 2. 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 General Services	
Service and Amenities	Estimated Useful Life
General Government • Growth-Related Studies	Not Infrastructure
Library Services • Library Branch • Studies • Collection Materials	50 years Not Infrastructure 10 years
Fire Services • Buildings • Training Vehicles • Equipment	50 years 10 years 10-15 years
Police Services • Personal Equipment • Police Headquarters	10 years 50 years
Public Safety • Equipment	20 years
Parks and Recreation • Indoor Recreation Facilities • Sports Complex • Skate Park • Soccer Field	50 years 50 years 20 years 20 years
Ambulance Services • Station • Equipment	50 years 10 years
Emergency Preparedness • Buildings • Generators	50 years 15 years
Transit • Transit Garage • PTIF Phase 2 Growth Projects	50 years 50 years

Table 2 Summary of Municipal Assets Considered Engineered Services	
Service and Amenities	Estimated Useful Life
Roads and Related • Property Acquisition • Roads Projects • Active Transportation • Growth-Related Studies	Not Infrastructure 60 years 25 years Not Infrastructure
Water Services • Water Infrastructure • Growth-Related Studies	60 years Not Infrastructure
Wastewater Services • Wastewater Infrastructure • Growth-Related Studies	60 years Not Infrastructure
Drains • Drainage services infrastructure	75 years

Annual Provision

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

Based on the information obtained from the City's Asset Management Plan (2016) and City staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated for both the general and engineered services. 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 3 and 4 provide an overview of the capital provisions required to replace the capital infrastructure proposed to be funded under the development charges by-law for both general and engineered services. As shown in Table 3, by 2028, the City will need to fund an additional \$195,000 per annum in order to properly fund the full life-cycle costs of the new assets related to the general services supported under the DC By-law.

Table 4 provides a separate analysis of the annual provisions required for the engineered services capital program. As shown in Table 4, the annual provision in 2028 amounts to \$515,000.

TABLE 3

**CITY OF GREATER SUDBURY
CALCULATED ANNUAL PROVISION BY 2028 - GENERAL SERVICES**

Service	2019 - 2028 Capital Program		Calculated AMP Annual Provision by 2028	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
General Government	\$ -	\$ -	\$ -	\$ -
Library Services	\$ 1,012,031	\$ 16,489,338	\$ 15,000	\$ 88,000
Fire Services	\$ 1,461,661	\$ 5,148,671	\$ 1,000	\$ 56,000
Police Services	\$ 1,254,440	\$ 58,811,664	\$ 32,000	\$ 1,264,000
Public Safety	\$ 306,829	\$ 12,271,206	\$ 14,000	\$ 566,000
Parks And Recreation	\$ 3,831,257	\$ 11,213,550	\$ 72,000	\$ 226,000
Ambulance Services	\$ 622,906	\$ 914,094	\$ 14,000	\$ 20,000
Emergency Preparedness	\$ 1,010,319	\$ 2,028,518	\$ 16,000	\$ 56,000
Transit	\$ 1,714,104	\$ 26,384,683	\$ 31,000	\$ 527,000
Total 2028 Provision	\$ 11,213,547	\$ 133,261,724	\$ 195,000	\$ 2,803,000

TABLE 4

**CITY OF GREATER SUDBURY
CALCULATED ANNUAL PRIVISION BY 2028 - ENGINEERED SERVICES**

Service	2019 - 2028 Capital Program		Calculated AMP Annual Provision by 2028	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Roads And Related	\$ 20,516,379	\$ 306,659,885	\$ 313,000	\$ 3,634,000
Water Services	\$ 2,531,637	\$ 50,508,752	\$ 39,000	\$ 799,000
Wastewater Services	\$ 12,032,560	\$ 176,723,233	\$ 139,000	\$ 1,764,000
Drains	\$ 2,497,557	\$ 73,901,069	\$ 24,000	\$ 111,000
Total 2028 Provision	\$ 37,578,132	\$ 607,792,940	\$ 515,000	\$ 6,308,000

Transit Asset Management in the City

The City of Greater Sudbury continues to recover for costs associated with the Transit Garage Expansion. The City is planning for additional projects to improve transit services, to be funded primarily through upper level government grants with some funding coming from DC revenues. Details on the Transit services capital projects and anticipated ridership forecast is found in Appendix B.9.

The additional Transit projects are expected to have a yearly net operating impact of \$111,000 per year by 2028 (see Appendix E). The City ensures that the transit system will be financially sustainable through yearly capital and operating budget reviews.

Financial Sustainability of the Program

Future Revenue Growth

The calculated annual funding provision should be considered within the context of the City's projected growth. Over the next ten years (to 2028) the City is projected to increase by approximately 2,940 households, which represents a 4.2 per cent increase over the existing base. In addition, the City will also add roughly 2,360 new employees that will result in approximately 1.80 million square feet 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. In part, these additional revenues can be used to fund long-term repair and replacement costs of the infrastructure proposed to be funded under the development charges by-law.

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 City 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 Tables 3 and 4 are considered to be financially sustainable as it is expected that the increased capital asset management requirements can be absorbed by the tax and user base over the long-term.

Importantly, the City'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 G

Draft 2019 Development Charges By-Law (Provided Under Separate Cover)