# DEVELOPMENT CHARGES BACKGROUND STUDY 

City of Greater Sudbury

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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 nonresidential) 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 nonresidential growth over the 2019-2028 planning period. The development forecast is further discussed in Appendix A.

| Development Forecast | 2018 <br> 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 <br> Detached | Semi <br> Detached | Apartments <br> and <br> Multiples | Non-Industrial | Industrial |
|  | $\$ 17,721$ | $\$ 14,238$ | $\$ 10,227$ | $\$ 8.89$ | $\$ 5.92$ |

## 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.

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 20192028. 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.

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 | $\begin{gathered} 2018 \\ \text { Estimate } \end{gathered}$ | 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 |  |

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

| Service | Gross Cost | Grants/ <br> Subsidies | $\begin{array}{c\|} \hline \text { Municipal } \\ \text { Cost } \\ \hline \end{array}$ | Total Net Capital Program |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 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 $2^{\text {nd }}$ 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.

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## TABLE 4

CITY OF GREATER SUDBURY
SUMMARY OF DEVELOPMENT-RELATED CAPIAL PROGRAM ED SERVICES 2009-2028
(in $\$ 000$ )

| Service | Gross Cost | Grants / Subsidies | NetMunicipalCost | 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) |  |  |  |  |  |  | ResidentialShare |  | Non-Residential Share |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NetMunicipalCost$(\$ 000)$ | Replacement\& Benefit toExisting(\$000) | Required Service Discount (\$000) | $\begin{gathered} \text { Prior DCs } \\ (\$ 000) \\ \hline \end{gathered}$ | $\qquad$ | $\begin{gathered} \text { Post-2028 } \\ \text { Benefit } \\ (\$ 000) \\ \hline \end{gathered}$ | Total DCEligible Costsfor Recovery$(\$ 000)$ |  |  |  |  |
|  |  |  |  |  |  |  |  | \% | (\$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  |  | \$64.49 |  | \$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  |  | \$132.59 |  | \$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  |  | \$14.54 |  | \$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  |  | \$95.23 |  | \$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  |  | \$30.53 |  | \$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  |  | \$478.04 |  | \$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  |  | \$33.02 |  | \$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  |  | \$101.16 |  | \$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  |  | \$156.46 |  | \$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  |  | \$1,106.06 |  | \$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 nondevelopment 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 nondevelopment 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 nonresidential 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 nonresidential 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 NonIndustrial 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 10 Year Growth in Population in New Units (Servi 10 Year Growth in Square Feet | $\begin{array}{r} 7,402 \\ 6,020 \\ 1,804,390 \end{array}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Development-Related Capital Program (2019-2028) |  |  |  |  |  |  |  |  |  |  |
| Service | Net <br> Municipal <br> Cost <br> (\$000) | Replacement \& Benefit to Existing (\$000) | $\begin{gathered} \text { Prior DCs } \\ (\$ 000) \end{gathered}$ | Available DC Reserves (\$000) | $\begin{gathered} \text { Post-2028 } \\ \text { Benefit } \\ (\$ 000) \\ \hline \end{gathered}$ | Total DC <br> Eligible Costs <br> for Recovery <br> $(\$ 000)$ | Residential Share |  | Non-Residential Share |  |
|  |  |  |  |  |  |  | \% | (\$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  | \$2,172.08 |  | \$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  | \$296.26 |  | \$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  | \$1,422.10 |  | \$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  | \$249.29 |  | \$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 Unadjusted Development Charge Per Sq.Ft. |  |  |  |  |  |  |  | \$4,139.73 |  | \$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 <br> 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 <br> Charge Per <br> 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 singe/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 NonIndustrial 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 <br> Residential Charge | Difference in |  |
| 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 i |  |
| 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 |  |
| 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 taxsupported 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 $\mathbf{\$ 2 5 8 . 9 4}$ 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.

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

The Development Charges Act now requires that municipalities complete an Asset Management Plan before the passing of a development charges bylaw. 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.

| 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 Senvices | \$ | 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 Bylaw.

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 <br> Considered | Servicing Needs |
| :--- | :--- |
| General Services | Services such as Library and Parks and Recreation are open <br> and accessible to all residents in the City and are driven and <br> planned for based on City-wide population growth. <br> General Government, Fire, Police, Public Safety, Ambulance, <br> Emergency Preparedness, and Transit services are provided to <br> all residents and employees in the City and are driven and <br> planned for based on City-wide population or population and <br> employment growth. |
| Engineered <br> Services | Roads and Related are provided through a City-wide network <br> and is planned based on City-wide population and employment <br> growth. |
| For services such as Water, Wastewater and Drains services, a <br> network of ponds, linear infrastructure and treatment facilities <br> are used to provide services to City-wide population and <br> 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 $3 \quad$ 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 $7 \quad$ Forecast of Occupied Households by Unit Type
Table $8 \quad$ Forecast of Annual Growth in Occupied Households by Unit Type
Table $9 \quad$ 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: $\quad 1,000$ 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 nonresidential space is anticipated.
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| Mid-Year | Census Population | Annual Growth | Total Population | Annual Growth | Occupied Households | Annual Growth | Av. 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 |  |

HEMSON
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\% |

HEMSON
APPENDIX A-TABLE 3
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

| Dwelling Unit Type | Period of Construction |  |  |  |  |  |  |  |  |  | Period of Construction Summaries |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pre 1945 | 1946-1960 | 1961-1970 | 1971-1980 | 1981-1990 | 1991-1995 | 1996-2000 | 2001-2005 | 2006-2010 | 2011-2016 | Pre 2006 | 2006-2016 | Total |
| Singles |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Semis |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Rows |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Apartments (excl. Duplexes): Bachelor or 1BR |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Apartments (excl. Duplexes): 2BR or more |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Apartments (excl. Duplexes) - Total |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Duplexes |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | 3,985 | 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 |
| All Units |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |



HEMSON
POPULATION, HOUSEHOLD \& EMPLOYMENT FORECAST SUMMARY

| Mid-Year | Census <br> Population | Annual Growth | Total <br> 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 |  |


| 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\% |

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\% |


| Mid-Year | Assumed Average Occupancies (PPU) |  |  |  |  | Forecast Population in New Households |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Singles | Semis | Rows | Apartments | Total | 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

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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|  |  | ｜lll｜ |  <br>  |  |  |  |
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|  |  | $\stackrel{-}{\circ}$ |  |  |  |  |
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APPENDIX A - TABLE 11
CITY OF GREATER SUDBURY
FORECAST OF ANNUAL NON-RESIDENTIAL SPACE GROWTH

| Employment Density |  |
| :--- | ---: |
| Population-Related Weighted | $540 \mathrm{ft}^{2}$ per employee |
| Employment Land | $1000 \mathrm{ft}^{2}$ per employee |
| Major Office | $290 \mathrm{ft}^{2}$ 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
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## 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. $4 \quad$ Police Services
Appendix B. $5 \quad$ Public Safety
Appendix B. 6 Parks and Recreation
Appendix B. $7 \quad$ 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.

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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 developmentrelated 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) nonresidential 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 tenyear growth in population and employment. The resulting unadjusted per
capita residential charge is $\$ 64.49$ before cash flow adjustments. The nonresidential 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.

APPENDIX B .1
TABLE 1
CITY OF GREATER SUDBURY
DEVELOPMENTRELATED CAPIAL PROGRAM
GENERAL GOVERNMENT

| Project Description | Timing |  |  | Grants/Subsidies/OtherRecoveries | NetMunicipal Cost | Ineligible Costs |  |  | Total DC Eligible Costs | DC Eligible Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Start | Finish |  |  |  | $\begin{gathered} \hline \text { BTE } \\ \% \end{gathered}$ | Replacement \& BTE Shares | $\begin{gathered} 10 \% \\ \text { Reduction } \end{gathered}$ |  | Prior DCs | Available DC Reserves | $\begin{gathered} \hline 2019- \\ 2028 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Post } \\ & 2028 \end{aligned}$ |
| 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 | \$ . |


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 CITY OF GREATER SUDBURYCASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE 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 |  |  |  |  |  |  |  |  |  |  |  |
| - Population Growth in New Units | 962 | 964 | 966 | 697 | 699 | 701 | 703 | 705 | 501 | 504 | 7,402 |
| REVENUE |  |  |  |  |  |  |  |  |  |  |  |
| - DC Receipts: Inflated | \$65.4 | \$66.9 | \$68.3 | \$50.3 | \$51.5 | \$52.6 | \$53.8 | \$55.1 | \$39.9 | \$41.0 | \$544.8 |
| INTEREST |  |  |  |  |  |  |  |  |  |  |  |
| - Interest on Opening Balance | \$0.0 | (\$4.3) | (\$3.6) | (\$3.4) | (\$4.7) | (\$5.6) | (\$5.5) | (\$3.7) | (\$1.7) | (\$0.4) | (\$33.1) |
| - Interest on In-year Transactions | (\$2.1) | \$0.3 | \$0.1 | (\$0.6) | (\$0.3) | \$0.1 | \$0.7 | \$0.7 | \$0.4 | \$0.3 | (\$0.4) |
| 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 |  |


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| 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 |  |


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## 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. Service Level \$/capita \$373.71 |  | 9-2028 | Un |  | A |  |
|  | Development-R | ated Capital Program | Develop | Charge | Develop | Charge |
|  | Total | Net DC Recoverable | \$/capita | \$/sq.ft. | \$/capita | \$/sq.ft. |
|  | \$17,796,994 | \$981,438 | \$132.59 | \$0.00 | \$150 | \$0.00 |


| BUILDINGS | \# of Square Feet |  |  |  |  |  |  |  |  |  | UNIT COST <br> (\$/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 |  |


| MATERIALS | \# of Materials |  |  |  |  |  |  |  |  |  | UNIT COST <br> (\$/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 <br> (\$/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 <br> (\$/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 |  |

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## INVENTORY SUMMARY（\＄000）

## SERVICE LEVEL（\＄／Capita）

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 | $\$ 981,438$ |


| Project Description | Timing |  |  | Grants/Subsidies/OtherRecoveries | NetMunicipal Cost | Ineligible Costs |  |  | TotalDC EligibleCosts | DC Eligible Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Start | Finish |  |  |  | $\begin{gathered} \hline \text { BTE } \\ \% \end{gathered}$ | Replacement \& BTE Shares | $\begin{gathered} 10 \% \\ \text { Reduction } \\ \hline \end{gathered}$ |  | Prior DCs | Available DC Reserves | $\begin{gathered} \hline 2019- \\ 2028 \end{gathered}$ | $\begin{aligned} & \hline \text { Post } \\ & 2028 \end{aligned}$ |
| 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 | \$ 1,532,804 |
| 2.1.2 Mackenzie Library Study <br> Main Library - Business | 2013 | 2015 | \$ 50,625 | \$ | 50,625 | 56.0\% | \$ 28,350 | \$ 2,228 | \$ 20,048 | \$ | \$ | \$ 10,024 | \$ 10,024 |
| 2.1.3 Plan/Study/Consultant | 2018 | 2018 | \$ 245,000 | \$ | \$ 245,000 | 56.0\% | \$ 137,200 | \$ 10,780 | \$ 97,020 | \$ | \$ | \$ 48,510 | \$ 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 | \$ 1,591,338 |
| 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 | 17,011 |
| Subtotal Material Acquisitions |  |  | \$ 11,787,673 | \$ | \$ 11,787,673 |  | \$ 11,575,495 | \$ 21,218 | \$ 190,960 | \$ - | \$ | \$ 173,950 | \$ 17,011 |
| 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 | \$ 1,608,349 |


HEMSON

| 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 |  |  |  |  |  |  |  |  |  |  |  |
| - Population Growth in New Units | 962 | 964 | 966 | 697 | 699 | 701 | 703 | 705 | 501 | 504 | 7,402 |
| REVENUE |  |  |  |  |  |  |  |  |  |  |  |
| - DC Receipts: Inflated | \$144.3 | \$147.5 | \$150.8 | \$110.9 | \$113.5 | \$116.1 | \$118.8 | \$121.5 | \$88.1 | \$90.3 | \$1,201.7 |
| INTEREST |  |  |  |  |  |  |  |  |  |  |  |
| - Interest on Opening Balance | \$0.0 | (\$41.3) | (\$36.0) | (\$30.2) | (\$26.4) | (\$22.2) | (\$17.7) | (\$12.7) | (\$7.4) | (\$3.6) | (\$197.5) |
| - Interest on In-year Transactions | (\$20.1) | \$2.4 | \$2.4 | \$1.7 | \$1.8 | \$1.8 | \$1.8 | \$1.9 | \$1.3 | \$1.3 | (\$3.7) |
| 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 |  |



HEMSON

## 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. Service Level \$/pop \& emp \$331.15 | 2019-2028 |  | Unadjusted Development Charge |  | Adjusted Development Charge |  |
|  |  |  |  |  |  |  |
|  | Total | Net DC Recoverable | \$/capita | \$/sq.ft. | \$/capita | \$/sq.ft. |
|  | \$6,610,332 | \$141,569 | \$14.54 | \$0.02 | \$15 | \$0.02 |

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 |
| Hanmer 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 |
| Wahnapitae 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 Horne 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 |  |


| VEHICLES (\# at all stations \& divisions) | \# of Vehicles |  |  |  |  |  |  |  |  |  | UNIT COST <br> (\$/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

| 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 | \$3,200 |
| Hoses (per roll) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | \$557 |
| Mobile Radios | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | \$12,000 |
| Mobile Repeaters | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | \$18,000 |
| Nozzles | 206 | 206 | 206 | 206 | 206 | 206 | 206 | 206 | 206 | 206 | \$1,109 |
| Pagers | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | \$800 |
| Portable Radios | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 225 | \$8,000 |
| SCBA Compressor | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | \$50,081 |
| SCBA Cylinders | 458 | 458 | 458 | 458 | 458 | 458 | 458 | 458 | 630 | 630 | \$838 |
| SCBA Face Piece | 255 | 255 | 255 | 255 | 255 | 255 | 255 | 255 | 486 | 486 | \$447 |
| SCBA Fill Station | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | \$22,299 |
| SCBA Harness \& Regulator | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 260 | 260 | \$8,363 |
| Station Generator | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | \$65,000 |
| Thermal Imaging Camera | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 12 | 20 | 20 | \$10,300 |
| Vehicle Extraction Tool (Jaws of Life) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 12 | 12 | 12 | \$33,448 |
| Water Rescue Suits | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 40 | 40 | 40 | \$1,672 |
| AED Units | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | \$2,453 |
| Cascade System | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$149,490 |
| Commercial Dryer | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | \$8,362 |
| Commercial Washer | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | \$13,379 |
| Fire Extinguishers | 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 | \$202,021 |
| Gas Monitors | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 40 | 40 | 40 | \$412 |
| Hazmat Decontamination Tent | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$50,045 |
| Knox Box | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 15 | 15 | \$2,063 |
| Ladders | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 137 | 137 | \$1,366 |
| Portable Fire Pumps | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | \$5,352 |
| Portable Generator | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | \$669 |
| PPV Fan | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | \$2,509 |
| Rescue Rope | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | \$570 |
| Residential Dryer | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | \$669 |
| Residential Washer | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | \$892 |
| Sets of Vetter Bags (3 per set) | 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 | \$275 |
| Wajax Bush Pumps | 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 | 3,491 | 4,023 | 4,023 |  |
| 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 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

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) |  |  |  |  |  |  |  |  |  | Average Service Level |  |
| 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 |

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| 2019-2028 Net Funding Envelope | $\$ 1,747,817$ |
| :--- | ---: |
| Notional Reserve Fund Balance |  |
| Balance as at December 31, 2018 <br> Revenue Losses <br> Total | $\$ 1,277,082$ |

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APPENDIX B. 3
TABLE 3
CITY OF GREATER SUDBURY
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 |  |



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| 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 |  |


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## 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 $12^{\text {th }}$ 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 developmentrelated 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-

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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. Service Level \$/pop \& emp \$175.72 |  | 9-2028 | Un |  |  |  |
|  | Development-R | ated Capital Program | Develo | Charge | Develop | Charge |
|  | Total | Net DC Recoverable | \$/capita | \$/sq.ft. | \$/capita | \$/sq.ft. |
|  | \$60,066,104 | \$927,464 | \$95.23 | \$0.12 | \$106 | \$0.14 |


| 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 |  |


| CITY OF GREATER SUDBURY <br> CALCULATION OF SERVICE LEVELS POLICE SERVICES |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
|  | 2009 | 2010 | 2011 | 2012 |
| Historic Population | 159,389 | 159,884 | 160,380 | 160,628 |
| Historic Employment | 74,525 | 74,854 | 75,185 | 75,400 |
| Total Population \& Employment | 233,914 | 234,738 | 235,565 | 236,028 |
| INVENTORY SUMMARY (\$000) |  |  |  |  |
| Buildings | \$33,430.5 | \$33,430.5 | \$32,182.6 | \$31,558.7 |
| Land | \$693.6 | \$693.6 | \$693.6 | \$693.6 |
| Furniture \& Equipment | \$3,112.2 | \$3,122.1 | \$3,156.4 | \$3,361.7 |
| Vehicles (\# At All Stations \& Divisions) | \$4,994.1 | \$5,090.3 | \$5,215.0 | \$5,245.6 |
| Total (\$000) | \$42,230.4 | \$42,336.5 | \$41,247.7 | \$40,859.6 |
| SERVICE LEVEL (\$/pop \& emp) |  |  |  |  |
| Buildings | \$142.92 | \$142.42 | \$136.62 | \$133.71 |
| Land | \$2.97 | \$2.95 | \$2.94 | \$2.94 |
| Furniture \& Equipment | \$13.30 | \$13.30 | \$13.40 | \$14.24 |
| Vehicles (\# At All Stations \& Divisions) | \$21.35 | \$21.69 | \$22.14 | \$22.22 |
| Total (\$/pop \& emp) | \$180.54 | \$180.36 | \$175.10 | \$173.11 |

[^1]10-Year Funding Envelope Calculation
10 Year Average Service Level (2009-2018)

| 10 Year Average Service Level (2009-2018) | $\$ 175.72$ |
| :--- | ---: |
| Net Population and Employment Growth (2019-2028) | 5,278 |

Maximum Allowable Funding Envelope
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| Project Description | Timing |  | Gross <br> Project Cost | Grants/Subsidies/OtherRecoveries | NetMunicipal Cost | Ineligible Costs |  |  |  | DC Eligible Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Start | Finish |  |  |  | $\begin{gathered} \hline \text { BTE } \\ \% \end{gathered}$ | Replacement \& BTE Shares | $\begin{gathered} 0 \% \\ \text { Reduction } \end{gathered}$ |  | $\begin{gathered} \hline \text { Prior } \\ \text { DCs } \\ \hline \end{gathered}$ | Available DC Reserves | $\begin{gathered} 2019- \\ 2028 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Post } \\ & 2028 \end{aligned}$ |
| 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 | \$ 131,664 |
| Subtotal Buildings, Land \& Furnishings |  |  | \$ 60,000,000 | \$ | \$ 60,000,000 |  | \$ 58,680,000 | \$ | \$ 1,320,000 | \$ | \$ 326,976 | \$ 861,360 | \$ 131,664 |
| TOTAL POLICE SERVICES |  |  | \$ 60,066,104 | \$ | \$ 60,066,104 |  | \$ 58,680,000 | \$ | \$ 1,386,104 | \$ | \$ 326,976 | \$ 927,464 | 131,664 |



HEMSON
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE 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 |  |  |  |  |  |  |  |  |  |  |  |
| - Population Growth in New Units | 962 | 964 | 966 | 697 | 699 | 701 | 703 | 705 | 501 | 504 | 7,402 |
| 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 |  |


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APPENDIX B. 4
TABLE 3
CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
NON-RESIDENTIAL DEVELOPMENT CHARGE

| 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 |  |


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## 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. Service Level \$/pop \& emp \$56.33 |  | 9-2028 | Un |  |  |  |
|  | Development-R | ated Capital Program | Develop | Charge | Develop | Charge |
|  | Total | Net DC Recoverable | \$/capita | \$/sq.ft. | \$/capita | \$/sq.ft. |
|  | \$12,578,035 | \$297,304 | \$30.53 | \$0.04 | \$35 | \$0.05 |


| COMMUNICATION INFRASTRUCTURE AND RELATED ASSETS | \# of Square Feet |  |  |  |  |  |  |  |  |  | $\begin{gathered} \hline \text { UNIT COST } \\ \text { (\$/sq. ft.) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 Commmunications 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 <br> (\$/unit) |
|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |  |
| Communication Infrastructure - Equip. in buildings/towers - 12 Tower Site | 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 |  |


|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Historic Population <br> Historic Employment <br> Total Population \& Employment | $\begin{aligned} & 159,389 \\ & 74,525 \\ & 233,914 \end{aligned}$ | $\begin{aligned} & 159,884 \\ & 74,854 \\ & 234,738 \end{aligned}$ | $\begin{aligned} & 160,380 \\ & 75,185 \\ & 235,565 \end{aligned}$ | $\begin{aligned} & 160,628 \\ & \frac{75,400}{236,028} \end{aligned}$ | $\begin{aligned} & 160,877 \\ & \underline{75,616} \\ & 236,493 \end{aligned}$ | $\begin{aligned} & 161,126 \\ & \underline{75,833} \\ & 236,959 \end{aligned}$ | $\begin{aligned} & 161,375 \\ & \frac{76,050}{237,425} \end{aligned}$ | $\begin{aligned} & 161,625 \\ & \underline{76,268} \\ & 237,893 \end{aligned}$ | $\begin{aligned} & 161,948 \\ & \underline{76,559} \\ & \mathbf{2 3 8 , 5 0 7} \end{aligned}$ | $\begin{aligned} & 162,272 \\ & \underline{76,851} \\ & \mathbf{2 3 9 , 1 2 3} \end{aligned}$ |  |
| 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) |  |  |  |  |  |  |  |  |  |  | Average <br> Service <br> Level |
| Communication Infrastructure And Related Assets | \$1.87 | \$1.86 | \$1.86 | \$1.85 | \$1.85 | \$1.84 | \$1.84 | \$1.84 | \$1.83 | \$1.83 | \$1.85 |
| Equipment | \$54.51 | \$54.32 | \$54.13 | \$54.02 | \$53.92 | \$53.94 | \$53.83 | \$53.73 | \$56.28 | \$56.14 | \$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 | \$56.33 |

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TABLE 2

## CITY OF GREATER SUDBURY DEVELOPMENT-RELATED CAPITAL PROGRAM PUBLIC SAFETY



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| 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 |  |


| $\stackrel{\circ}{\circ} \stackrel{\circ}{\mathrm{N}}$ |  |
| :---: | :---: |
|  |  |


| 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 |  |


|  |  |
| :---: | :---: |
|  |  |

HEMSON

## 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 \$2,147.39 | 2019-2028 <br> Development-Related Capital Program |  | Unadjusted Development Charge |  | Adjusted <br> Development Charge |  |
|  |  |  |  |  |  |  |
|  | Total | Net DC Recoverable | \$/capita | \$/sq.ft. | \$/capita | \$/sq.ft. |
|  | \$15,044,807 | \$3,538,445 | \$478.04 | \$0.00 | \$546 | \$0.00 |

CITY OF GREATER SUDBURY
INVENTRY OF CAPIAL ASSETS
PARKS AND RECREATION
PARKS BUILDINGS


|  |  | $\begin{array}{\|l\|} \hline \stackrel{\sim}{\omega} \\ \underset{\sim}{c} \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \underset{\sim}{\sim} \\ \hline \end{array}$ | $\begin{aligned} & \overline{\bar{y}} \\ & \stackrel{y}{\dot{\sigma}} \end{aligned}$ | $\begin{aligned} & \stackrel{\sim}{\sim} \\ & \stackrel{y}{*} \end{aligned}$ |  | $$ | $\stackrel{\text { Nos }}{\text { is }}$ | $\begin{array}{\|c\|} \hline \stackrel{O}{i} \\ \dot{\theta} \end{array}$ | $\begin{array}{\|l\|} \hline \stackrel{O}{i} \\ \stackrel{y}{*} \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \frac{\mathrm{O}}{\mathrm{~s}} \\ \hline \end{array}$ | $\frac{\mathrm{O}}{\mathrm{i}}$ | $\left\lvert\, \begin{array}{\|c\|} \hline \frac{g}{\dot{\theta}} \\ \hline \end{array}\right.$ | 冎 | \％ | $$ | $\underset{\sim}{N}$ | $\begin{aligned} & \mathbb{\infty} \\ & \underset{\sim}{\circ} \\ & \hline \end{aligned}$ | $$ | $\stackrel{\stackrel{\sim}{\oplus}}{\substack{2}}$ | $\begin{array}{\|l\|} \hline \underset{\sim}{*} \\ \hline \end{array}$ | $\stackrel{\mathscr{O}}{\circ}$ | $\left. \right\rvert\,$ | $\begin{array}{\|c\|c} \hline \stackrel{N}{6} \\ \hline \end{array}$ | $\left\|\begin{array}{l} \stackrel{\leftrightarrow}{0} \\ \stackrel{\leftrightarrow}{6} \end{array}\right\|$ | $$ | 邑 | \％ | \％ | \％ | $\begin{array}{\|l\|} \hline 8 \\ \hline ⿱ ⿴ 囗 ⿰ 丨 丨 ⿱ 口 ⿰ 口 口 寸 ~ \end{array}$ | 呺 | $\stackrel{8}{8}$ | $\stackrel{N}{\mathcal{N}}$ | $\begin{aligned} & \infty \\ & \frac{\infty}{i n} \\ & \stackrel{n}{6} \end{aligned}$ |  | $\frac{\leftrightarrow}{\infty}$ |  | $\begin{array}{\|l\|} \hline \infty \\ \stackrel{\sim}{\infty} \end{array}$ | $\stackrel{\circ}{i}$ | $\frac{\pi}{i}$ |  | $\dot{\theta}$ | $$ | \％ | $\begin{aligned} & \hline 8 \\ & \hline i \\ & \hline \end{aligned}$ | $\stackrel{\infty}{\square}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\stackrel{\infty}{\infty}$ |  | $\frac{\stackrel{n}{N}}{\underset{N}{2}}$ | $\stackrel{\circ}{\square}$ |  | $\stackrel{\circ}{\circ}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{7} \\ & \end{aligned}$ | N | ํ | \％ | $\stackrel{\sim}{\square}$ | 뭉 | $\ddot{\circ}$ | $$ | 答 | \％－ | $\begin{aligned} & \mathbb{N} \\ & \stackrel{\sim}{\sim} \end{aligned}$ | $\stackrel{\stackrel{\circ}{\underset{\sim}{\circ}}}{\sim}$ | $\stackrel{\sim}{\sim}$ | $\stackrel{\stackrel{e}{c}}{\stackrel{e}{=}}$ | ， | $\stackrel{\circ}{\circ}$ | 안 | $\begin{aligned} & \hline \stackrel{\circ}{\mathrm{o}} \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|} \hline \underset{\sim}{\infty} \\ \stackrel{\sim}{\sim} \end{array}$ | $$ | \％ | $\begin{aligned} & \bar{m} \\ & \stackrel{N}{\sim} \end{aligned}$ | $\begin{gathered} \stackrel{\circ}{\mathrm{O}} \\ \underset{\sim}{2} \end{gathered}$ | $\stackrel{\circ}{\mathrm{N}}$ | $\begin{array}{\|c\|} \hline \stackrel{e}{m} \\ \stackrel{y}{*} \end{array}$ | 8 | ， | $\stackrel{\hat{H}}{\underset{\sim}{r}}$ | $\begin{aligned} & \stackrel{0}{\circ} \\ & \stackrel{0}{r} \\ & \hline \end{aligned}$ | $\mathfrak{6}$ | $\bar{\infty}$ | $\stackrel{\infty}{\stackrel{\circ}{\sim}}$ | $\begin{aligned} & \stackrel{n}{2} \\ & \stackrel{2}{2} \end{aligned}$ | $\stackrel{\circ}{\circ}$ | 은 | 8 |  | $\begin{array}{\|c} \stackrel{\otimes}{\mathrm{O}} \\ \underset{\mathrm{~m}}{2} \end{array}$ | \％ | \％ | $\stackrel{\text { ¢ }}{\text { ¢ }}$ |
|  | $\stackrel{ }{ }$ |  | $\stackrel{\stackrel{N}{N}}{\underset{N}{2}}$ | $\frac{0}{7}$ |  | $\circ$ | $\stackrel{\circ}{\stackrel{\circ}{7}} \underset{\sim}{r}$ | \％ | ํㅜํ | $\stackrel{\sim}{\square}$ | $\stackrel{\sim}{\square}$ | $\stackrel{\sim}{\square}$ | ® | $$ | ハّN入入 | － | $\begin{aligned} & \mathbb{N} \\ & \stackrel{\sim}{N} \end{aligned}$ | $\stackrel{\stackrel{\otimes}{\underset{\sim}{c}}}{\sim}$ | $\stackrel{\sim}{\sim}$ | $\stackrel{\text { n}}{\stackrel{6}{7}}$ | ， | $\stackrel{\circ}{-}$ | 导 | $\begin{array}{\|l\|} \hline \stackrel{O}{0} \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \stackrel{\infty}{N} \\ \stackrel{y}{*} \\ \hline \end{array}$ | $\text { \| } \overline{\hat{\circ}}$ | \％ | $\begin{aligned} & \bar{m} \\ & \underset{\sim}{\sim} \end{aligned}$ | $\begin{gathered} \stackrel{\sim}{\mathrm{O}} \\ \underset{\sim}{2} \end{gathered}$ | $\stackrel{\stackrel{\circ}{\mathrm{o}}}{ }$ | $\begin{array}{\|l\|} \hline \stackrel{\rightharpoonup}{0} \\ \stackrel{O}{-} \end{array}$ | \％ | ， | $\stackrel{\hat{H}}{\underset{r}{r}}$ | $\stackrel{\stackrel{0}{0}}{\stackrel{\circ}{\tau}}$ | $\mathfrak{6}$ | $\stackrel{\rightharpoonup}{\infty}$ | $\stackrel{\infty}{\stackrel{\infty}{\sim}}$ | $\begin{aligned} & \stackrel{n}{2} \\ & \underset{\sim}{2} \end{aligned}$ | $\because$ | 은 | O | $\underset{\sim}{\infty}$ |  | \％ | \％ | $\stackrel{\text { ¢ }}{\sim}$ |
|  | $\bigcirc$ |  | $\frac{\otimes}{\underset{\sim}{n}}$ | $\stackrel{\circ}{7}$ |  | 毋 | $\begin{aligned} & \stackrel{0}{\mathrm{~m}} \\ & \underset{\sim}{r} \end{aligned}$ | 끄ํ | ํ | $\stackrel{\sim}{\circ}$ | 응 | $\stackrel{\text { ® }}{\sim}$ | \＆ | $\stackrel{\infty}{\stackrel{\infty}{N}}$ | \％ | $\stackrel{\square}{\circ}$ | $\begin{aligned} & \mathscr{O} \\ & \underset{\sim}{0} \end{aligned}$ |  | $\stackrel{\sim}{\sim}$ | $\stackrel{\tilde{e}}{\stackrel{e}{=}}$ | $\frac{n}{\infty}$ | $\stackrel{\circ}{\circ}$ | 㗭 | $\begin{array}{\|l\|} \hline \stackrel{\rightharpoonup}{\circ} \\ \underset{子}{ } \end{array}$ | $\begin{array}{\|c\|} \hline \underset{\sim}{\infty} \\ \stackrel{\sim}{\sim} \end{array}$ |  | － | $\begin{aligned} & \bar{m} \\ & \end{aligned}$ | $\begin{array}{\|c\|c} \stackrel{\sim}{\mathrm{O}} \\ \hline \end{array}$ | $\stackrel{\circ}{\sim}$ | $\left.\begin{aligned} & \stackrel{\rightharpoonup}{m} \\ & \stackrel{m}{\sim} \end{aligned} \right\rvert\,$ | 8 | ， | $\stackrel{y}{\underset{f}{f}}$ | $\stackrel{0}{\sigma}$ | $\check{6}$ | $\stackrel{\sim}{\infty}$ | $\stackrel{\infty}{\circ}$ | $\stackrel{\varrho}{\stackrel{\circ}{\wedge}}$ | $\stackrel{\square}{\circ}$ | $\circ$ | O | $\underset{\sim}{\circ}$ | $\underset{\substack{\circ \\ \hline \\ \hline}}{\substack{0}}$ | \％ | \％ | $\stackrel{\text { ¢ }}{\sim}$ |
|  |  |  | $\stackrel{\stackrel{9}{N}}{\underset{\sim}{2}}$ | $\stackrel{\circ}{7}$ |  |  |  | $\stackrel{\sim}{\square}$ | 응 | \％ | \％ | $\stackrel{\text { N}}{\sim}$ | ®\％ | $\stackrel{\infty}{\sim}$ | \％ | － | $\stackrel{\infty}{\infty}$ | $\stackrel{\underset{\sim}{\underset{\sim}{c}}}{\sim}$ | $\stackrel{\sim}{\sim}$ | $\stackrel{e_{2}^{\prime}}{=}$ | $\frac{\stackrel{n}{\infty}}{\infty}$ | $\stackrel{\circ}{-}$ | \％ | $\begin{aligned} & 8 \\ & \hline 0 \\ & \dot{q} \end{aligned}$ | $\stackrel{\stackrel{\infty}{\stackrel{\infty}{\sim}}}{\stackrel{\sim}{\sim}} \mid$ |  | $\stackrel{\text { \％}}{\sim}$ | $\begin{aligned} & \bar{m} \\ & \stackrel{m}{\sim} \end{aligned}$ | $\mid \stackrel{\leftrightarrow}{\mathrm{O}} \underset{\sim}{\mathrm{~N}}$ | $\stackrel{\stackrel{\circ}{\sim}}{\sim}$ | $\left.\begin{array}{\|c} \stackrel{\rightharpoonup}{m} \\ \stackrel{\sim}{r} \end{array} \right\rvert\,$ | $\infty$ | ， | $\stackrel{\hat{f}}{\underset{\sim}{2}}$ | $\stackrel{\mathscr{O}}{\stackrel{\circ}{-}}$ | ๗ | $\stackrel{\sim}{\infty}$ | $\stackrel{\infty}{\infty}$ | $\stackrel{\substack{2 \\ \underset{~}{2} \\ \hline}}{ }$ | $\because$ | \％ | \％ |  | $\underset{\sim}{\underset{\sim}{0}} \underset{\sim}{\infty}$ | \％ | \％ | $\stackrel{\text { ¢ }}{\text { ¢ }}$ |
|  |  |  | $\frac{\stackrel{R}{N}}{N}$ | $\stackrel{\circ}{7}$ | 8 | \＆ | $\begin{aligned} & 0.0 \\ & \stackrel{\circ}{7} \\ & \end{aligned}$ |  | Oั | \％ | \％ | \％ | \％${ }_{\circ}^{8}$ | $\stackrel{\sim}{\sim}$ | \％ | $\stackrel{\square}{\circ}$ | $\stackrel{\mathscr{O}}{\underset{\sim}{\infty}}$ | $\underset{\sim}{\underset{\sim}{\circ}} \mid$ | $\stackrel{\sim}{\sim}$ | $\stackrel{\circ}{\stackrel{e}{2}} \underset{=}{\square}$ | $\frac{n}{\infty}$ | $\stackrel{\circ}{\circ}$ | 안 | $$ | $\begin{array}{\|c\|c\|c\|c\|c\|} \stackrel{\infty}{\sim} \\ \sim \end{array}$ |  | $\stackrel{\sim}{\sim}$ | $\begin{aligned} & \bar{m} \\ & \stackrel{N}{\sim} \end{aligned}$ | $\begin{gathered} \stackrel{\leftrightarrow}{\mathrm{O}} \\ \underset{\sim}{2} \end{gathered}$ | $\stackrel{\circ}{\sim}$ | $\begin{array}{\|c\|} \stackrel{\rightharpoonup}{m} \\ \underset{\sim}{2} \end{array}$ | $\infty$ |  | $\stackrel{\hat{f}}{\stackrel{y}{2}}$ | $\stackrel{\mathscr{O}}{\stackrel{\circ}{\square}}$ | $\mathfrak{¢}$ | $\stackrel{\sim}{\infty}$ | $\stackrel{\infty}{\stackrel{\circ}{\sim}}$ | $\stackrel{\curvearrowleft}{\stackrel{n}{2}}$ | $\stackrel{\circ}{\circ}$ | 앙 | \％ |  |  | 8 | \％ | － |
| $\begin{aligned} & \stackrel{\circ}{0} \\ & \# \end{aligned}$ | $\stackrel{m}{0}$ |  | $\frac{\stackrel{R}{N}}{\stackrel{2}{\sim}}$ | $\frac{0}{7}$ |  | $\bigcirc$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{\circ}{7}} \\ & \hline \end{aligned}$ |  | ํ． | ㄲ | \％ | $\stackrel{\sim}{\square}$ | \％ | $\stackrel{\infty}{\sim}$ | ก |  |  | $\underset{\sim}{\underset{\sim}{\underset{\sim}{2}}}$ |  |  |  | $\stackrel{8}{-}$ | 안 |  |  | 啇 | $\stackrel{\sim}{\sim}$ | $\begin{aligned} & \bar{m} \\ & \stackrel{N}{\sim} \end{aligned}$ | $\begin{array}{\|c\|c} \stackrel{\sim}{\mathrm{N}} \\ \hline \end{array}$ | $\stackrel{\circ}{\text { ® }}$ | $\begin{array}{\|l\|} \hline \begin{array}{c} \mathbf{o} \\ \stackrel{\rightharpoonup}{c} \\ \hline \end{array} \\ \hline \end{array}$ | $\infty$ |  | $\begin{aligned} & \stackrel{\rightharpoonup}{\underset{\sim}{2}} \end{aligned}$ | $\begin{aligned} & \stackrel{e}{\circ} \\ & \stackrel{\circ}{7} \\ & \hline \end{aligned}$ | ¢ | $\stackrel{\infty}{\infty}$ | $\begin{aligned} & \stackrel{\infty}{0} \\ & \stackrel{N}{\sim} \end{aligned}$ | $\begin{aligned} & \stackrel{n}{k} \\ & \stackrel{2}{2} \end{aligned}$ | $\stackrel{\square}{\circ}$ | $\bigcirc$ |  |  | $\underset{\substack{\circ \\ \hline \\ \hline}}{\substack{2}}$ | 8 | 8 | $\stackrel{\text { ¢ }}{\text { ¢ }}$ |



| ~ | $\begin{aligned} & \infty \\ & \stackrel{\infty}{\sim} \\ & \stackrel{2}{2} \end{aligned}$ | $\stackrel{ }{\stackrel{\circ}{7}}$ | $\begin{aligned} & \mathrm{N} \\ & \mathrm{~N} \\ & \mathrm{~N} \end{aligned}$ | N | $\begin{aligned} & \stackrel{N}{N} \\ & \underset{N}{2} \end{aligned}$ | $\begin{aligned} & \mathrm{G} \\ & \underset{\sim}{\mathrm{G}} \end{aligned}$ | $\begin{gathered} \stackrel{N}{N} \\ \sim \\ \sim \end{gathered}$ | \& | $\stackrel{\circ}{\circ}$ | $\%$ | $\underset{\sim}{\mathrm{N}}$ | $\bigcirc$ | $\begin{aligned} & \stackrel{L}{6} \\ & \stackrel{1}{N} \end{aligned}$ | $\underset{\sim}{\underset{j}{j}}$ | $\begin{aligned} & \stackrel{\circ}{4} \\ & \stackrel{2}{2} \end{aligned}$ | 은 | $\begin{aligned} & \text { N} \\ & \stackrel{\circ}{\sim} \end{aligned}$ | !eg | $\stackrel{\text { N }}{\sim}$ | $\stackrel{\infty}{\circ}$ | $\begin{array}{\|c} \underset{\sim}{9} \\ \text { in } \end{array}$ | $$ | $\begin{aligned} & \hline \stackrel{0}{\lambda} \\ & \stackrel{\rightharpoonup}{N} \end{aligned}$ | \% | \& | $\stackrel{\infty}{\stackrel{\pi}{i}}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{y}{2} \end{aligned}$ | $\begin{aligned} & \mathrm{N} \\ & \stackrel{\rightharpoonup}{N} \end{aligned}$ | ¢ | ৪্লি | $\stackrel{\circ}{\stackrel{\circ}{F}}$ | ¢ | $\begin{aligned} & 8 \\ & \stackrel{8}{7} \\ & \hline \end{aligned}$ | io | $\begin{gathered} \stackrel{N}{8} \\ \underset{\sim}{2} \end{gathered}$ | $\begin{array}{\|c} \stackrel{\sim}{\sim} \\ \stackrel{\sim}{2} \end{array}$ | $\stackrel{\circ}{\circ}$ | $\stackrel{N}{\stackrel{N}{N}}$ | $\begin{array}{\|c} \stackrel{N}{N} \\ i 5 \end{array}$ | ¢ | 안 | N్ల | $\bigcirc$ | ¢ | $\begin{aligned} & \hline \underset{8}{8} \\ & \stackrel{y}{*} \end{aligned}$ | $\begin{aligned} & \frac{0}{5} \\ & \stackrel{7}{7} \end{aligned}$ | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \infty \\ & \stackrel{\infty}{\sim} \\ & \stackrel{2}{2} \end{aligned}$ | $\stackrel{0}{\circ}$ | $\begin{aligned} & \mathrm{N} \\ & \mathrm{~N} \\ & \mathrm{~N} \end{aligned}$ | N | $\begin{aligned} & \stackrel{\text { N }}{N} \\ & \underset{N}{2} \end{aligned}$ | $\begin{aligned} & \underset{G}{G} \\ & \underset{\sim}{c} \end{aligned}$ | $\begin{gathered} \stackrel{\sim}{n} \\ \stackrel{\sim}{\sim} \end{gathered}$ | \& | $\%$ | $8$ | $\stackrel{\stackrel{\rightharpoonup}{\mathrm{m}}}{-}$ | $\bigcirc$ | $\begin{aligned} & \mathrm{N} \\ & \stackrel{N}{\mathrm{~N}} \\ & \mathrm{~N} \end{aligned}$ | $\stackrel{\tau}{\underset{j}{j}}$ | $\begin{aligned} & \stackrel{0}{4} \\ & \stackrel{y}{2} \\ & \hline \end{aligned}$ | 읃 | $\begin{aligned} & \text { N} \\ & \stackrel{\text { N}}{\sim} \end{aligned}$ | !్ల | $\stackrel{\text { N}}{\sim}$ | $\stackrel{\infty}{\sim}$ | $\begin{gathered} \text { O} \\ \text { in } \end{gathered}$ | $$ | $\begin{aligned} & \stackrel{\circ}{\lambda} \\ & \underset{N}{\prime} \end{aligned}$ | ¢ | 8 | $\frac{\infty}{\dot{i}}$ | $\begin{array}{\|l} \hline 0 \\ \hline 0 \\ \hline \end{array}$ | $\begin{aligned} & \pm \\ & \stackrel{t}{n} \\ & i \end{aligned}$ | 8 | ৪্লি | $\stackrel{\circ}{\underset{\sim}{7}}$ | \& | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \hline \end{aligned}$ | ! | $\begin{aligned} & \underset{\sim}{e} \\ & \underset{\sim}{2} \end{aligned}$ | $\stackrel{\stackrel{\sim}{\sim}}{\stackrel{\sim}{\sim}}$ | 은 | $\underset{\underset{\sim}{N}}{\underset{\sim}{2}}$ | $\begin{array}{\|c} \hat{N} \\ \text { in } \end{array}$ | \% | 운 | $\underset{\sim}{N}$ | $\infty$ | ¢ | $\begin{aligned} & \pm \\ & 0 \\ & \underset{\sim}{2} \end{aligned}$ | $\frac{10}{5}$ | \% |


V.L.A. Playground Fieldhouse
V.L.A. Playground Storage Shed

|  | $\begin{array}{\|l\|} \hline \stackrel{y}{0} \\ \stackrel{\circ}{\circ} \\ \hline \end{array}$ | \％ | $\begin{array}{\|l\|} \hline \stackrel{\circ}{\circ} \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \frac{N}{i} \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline \stackrel{\sim}{\infty} \\ \hline \end{array}$ | $\begin{aligned} & \hline \stackrel{\sim}{\sim} \\ & \hline \end{aligned}$ | $$ | $\begin{array}{\|c\|} \hline \stackrel{\rightharpoonup}{\circ} \\ \hline \end{array}$ | $\stackrel{\square}{6}$ | 岗 | $0 \begin{aligned} & 80 \\ & 0 \\ & \hline \end{aligned}$ | － | 尔 | 玺 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |



## HEMSON

| SPECIAL FACILITIES CONT'D | \# of Square Feet |  |  |  |  |  |  |  |  |  | UNIT COST <br> (\$/sq. ft.) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |  |
| Dowling 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 |
| Fielding Memorial Park | 2,582 | 2,582 | 2,582 | 2,582 | 2,582 | 2,582 | 2,582 | 2,582 | 2,582 | 2,582 | \$363 |
| Fielding 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 |
| Millenium 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 Fields - 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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CITY OF GR
INVENTORY OF CAPITAL ASSET
PARKS AND RECREATION

| \# of Equipment |  |  |  |  |  |  |  | UNIT COST <br> (\$/unit) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |  |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$14,154 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | , | 1 | 1 | 1 | 1 | \$18,976 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$45,023 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$47,605 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$16,789 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$15,919 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$64,170 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$16,042 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$54,584 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$26,555 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$41,988 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$9,961 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$64,170 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$16,546 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| , | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$71,609 |
| - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$13,587 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$64,170 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$10,467 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$17,956 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$16,042 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$124,305 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$125,272 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$25,339 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$64,170 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$26,555 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$16,874 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$18,035 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$12,531 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$48,740 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$64,170 |
| HEM |  |  |  |  |  |  |  |  |

CITY OF GREATER SUDBURY
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK AND PLAYGROUND EQUIPMENT CONT'D
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APPENDIX B. 6
TABLE 1

| PARK AND PLAYGROUND EQUIPMENT CONT'D | \# of Equipment |  |  |  |  |  |  |  |  |  | UNIT COST <br> (\$/unit) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |  |
| Memorial Park Playground | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$21,876 |
| Metcalfe Park | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$16,042 |
| Minnow Lake Dog Park | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$85,411 |
| Mountainview Playground Park | 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 | \$42,781 |
| Onaping Community Centre Park Tot Lot | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$24,612 |
| Oriole Playground | 1 | 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 | \$42,781 |
| Parkinson Park Tot Lot | 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 | \$42,781 |
| Penman Park | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$26,633 |
| Percy Playground | 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 | \$42,781 |
| Pinecrest Tot Lot | 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 | \$33,934 |
| Quinn Logan Tot Lot | 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 | \$42,781 |
| Ravine Park | 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 | \$17,936 |
| Rick Mcdonald Complex Park - Seniors Park | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | \$72,998 |
| Ridgecrest Playground | 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 | \$42,781 |
| Saturn Park Tot Lot | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| Selkirk Park | 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 | \$42,781 |
| Shirley Tot Lot | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| Silver Birch | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$42,781 |
| Spruce Meadows | 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 | \$64,170 |
| St. Charles School Playground Tot Lot | 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 | \$42,781 |
| St. Onge Tot Lot | 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 | \$16,968 |
| Theresa Playground | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$77,459 |
| Thomas Tot Lot | 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 | \$23,693 |
| Trottier Subdivision Park | 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 | \$37,538 |
| Victor Playground | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$14,367 |
| Wahnapitae Community Club Tot Lot | 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 | \$34,329 |
| Worthington Playground | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$26,313 |
| York Playground | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | \$32,756 |
| Total (\#) | 78 | 82 | 90 | 94 | 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 |  |


|  | $\begin{aligned} & \hat{\otimes} \\ & i \\ & \stackrel{N}{\infty} \\ & \stackrel{y}{*} \end{aligned}$ | $\begin{array}{\|c} \substack{0 \\ N \\ 0 \\ 0 \\ 0 \\ \\ \hline} \end{array}$ |  | $\begin{array}{\|l\|} \hline \bar{\infty} \\ \stackrel{y}{c} \\ \underset{\sim}{心} \end{array}$ | $\circ$ 0 0 0 6 6 |  | $\begin{gathered} \infty \\ \infty \\ \underset{\sim}{\infty} \\ \underset{\sim}{n} \end{gathered}$ | $\stackrel{\circ}{\stackrel{\circ}{-}}$ | $\bar{\infty}$ | $\begin{aligned} & \text { O} \\ & \infty \\ & \infty \\ & \stackrel{\sim}{\infty} \\ & \stackrel{N}{\infty} \end{aligned}$ |  | $\begin{array}{\|c} \underset{\sim}{\infty} \\ \underset{\sim}{\tilde{\omega}} \\ \omega \\ \omega \end{array}$ | $\begin{aligned} & \text { do } \\ & \stackrel{0}{n} \\ & \stackrel{\rightharpoonup}{\infty} \end{aligned}$ | $\begin{array}{\|l} \Gamma_{0} \\ \hat{O}_{0} \end{array}$ |  | - | $\left\lvert\, \frac{\stackrel{i}{0}}{\stackrel{i}{i}}\right.$ |  | $\begin{aligned} & \tilde{N} \\ & \underset{N}{\hat{\infty}} \\ & \stackrel{\omega}{\infty} \end{aligned}$ | $\left\lvert\, \begin{gathered} \infty \\ \\ \\ \infty \\ \vdots \end{gathered}\right.$ | $\begin{aligned} & \text { N } \\ & \text { N} \\ & \text { N. } \\ & \text { N} \end{aligned}$ | - |  | - | O- | -1 | $\begin{aligned} & \bar{\infty} \\ & \sim \\ & \sim \\ & \sim \\ & \end{aligned}$ | 8 |  |  |  |  |  |  |  |  | ¢ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |



| \# of Square Feet |  |  |  |  |  |  |  |  |  | UNIT COST (\$/sq. ft.) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |  |
| 801 | 801 | 801 | 801 | 801 | 801 | 801 | 801 | 801 | 801 | \$96 |
| 1,078 | 1,078 | 1,078 | 1,078 | 1,078 | 1,078 | 1,078 | 1,078 | 1,078 | 1,078 | \$33 |
| 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | \$130 |
| - | - | 183 | 2,196 | 2,196 | 2,196 | 2,196 | 2,196 | 2,196 | 2,196 | \$317 |
| 2,340 | 2,340 | 2,340 | 2,340 | 2,340 | 2,340 | 2,340 | 2,340 | 2,340 | 2,340 | \$132 |
| 1,557 | 1,557 | 1,557 | 1,557 | 1,557 | 1,557 | 1,557 | 1,557 | 1,557 | 1,557 | \$147 |
| 576 | 576 | 576 | 576 | 576 | 576 | 576 | 576 | 576 | 576 | \$53 |
| 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | \$603 |
| 864 | 864 | 864 | 864 | 864 | 864 | 864 | 864 | 864 | 864 | \$116 |
| 64 | 64 | 64 | 64 | 64 | - | - | - | - | - | \$68 |
| 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | \$99 |
| 1,590 | 1,590 | 1,590 | 1,590 | 1,590 | 1,590 | 1,590 | 1,590 | 1,590 | 1,590 | \$153 |
| - | - | - | - | - | 1,700 | 1,700 | 1,700 | 2,180 | 2,180 | \$196 |
| 9,396 | 9,396 | 9,579 | 11,592 | 11,592 | 13,228 | 13,228 | 13,228 | 13,708 | 13,708 |  |
| 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 |  |



|  | $\hat{\hat{N}}$ | - | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | - |  | - | $\checkmark$ | - | ~ |  |  | $\ulcorner$ | , | $\sim$ | $\ulcorner$ | - | $\bigcirc$ | - | - | N | ¢ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\stackrel{\circ}{i}$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | - |  | $\checkmark$ | $\checkmark$ | - | $\sim$ |  | ' | - | , | N | - | - | $\bigcirc$ | - | $\checkmark$ | N | ¢ |
|  | $\stackrel{\leftrightarrow}{i}$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | - |  | - | - | - |  |  | , | $\checkmark$ | , | ~ | - | - | - | - | - | N | ¢ |
|  | $\stackrel{\rightharpoonup}{\dot{\sim}}$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | - |  | - | - | - |  |  | , | $\checkmark$ |  | ~ | - | - | - | - | - | d | ¢ |
|  | $\stackrel{m}{i}$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | - |  | - | - | - |  |  |  | $\checkmark$ |  | N | - | - | $\bigcirc$ | - | $\checkmark$ | N | ¢ |
| $\left\|\begin{array}{l} \vec{z} \\ \stackrel{\rightharpoonup}{u} \\ u \\ 0 \\ \# \end{array}\right\|$ |  | - | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | - | $\checkmark$ | - | - | - |  |  | $\ulcorner$ | $\checkmark$ | - | - | - | - | m | - | - | ก |  |
|  | $\stackrel{\Gamma}{\sim}$ | $\bigcirc$ | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | - | - | - | - | $\ulcorner$ |  |  | $\ulcorner$ | $\checkmark$ | - | - | $\checkmark$ | - | m | - | $\checkmark$ | ก | 0 M N- N- |
|  | $\stackrel{0}{6}$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | - | $\checkmark$ | - | - | $\ulcorner$ |  |  | $\ulcorner$ | $\checkmark$ | - | - | - | $\checkmark$ | m | $\bigcirc$ | $\checkmark$ | ก |  |
|  | O융 | - | - | $\checkmark$ | - | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | - | - |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | - | - | ' | ' | ' |  | $\div$ | $\stackrel{\Gamma}{\dot{\sim}}$ |
|  | : |  | $\checkmark$ | - | - | $\checkmark$ | - | - | - | - | - |  |  | $\ulcorner$ | $\checkmark$ | - | ' | ' | ' | ' | ' |  | + | N |

HEMSON

|  |  | $\begin{array}{l\|l\|l} \hline 0 \\ 0 & 0 \\ 0 & 0 \\ \vdots & 0 \\ \hline \end{array}$ | $\begin{aligned} & \text { o } \\ & \stackrel{y}{m} \\ & \stackrel{\circ}{6} \end{aligned}$ |  | $\begin{array}{\|c\|c} \hline \underset{\sim}{c} \\ \underset{\sim}{e} \\ \hline \end{array}$ | $\begin{aligned} & \hline \AA \\ & \AA \\ & \mathbb{\infty} \\ & \underset{\leftrightarrow}{\prime} \end{aligned}$ | $\begin{array}{\|l} \hline \stackrel{\otimes}{\circ} \\ \stackrel{\circ}{\circ} \\ \underset{\sim}{\circ} \end{array}$ | $$ | $\begin{aligned} & \overline{\stackrel{\circ}{0}} \\ & \stackrel{0}{\circ} \\ & \stackrel{\infty}{\oplus} \end{aligned}$ | $\begin{aligned} & \bar{\circ} \\ & \stackrel{y}{\circ} \\ & \stackrel{y}{*} \end{aligned}$ | $\begin{aligned} & \text { 아N } \\ & \underset{\sim}{\aleph} \\ & \hline \end{aligned}$ |  |  | $$ | $\begin{aligned} & \stackrel{y}{c} \\ & \underset{\sim}{\omega} \\ & \underset{\sim}{\infty} \end{aligned}$ | $\begin{aligned} & \hline \stackrel{\circ}{0} \\ & 0 \\ & \sigma \\ & \sigma \end{aligned}$ | $\begin{array}{\|c\|} \hline \stackrel{8}{0} \\ 0 \\ \vdots \\ \hline \dot{\leftrightarrow} \end{array}$ | N <br>  <br>  | $\begin{array}{\|l\|} \hline \begin{array}{l} \mathrm{o} \\ \stackrel{y}{*} \\ \stackrel{\rightharpoonup}{*} \\ \hline \end{array} \\ \hline \end{array}$ | $\circ$ <br> $\stackrel{\circ}{6}$ <br>  <br>  |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & \infty \\ & \vdots \\ & \hline \infty \end{aligned}$ | $\begin{aligned} & \text { N} \\ & \text { On } \\ & \text { N } \\ & \text { N } \end{aligned}$ | $$ |  | $\begin{aligned} & 0 \\ & \hline \\ & 0 \\ & 0 \\ & \end{aligned}$ | $\begin{aligned} & \hline \stackrel{0}{0} \\ & \stackrel{0}{\infty} \\ & \dot{\sim} \end{aligned}$ |  |  | $\begin{array}{\|c\|} \hline \infty \\ 0 \\ \stackrel{\omega}{\infty} \\ \dot{\sigma} \\ \hline \end{array}$ |  | N |  | $\begin{aligned} & \hline \bar{\delta} \\ & \stackrel{\rightharpoonup}{\circ} \\ & \stackrel{\circ}{\circ} \end{aligned}$ |  | $\begin{aligned} & \text { N} \\ & 0 \\ & \text { N } \\ & \text { N } \end{aligned}$ | $$ | $$ | O <br>  <br>  <br>  |  | $\begin{aligned} & \hline 0 \\ & \infty \\ & \infty \\ & \end{aligned}$ | $\stackrel{\circ}{\circ}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| \＃of Fleet and Equipment |  |  |  |  |  | UNIT COST <br> （\＄／unit） |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |  |
| 1 | 6 | 6 | 6 | 6 | 6 | \＄16，356 |
| 2 | 2 | 2 | 2 | 2 | 2 | \＄15，120 |
| 75 | 75 | 75 | 75 | 75 | 75 | \＄540 |
| 12 | 12 | 12 | 12 | 12 | 12 | \＄594 |
| 2 | 2 | 2 | 2 | 2 | 2 | \＄10，800 |
| 2 | 2 | 2 | 2 | 2 | 2 | \＄6，480 |
| 6 | 6 | 6 | 6 | 6 | 6 | \＄1，080 |
| 9 | 9 | 9 | 9 | 9 | 9 | \＄1，620 |
| 3 | 3 | 3 | 3 | 3 | 3 | \＄15，120 |
| 2，394 | 2，411 | 2，412 | 2，413 | 2，412 | 2，413 |  |
| \＄10，263．7 | \＄11，075．8 | \＄11，075．8 | \＄11，075．8 | \＄11，037．2 | \＄11，037．2 |  | \＃of Square Feet UNIT COST


| $\stackrel{\infty}{\stackrel{\infty}{2}}$ | $\begin{aligned} & \bar{e} \\ & \stackrel{\sim}{0} \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|} \hline \stackrel{y}{n} \\ \underset{\sim}{2} \end{array}$ | $\begin{aligned} & \stackrel{N}{f} \\ & \underset{G}{2} \end{aligned}$ | $\begin{array}{\|l\|l} \hline 8 \\ \underset{\sim}{0} \\ \underset{\sim}{2} \end{array}$ |  | $\left.\begin{array}{\|l\|} \hline \stackrel{\circ}{n} \\ \stackrel{0}{0} \end{array} \right\rvert\,$ | $\begin{array}{\|c\|} \hline 8 \\ \hline 0.0 \\ \underset{\sim}{0} \end{array}$ | $\underset{\sim}{\text { İN }}$ |  |  | $\begin{array}{\|c\|} \hline 0 \\ \hline 0 \\ 0 \\ \vdots \end{array}$ | $\left.\begin{array}{\|l\|} \hline \stackrel{8}{\circ} \\ \stackrel{\sim}{0} \end{array} \right\rvert\,$ | $\begin{aligned} & \text { on } \\ & \tilde{\sim} \end{aligned}$ | $\begin{array}{\|l\|} \hline \stackrel{R}{\mathrm{~N}} \\ \mathrm{~m} \\ \hline \end{array}$ | $\begin{aligned} & \stackrel{\circ}{\otimes} \\ & \underset{y}{c} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{2} \\ & \ddagger \end{aligned}$ | $\begin{aligned} & \hat{\omega} \\ & \dot{\omega} \\ & \bar{i} \end{aligned}$ |  |  | $$ | $\begin{array}{\|c} \stackrel{\otimes}{0} \\ \underset{\sim}{\infty} \\ \hline \end{array}$ | $\begin{array}{\|l\|l} \hline 0 \\ \stackrel{y y y}{*} \\ \stackrel{y}{*} \end{array}$ | $\begin{array}{\|l\|} \hline 8 \\ \infty \\ \infty \end{array}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{\rightharpoonup}{2}} \\ & \stackrel{\sim}{6} \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{0}{2} \\ & \end{aligned}$ | $\begin{array}{\|l\|} \hline 0 \\ \infty \\ \infty \\ \infty \end{array}$ | $\begin{gathered} \stackrel{8}{8} \\ \underset{c}{c} \\ \underset{m}{2} \end{gathered}$ |  | － |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\hat{\sim}}{\stackrel{1}{2}}$ | $\left.\begin{aligned} & \dot{e} \\ & \stackrel{\sim}{0} \end{aligned} \right\rvert\,$ | $\begin{gathered} \stackrel{\Gamma}{n} \\ \underset{\sim}{0} \\ \underset{\sim}{2} \end{gathered}$ | $\begin{aligned} & \stackrel{N}{7} \\ & \underset{寸}{\prime} \end{aligned}$ | $\begin{array}{\|c\|} \hline \ddot{\sim} \\ \tilde{\sim} \\ \underset{\sim}{2} \end{array}$ | $\begin{array}{\|l\|l} \hline \stackrel{0}{0} \\ \vdots \\ \hline \end{array}$ | $\begin{array}{\|c\|c} \substack{0 \\ e \\ e \\ \hline} \end{array}$ | $\begin{aligned} & 8 \\ & \hline 8 \\ & \hline 0 \\ & \hline \end{aligned}$ |  |  | $\stackrel{a}{i}$ | $\begin{array}{\|c} \hline 0.0 \\ 0 . \\ \vdots \end{array}$ | $\left.\begin{array}{\|l\|} \hline 8 \\ \stackrel{8}{\sim} \\ \underset{\sim}{\circ} \end{array} \right\rvert\,$ | $\begin{array}{\|c} \substack{0 \\ \tilde{\sim} \\ \hline} \end{array}$ | $\begin{array}{\|l\|l\|l\|l\|} \stackrel{o}{n} \\ \stackrel{m}{m} \end{array}$ | $\begin{gathered} \stackrel{\circ}{\otimes} \\ \text { g } \end{gathered}$ | $\begin{aligned} & \hline \stackrel{\circ}{8} \\ & \underset{\sim}{2} \end{aligned}$ | $\stackrel{\substack{\infty \\ i \\ i}}{ }$ | $\underset{\sim}{\mathscr{m}}$ |  | $\stackrel{\sim}{\sim}$ | $\begin{aligned} & \underset{\sim}{\otimes} \\ & \underset{\sim}{\infty} \\ & \hline \end{aligned}$ |  | $\begin{array}{\|c\|c} \stackrel{8}{\infty} \\ \infty \end{array}$ | $\begin{aligned} & \stackrel{\circ}{2} \\ & \stackrel{y}{m} \end{aligned}$ | $\begin{aligned} & \stackrel{0}{2} \\ & \stackrel{y}{m} \\ & \stackrel{m}{0} \end{aligned}$ | $\left.\begin{array}{\|l\|l\|} \hline 0.0 \\ \infty \\ \infty \end{array} \right\rvert\,$ | $\begin{gathered} \stackrel{8}{8} \\ \stackrel{y}{m} \\ \hline \end{gathered}$ |  | ＂ |
| $\stackrel{\circ}{\circ}$ | $\begin{aligned} & \bar{e} \\ & \stackrel{\rightharpoonup}{0} \\ & \hline \end{aligned}$ | $\begin{aligned} & \stackrel{\Gamma}{5} \\ & \underset{\sim}{\circ} \end{aligned}$ | $\begin{aligned} & \stackrel{N}{f} \\ & \underset{G}{\prime} \end{aligned}$ | $\left\|\begin{array}{c} \circ \\ \hline \\ 0 \\ \sim \end{array}\right\|$ | $\begin{array}{\|c} \hline 0 \stackrel{0}{N} \\ \dot{q} \end{array}$ | $\begin{array}{\|l\|} \hline \stackrel{\circ}{n} \\ \stackrel{e}{6} \\ \hline \end{array}$ | $\begin{aligned} & \substack{8 \\ \hline 0 \\ \hline 0 \\ \hline} \end{aligned}$ | $\infty$ | 프 | $\begin{aligned} & \bar{\otimes} \\ & \stackrel{\otimes}{\star} \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ | $\stackrel{\circ}{\circ}$ | $\left.\begin{array}{\|l\|} \hline 0 \\ \stackrel{\circ}{\infty} \\ \underset{\sim}{\circ} \end{array} \right\rvert\,$ | $\begin{array}{\|c} \hline 0 \\ \underset{\sim}{\tilde{j}} \end{array}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{R}} \\ & \stackrel{y}{c} \\ & \hline \end{aligned}$ | $\begin{gathered} \stackrel{\otimes}{\otimes} \\ \underset{y}{j} \end{gathered}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \ddagger \end{aligned}$ | $\begin{aligned} & \hat{\omega} \\ & i=1 \\ & \overline{i n} \end{aligned}$ | $\begin{aligned} & \underset{\sim}{\infty} \\ & \underset{\sim}{\infty} \end{aligned}$ | $\begin{aligned} & \text { 桷 } \\ & \stackrel{0}{\mathrm{~F}} \end{aligned}$ |  | $\begin{array}{\|c} \stackrel{\otimes}{0} \\ \underset{\sim}{\infty} \\ \hline \end{array}$ | $\begin{aligned} & 0 \\ & \hline 0 \\ & \stackrel{y}{c} \\ & \end{aligned}$ | $\begin{array}{\|c\|} \hline 0 \\ \infty \\ \infty \end{array}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{\rightharpoonup}{2}} \\ & \stackrel{\sim}{6} \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{2}}$ | $\begin{aligned} & \stackrel{\ddot{0}}{\infty} \\ & \infty \\ & \infty \end{aligned}$ | $\begin{gathered} \stackrel{8}{8} \\ \underset{\sim}{m} \\ \hline \end{gathered}$ |  | － |
| $\stackrel{n}{n}$ | $\begin{aligned} & \bar{e} \\ & \stackrel{\rightharpoonup}{0} \\ & \underset{\sim}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\Gamma}{5} \\ & \underset{\sim}{\circ} \end{aligned}$ | $\stackrel{\stackrel{N}{f}}{\underset{\sim}{f}}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} 8 \\ \underset{\sim}{2} \end{array} \\ \hline \end{array}$ |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0.5 \end{aligned}$ | $\begin{array}{\|c\|c\|} \hline 8 \\ \hline 0 \\ \hline \mathbf{e} \end{array}$ | $\AA$ | $\stackrel{\rightharpoonup}{\otimes}$ | $\stackrel{\infty}{\Xi}$ | $\left.\begin{array}{\|l\|} \hline 0 . \\ 0 \\ 0 \\ \end{array} \right\rvert\,$ | $\left.\begin{array}{\|c} \stackrel{8}{8} \\ \underset{\sim}{\infty} \end{array} \right\rvert\,$ | $\begin{array}{\|c} \hline 0 \\ \\ \end{array}$ | $\begin{array}{\|l\|l\|} \hline \stackrel{R}{\mathrm{~N}} \\ \end{array}$ | $\begin{array}{\|c} \hline \stackrel{\otimes}{\infty} \\ \text { g } \end{array}$ | $\begin{array}{\|l\|l} \hline \otimes \\ \stackrel{8}{\mp} \end{array}$ | $\begin{aligned} & \hat{\infty} \\ & \stackrel{\infty}{5} \\ & \stackrel{y}{5} \end{aligned}$ | $\begin{aligned} & \tilde{m} \\ & \underset{\sim}{n} \end{aligned}$ | $\begin{aligned} & \stackrel{⿳}{6} \\ & \stackrel{4}{F} \end{aligned}$ | $\frac{N}{\dot{j}}$ | $$ | $\begin{array}{\|c\|c} \substack{0 \\ ~ \\ \stackrel{y}{c} \\ \hline} \end{array}$ | $\begin{array}{\|c\|} \hline \stackrel{y}{\infty} \\ \infty \end{array}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{\rightharpoonup}{2}} \\ & \stackrel{\sim}{m} \end{aligned}$ | $\begin{array}{\|l\|} \hline 0 \\ \stackrel{0}{m} \\ e m \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 0 \\ \infty \\ \infty \\ \infty \end{array}$ | $\begin{array}{\|c\|c} \stackrel{\circ}{8} \\ \stackrel{m}{2} \end{array}$ |  | － |
| ฝे |  | $\begin{aligned} & \stackrel{\Gamma}{5} \\ & \underset{\sim}{8} \end{aligned}$ | $\begin{aligned} & \stackrel{N}{7} \\ & \underset{\sim}{4} \end{aligned}$ | $\left\lvert\, \begin{gathered} \circ \\ \hline 0 \\ \underset{\sim}{\circ} \\ \hline \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} 0 \\ \underset{\sim}{o} \\ \dot{g} \end{gathered}\right.$ | $\left\|\begin{array}{l} \substack{0 \\ e \\ e \\ \hline} \end{array}\right\|$ |  | $\%$ |  | $\begin{aligned} & \widehat{\otimes} \\ & \stackrel{\rightharpoonup}{i} \end{aligned}$ | $\begin{array}{\|c} \hline 0.0 \\ 0 \\ 0 \\ \vdots \end{array}$ | $\left.\begin{array}{\|l\|} \hline 8 \\ \stackrel{8}{\circ} \\ \underset{\sim}{*} \end{array} \right\rvert\,$ | $\begin{aligned} & 0 \\ & \underset{\sim}{N} \\ & \hline \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{R}} \\ & \mathrm{~m}_{\mathrm{m}} \end{aligned}$ | $\begin{gathered} \stackrel{\circ}{\otimes} \\ \underset{y}{j} \end{gathered}$ | $\begin{array}{\|l\|l} \hline 8 \\ \stackrel{8}{\square} \end{array}$ | $\begin{aligned} & \hat{0} \\ & \stackrel{\otimes}{0} \\ & \stackrel{5}{0} \end{aligned}$ | $\underset{\substack{\mathscr{m} \\ \underset{\sim}{\circ} \\ \hline}}{ }$ |  | $\stackrel{\sim}{\sim}$ | $\begin{aligned} & \underset{\sim}{\otimes} \\ & \underset{\sim}{\infty} \\ & \hline \end{aligned}$ | $\begin{gathered} \stackrel{0}{0} \\ \stackrel{y}{*} \\ \stackrel{n}{2} \end{gathered}$ | $\begin{gathered} 0 \\ \stackrel{0}{0} \\ \hline \end{gathered}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{\rightharpoonup}{2}} \\ & \stackrel{\sim}{m} \end{aligned}$ | $\left.\begin{array}{\|l\|} \hline 0 \\ \stackrel{0}{m} \\ e m \end{array} \right\rvert\,$ | $\begin{array}{\|l\|l\|} \hline 0 . \\ \infty \\ \infty \end{array}$ | $\left.\begin{array}{\|l\|} \hline \stackrel{y}{c} \\ \stackrel{m}{m} \end{array} \right\rvert\,$ |  | － |
| $\stackrel{m}{\stackrel{m}{2}}$ | $\left.\begin{aligned} & \bar{e} \\ & \stackrel{\rightharpoonup}{0} \\ & \underset{\sim}{2} \end{aligned} \right\rvert\,$ | $\begin{aligned} & \stackrel{\Gamma}{5} \\ & \underset{\sim}{\circ} \end{aligned}$ | $\stackrel{\stackrel{\rightharpoonup}{\mathrm{G}}}{\stackrel{\mathrm{G}}{2}}$ | $\begin{array}{\|c} \hline 8 \\ \underset{\sim}{0} \\ \underset{\sim}{2} \end{array}$ | $\begin{array}{\|l\|l} \hline 0 \\ \underset{\sim}{o} \\ \hline \end{array}$ | $\left.\begin{array}{\|c\|} \hline 0 \\ \stackrel{e}{6} \\ \stackrel{e}{0} \end{array} \right\rvert\,$ | $\begin{array}{\|c\|} \hline 8 \\ \hline 0.0 \\ \hline 0 \end{array}$ |  |  |  | $\begin{array}{\|c\|} \hline .8 \\ 0 \\ 0 \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline \stackrel{8}{\circ} \\ \stackrel{\sim}{\sim} \\ \hline \end{array}$ | $\begin{aligned} & \text { N } \\ & \underset{\sim}{N} \end{aligned}$ | $\begin{array}{\|l\|} \hline \stackrel{o}{\mathrm{o}} \\ \mathbf{m} \\ \underset{m}{2} \end{array}$ | $\begin{gathered} \stackrel{\circ}{\otimes} \\ \underset{y}{j} \end{gathered}$ |  | $\begin{aligned} & \stackrel{\rightharpoonup}{\infty} \\ & \stackrel{\rightharpoonup}{5} \end{aligned}$ | $\underset{\sim}{\mathscr{m}}$ |  | $\stackrel{\stackrel{\sim}{\sim}}{\stackrel{\sim}{\infty}}$ | $\begin{array}{\|c} {\underset{\sim}{0}}_{\substack{\infty}}^{\infty} \end{array}$ | $\begin{aligned} & 0 \\ & 0 \\ & \stackrel{y}{2} \\ & \stackrel{n}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{y}{0} \\ & \stackrel{\infty}{\infty} \end{aligned}$ | مٌ | $\begin{aligned} & \stackrel{0}{\omega} \\ & \stackrel{e n}{m} \end{aligned}$ | $\begin{array}{\|l\|} \hline \mathscr{0} \\ \infty \\ \infty \end{array}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{y}{c} \\ & \hline \end{aligned}$ | 徳 | － |

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| PARKS AND RECREATION |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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) |  |  |  |  |  |  |  |  |  |  |  |
| 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 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Parks Buildings | \$248.12 | \$248.56 | \$249.10 | \$251.86 | \$251.86 | \$251.34 | \$250.99 | \$250.60 | \$245.68 | \$245.19 | \$249 |
| Special Facilities | \$122.55 | \$113.05 | \$133.75 | \$154.49 | \$151.54 | \$149.87 | \$149.48 | \$149.24 | \$135.75 | \$135.48 | \$140 |
| Sports Fields | \$219.60 | \$259.70 | \$262.21 | \$263.44 | \$263.03 | \$265.43 | \$266.27 | \$267.62 | \$267.09 | \$269.95 | \$260 |
| Park And Playground Equipment | \$20.43 | \$21.25 | \$22.22 | \$23.50 | \$23.91 | \$23.88 | \$23.84 | \$23.80 | \$23.75 | \$23.71 | \$23 |
| Trails | \$24.83 | \$29.66 | \$29.62 | \$30.98 | \$30.93 | \$30.88 | \$30.83 | \$30.79 | \$30.72 | \$30.66 | \$30 |
| Ski Hills | \$7.66 | \$7.63 | \$7.97 | \$11.93 | \$11.91 | \$13.93 | \$13.91 | \$13.89 | \$14.44 | \$14.41 | \$12 |
| 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 | \$18 |
| Fleet And Equipment | \$58.42 | \$58.85 | \$60.27 | \$63.90 | \$63.80 | \$68.74 | \$68.63 | \$68.53 | \$68.15 | \$68.02 | \$65 |
| 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 | \$1,304 |
| Land - Major Facilities | \$31.1 | \$31.0 | \$30.9 | \$30.9 | \$30.8 | \$30.8 | \$30.7 | \$30.7 | \$30.6 | \$30.6 | \$31 |
| 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 | \$16 |
| 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 | \$2,147.39 |

## CITY OF GREATER SUDBURY 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 | $\$ 5,639,484$ |



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APPENDIX B. 6
TABLE 3
CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
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 |  |

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## 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. Service Level \$/pop \& emp $\$ 67.70$ | 2019-2028 <br> Development-Related Capital Program |  | Unadjusted Development Charge |  | Adjusted <br> Development Charge |  |
|  |  |  |  |  |  |  |
|  | Total | Net DC Recoverable | \$/capita | \$/sq.ft. | \$/capita <br> \$35 | \$/sq.ft. \$0.05 |


| 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 |  |


| AMBULANCES \& OTHER VEHICLES | \# of Ambulances \& Other Vehicles |  |  |  |  |  |  |  |  |  | UNIT COST <br> (\$/unit) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |  |
| Ambulances | 20 | 20 | 21 | 22 | 22 | 22 | 23 | 23 | 23 | 23 | \$157,173 |
| Primary Response Units (PRU's) | 12 | 12 | 12 | 12 | 10 | 10 | 8 | 8 | 8 | 8 | \$69,903 |
| ERV Command | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 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 | 1 | \$17,665 |
| Ford 4X4 |  |  |  |  |  |  |  | 1 | 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 |  |
|  | \# of Machinery \& Equipment |  |  |  |  |  |  |  |  |  |  |
| MACHINERY \& EQUIPMENT (excluding computers) |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { UNIT COST } \\ & \text { (\$/unit) } \\ & \hline \end{aligned}$ |
|  | 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 Facililies) | 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-Telestaff | - | - | - | - | - | - | - | - | 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 |  |


|  |  |  |  | 133 <br> APPENDIX <br> TABLE 1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |  |
| SERVICE LEVEL (\$/pop \& emp) |  |  |  |  |  |  |  |  |  |  | Average Service Level |
| Buildings | \$31.59 | \$31.48 | \$31.37 | \$31.30 | \$31.24 | \$31.18 | \$31.12 | \$31.06 | \$30.98 | \$30.90 | \$31.22 |
| Land | \$1.52 | \$1.51 | \$1.51 | \$1.50 | \$1.50 | \$1.50 | \$1.50 | \$1.49 | \$1.49 | \$1.48 | \$1.50 |
| Ambulances \& Other Vehicles | \$20.32 | \$20.25 | \$20.84 | \$21.47 | \$20.84 | \$20.80 | \$21.06 | \$20.32 | \$20.61 | \$20.56 | \$20.71 |
| Machinery \& Equipment (Excluding Computers) | \$10.24 | \$12.47 | \$12.65 | \$12.87 | \$13.31 | \$13.22 | \$16.81 | \$16.69 | \$17.25 | \$17.21 | \$14.27 |
| Total (\$/pop \& emp) | \$63.67 | \$65.71 | \$66.37 | \$67.15 | \$66.89 | \$66.70 | \$70.48 | \$69.57 | \$70.33 | \$70.15 | \$67.70 |
| 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 |  |  |  |  |  |  |  |  |  |  |



HEMSON
CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
RESIDENTIAL DEVELOPMENT CHARGE

| 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 <br> - Population Growth in New Units | 962 | 964 | 966 | 697 | 699 | 701 | 703 | 705 | 501 | 504 | 7,402 |
| REVENUE <br> - 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 |  |


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APPENDIX B. 7
TABLE 3
CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
NON-RESIDENTIAL DEVELOPMENT CHARGE

| $\begin{aligned} & \text { ㄹ } \\ & \stackrel{1}{\circ} \end{aligned}$ |  | $$ | O O O - | $\begin{aligned} & \underset{\sim}{*} \end{aligned}$ | $\begin{aligned} & \mathrm{N} \hat{\mathrm{O}} \\ & \dot{\theta} \dot{\theta} \end{aligned}$ | $\begin{aligned} & \text { N } \\ & \underset{\leftrightarrow}{2} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N్N | $\begin{aligned} & 0 \\ & \stackrel{0}{\infty} \\ & \stackrel{1}{\infty} \end{aligned}$ | $\begin{aligned} & 00 \\ & 0.0 \\ & \circ \circ \theta \end{aligned}$ | $\begin{aligned} & 8 \\ & 8 \\ & 8 \\ & 8 \end{aligned}$ | $\begin{aligned} & \dot{\sim} \\ & \underset{\sim}{n} \end{aligned}$ | $\begin{aligned} & \dot{\circ} \cdot \bar{\circ} \\ & \dot{\theta} \end{aligned}$ |  | $\begin{aligned} & 0 \\ & \frac{\dot{C}}{\dot{\infty}} \end{aligned}$ |
| N্N | $\begin{aligned} & \dot{\theta} \\ & \leftrightarrow \\ & \leftrightarrow \end{aligned}$ |  | $\begin{aligned} & 8 \\ & 8 \\ & 8 \end{aligned}$ | $\stackrel{\otimes}{\infty}$ | $$ | $\stackrel{\text { N }}{\underset{\leftrightarrow}{*}}$ | $\begin{aligned} & \bullet \\ & \stackrel{0}{\dot{\infty}} \end{aligned}$ |
| No No |  | $\begin{aligned} & 0.0 \\ & 0.0 \\ & \infty \end{aligned}$ | $\begin{aligned} & \text { ob} \\ & \underset{\sim}{n} \\ & \underset{N}{2} \end{aligned}$ |  |  | $\stackrel{\varphi}{\dot{\sigma}}$ | $\begin{aligned} & \underset{\theta}{\forall} \\ & \dot{\theta} \end{aligned}$ |
| N్N | $\begin{aligned} & \underset{\sigma}{\circ} \\ & \stackrel{\omega}{\dot{\omega}} \end{aligned}$ |  | $\begin{aligned} & \text { O} \\ & \text { N- } \\ & \text { Ni } \end{aligned}$ | $\stackrel{\underset{\sim}{*}}{\stackrel{\rightharpoonup}{*}}$ | $\begin{aligned} & \mathscr{O} \\ & \dot{\theta} \dot{\theta} \\ & \text { O } \end{aligned}$ | $\hat{\hat{o}}$ | $\begin{aligned} & \underset{N}{N} \\ & \text { en } \end{aligned}$ |
| $\underset{\sim}{N}$ | $\begin{aligned} & \underset{\sim}{\underset{N}{N}} \\ & \underset{\mathscr{C}}{2} \end{aligned}$ | $\begin{aligned} & 0.0 \\ & 0.0 \\ & \infty \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \infty \\ & \text { - } \\ & \text { N } \end{aligned}$ | $\underset{\dot{\sigma}}{\bar{\sigma}}$ | $\begin{aligned} & \underset{\sim}{\dot{G}} \underset{\sim}{\circ} \\ & \underset{\theta}{2} \end{aligned}$ | $\dot{\otimes}$ | $\stackrel{\overparen{\sigma}}{\stackrel{\omega}{\omega}}$ |
| N్N | $$ | $\stackrel{\infty}{\infty} \underset{\sim}{\infty} \underset{\sim}{\infty} \underset{\leftrightarrow}{\dot{G}}$ | $\begin{aligned} & \text { Q } \\ & \infty \\ & \text { O- } \end{aligned}$ | $\begin{aligned} & \dot{O} \\ & \stackrel{\rightharpoonup}{\infty} \end{aligned}$ |  | $\underset{\substack{\text { No } \\ \vdots}}{ }$ | N |
| N | $\begin{aligned} & \infty \\ & \stackrel{\infty}{\infty} \\ & \underset{\sim}{2} \end{aligned}$ |  | $\begin{aligned} & \text { O} \\ & \infty \\ & \text { on } \\ & \end{aligned}$ | $\begin{aligned} & \bullet \\ & \stackrel{\bullet}{\infty} \end{aligned}$ | $\begin{aligned} & \infty \\ & \stackrel{\infty}{\infty} \underset{\ominus}{\infty} \end{aligned}$ | $\frac{0}{\dot{\epsilon}}$ | $$ |
| N্N | $\underset{\sim}{\underset{\sim}{\infty}}$ | $\begin{aligned} & \circ 0 \\ & \circ \circ \\ & \& \circ \\ & \otimes \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \text { N } \\ & \text { N} \end{aligned}$ | $\stackrel{\varphi}{\stackrel{ே}{\infty}}$ |  | $\begin{aligned} & \stackrel{O}{\dot{\sim}} \\ & \stackrel{N}{\prime} \end{aligned}$ | ¢ |
| N్ర్ | $\stackrel{m}{\dot{E}}$ | $\begin{aligned} & \circ 0 \\ & \circ \circ \\ & \dot{\circ} \dot{\circ} \end{aligned}$ | $\stackrel{\text { ®}}{\underset{\sim}{N}}$ | $\stackrel{m}{\stackrel{m}{\dot{\infty}}}$ |  | $\frac{\sigma}{\dot{\sigma}}$ | - |
| $\stackrel{\circ}{i}$ | $\begin{aligned} & 0 . \\ & \dot{\infty} \end{aligned}$ | $\begin{aligned} & 00 \\ & \circ \circ \circ \\ & \infty \end{aligned}$ |  | $\underset{\dot{\sigma}}{\stackrel{\rightharpoonup}{x}}$ | $\begin{aligned} & \text { ON } \\ & \text { No } \\ & 0 \rightarrow O \end{aligned}$ | $\stackrel{m}{\underset{\sim}{x}}$ | $\stackrel{\cdots}{\dot{\infty}}$ |
| AMBULANCE SERVICES |  |  |  |  |  |  |  |


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## 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 |
| $\$ 207.42$ | $\$ 3,038,837$ | $\$ 985,279$ | $\$ 101.16$ | $\$ 0.13$ | \$116 |

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 |

VEHICLES AND EQUIPMENT (CONT'D)

| 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 | \$9,838 |
| Lawn Mower - Gas Power | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$656 |
| Ice Machine | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$13,293 |
| Power Washer | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$547 |
| Refrigerator | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$1,640 |
| Refrigerator | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$1,640 |
| Refrigerator - Commercial | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$8,745 |
| Shop Vac | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$1,059 |
| Shop Vac | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$1,177 |
| Snowblower | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$1,640 |
| Snowthrower | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$328 |
| Stove | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$1,093 |
| Stove | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$1,093 |
| Stove - Commercial | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$10,931 |
| Vacuum - Cannister | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$547 |
| Vacuum - Cannister | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$547 |
| Vacuum - Cannister | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$589 |
| Vacuum - Cannister | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$795 |
| Vacuum - Cannister | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$795 |
| Washing Machine | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$1,504 |
| Dryer | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$1,346 |
| Washing Machine | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$1,640 |
| Whipper Snipper | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$437 |
| Whipper Snipper | 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 | \$1,082 |
| Tables | 135 | 155 | 207 | 207 | 218 | 238 | 238 | 238 | 238 | 238 | \$630 |
| Chairs | 52 | 52 | 312 | 312 | 312 | 312 | 312 | 312 | 312 | 312 | \$102 |
| Chairs | 185 | 185 | 217 | 217 | 239 | 239 | 239 | 239 | 239 | 239 | \$352 |
| Chairs | - | - | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | \$841 |

INVENTORY OF CAPITAL ASSETS
VEHICLES AND EQUIPMENT (CONT'D)

| $\begin{array}{c}\text { UNIT COST } \\ \text { (\$/unit) }\end{array}$ |
| ---: |
| $\$ 102$ |
| $\$ 5,465$ |
| $\$ 3,378$ |
| $\$ 2,226$ |
| $\$ 526$ |
| $\$ 309$ |
| $\$ 4,000$ |
| $\$ 3,245$ |
| $\$ 547$ |
| $\$ 1,484$ |
| $\$ 1,076$ |
| $\$ 1,076$ |
| $\$ 1,150$ |
| $\$ 1,175$ |
| $\$ 587$ |
| $\$ 4,828$ |
| $\$ 3,958$ |


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CITY OF GREATER SUDBURY
CALCULATION OF SERVICE LEVELS
EMERGENCY PREPAREDNESS
EMERGENCY PREPAREDNESS
Historic Population
Historic Employment
total Population \& Employment
INVENTORY SUMMARY (\$000)
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 | $\$ 985,279$ |

HEMSON


HEMSON
CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
RESIDENTIAL DEVELOPMENT CHARGE

| 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 |  |


|  |  |
| :---: | :---: |
|  |  |

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APPENDIX B. 8
TABLE 3
CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)


|  |  |
| :---: | :---: |
|  |  |

HEMSON

## 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 20092017. 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.

## HEMSON

| City of Greater Sudbury Transit Ridership Forecast |  |  |  |
| :---: | ---: | ---: | ---: |
| Year | Total Annual <br> Ridership | DC Forecast <br>  <br> Employment | Annual Ridership <br>  <br> Employment |
| $\mathbf{2 0 0 9}$ | $4,250,000$ | 233,914 | 18.17 |
| $\mathbf{2 0 1 0}$ | $4,260,000$ | 234,738 | 18.15 |
| $\mathbf{2 0 1 1}$ | $4,470,000$ | 235,565 | 18.98 |
| $\mathbf{2 0 1 2}$ | $4,440,000$ | 236,028 | 18.81 |
| $\mathbf{2 0 1 3}$ | $4,360,000$ | 236,493 | 18.44 |
| $\mathbf{2 0 1 4}$ | $4,460,000$ | 236,959 | 18.82 |
| $\mathbf{2 0 1 5}$ | $4,260,000$ | 237,425 | 17.94 |
| $\mathbf{2 0 1 6}$ | $4,180,000$ | 237,893 | 17.57 |
| $\mathbf{2 0 1 7}$ | $4,060,000$ | 238,507 | 17.02 |
| $\mathbf{2 0 1 8}$ | $4,354,638$ | 239,123 | 18.21 |
| $\mathbf{2 0 1 9}$ | $4,365,892$ | 239,741 | 18.21 |
| $\mathbf{2 0 2 0}$ | $4,377,165$ | 240,360 | 18.21 |
| $\mathbf{2 0 2 1}$ | $4,388,528$ | 240,984 | 18.21 |
| $\mathbf{2 0 2 2}$ | $4,398,799$ | 241,548 | 18.21 |
| $\mathbf{2 0 2 3}$ | $4,409,106$ | 242,114 | 18.21 |
| $\mathbf{2 0 2 4}$ | $4,419,432$ | 242,681 | 18.21 |
| $\mathbf{2 0 2 5}$ | $4,429,776$ | 243,249 | 18.21 |
| $\mathbf{2 0 2 6}$ | $4,440,192$ | 243,821 | 18.21 |
| $\mathbf{2 0 2 7}$ | $4,445,474$ | 244,111 | 18.21 |
| $\mathbf{2 0 2 8}$ | $4,450,755$ | 244,401 | 18.21 |
| $\mathbf{2 0 2 9}$ | $4,456,036$ | 244,691 | 18.21 |
| $\mathbf{2 0 3 0}$ | $4,461,317$ | 244,981 | 18.21 |
| $\mathbf{2 0 3 1}$ | $4,466,726$ | 245,278 | 18.21 |
| $\mathbf{2 0 3 2}$ | $4,474,666$ | 245,714 | 18.21 |
| $\mathbf{2 0 3 3}$ | $4,482,642$ | 246,152 | 18.21 |
| $\mathbf{2 0 3 4}$ | $4,490,636$ | 246,591 | 18.21 |
| $\mathbf{2 0 3 5}$ | $4,498,649$ | 247,031 | 18.21 |
| $\mathbf{2 0 3 6}$ | $4,506,644$ | 247,470 | 18.21 |
| $\mathbf{2 0 3 7}$ | $4,511,852$ | 247,756 | 18.21 |
| $\mathbf{2 0 3 8}$ | $4,517,097$ | 248,044 | 18.21 |
| $\mathbf{2 0 3 9}$ | $4,522,360$ | 248,333 | 18.21 |
| $\mathbf{2 0 4 0}$ | $4,527,623$ | 248,622 | 18.21 |
| $\mathbf{2 0 4 1}$ | $4,532,886$ | 18.21 |  |
|  |  | 248,911 |  |

## 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 |  | $\mathbf{4 , 5 3 2 , 8 8 6}$ | $\mathbf{1 0 0 \%}$ |

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.

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

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APPENDIX B. 9
TABLE 2
CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
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 | \$1,158.1 |
| - 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 <br> - 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 |  |

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TABLE 2
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

| 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 |  |


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| :---: | :---: |
|  |  |

## Appendix C

## Engineering Services <br> 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. $1 \quad$ Roads and Related
Appendix C. $2 \quad$ 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 developmentrelated 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:


| ROAD COMPONENTS | \# of Road Components |  |  |  |  |  |  |  |  |  | UNIT COST\$1,017,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 |  |
| 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 | \$1,757,398.5 | \$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 | Acres of Right of Way |  |  |  |  |  |  |  |  |  | UNIT COST$\$ 200,000$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 |  |
| 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 |  |


|  |  |  |  | 161 APPENDIX TABLE |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CITY OF GREATER SUDBURY CALCULATION OF SERVICE LEVELS ROADS | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |  |
| Historic Population Historic Employment total Population \& Employment | $\begin{aligned} & 159,389 \\ & \frac{74,525}{233,914} \end{aligned}$ | $\begin{aligned} & 159,884 \\ & \frac{74,854}{234,738} \end{aligned}$ | $\begin{aligned} & 160,380 \\ & \frac{75,185}{235,565} \end{aligned}$ | $\begin{aligned} & 160,62 \\ & \frac{75,400}{236,028} \end{aligned}$ | $\begin{aligned} & 160,877 \\ & \frac{75,616}{236,493} \end{aligned}$ | $\begin{aligned} & 161,126 \\ & \frac{75,833}{236,959} \end{aligned}$ | $\begin{aligned} & 161,375 \\ & \frac{76,050}{237,425} \end{aligned}$ | $\begin{aligned} & 161,625 \\ & \frac{76,268}{237,893} \end{aligned}$ | $\begin{aligned} & 161,948 \\ & \frac{76,559}{238,507} \end{aligned}$ | $\begin{aligned} & 162,272 \\ & \frac{76,851}{239,123} \end{aligned}$ |  |
| INVENTORY SUMMARY (\$000) |  |  |  |  |  |  |  |  |  |  |  |
| Road Components <br> Road Land Value | $\begin{array}{r} \hline \$ 1,756,844.5 \\ \$ 337,508.4 \end{array}$ | $\begin{array}{\|r\|} \hline \$ 1,757,398.5 \\ \$ 337,508.4 \end{array}$ | $\begin{array}{\|r\|} \hline \$ 1,759,906.3 \\ \$ 337,508.4 \end{array}$ | $\begin{array}{\|r\|} \hline \$ 1,758,907.1 \\ \$ 337,508.4 \end{array}$ | $\begin{array}{r} \hline \$ 1,758,716.0 \\ \$ 337,204.4 \end{array}$ | $\begin{array}{r} \hline \$ 1,717,107.0 \\ \$ 326,201.8 \end{array}$ | $\begin{array}{\|r\|} \hline \$ 1,736,954.6 \\ \$ 330,284.0 \end{array}$ | $\begin{array}{r} \hline \$ 1,737,082.1 \\ \$ 330,284.0 \end{array}$ | $\begin{array}{\|r\|} \hline \$ 1,751,214.2 \\ \$ 332,933.0 \end{array}$ | $\begin{array}{r} \hline \$ 1,751,214.2 \\ \$ 332,933.0 \end{array}$ |  |
| 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) |  |  |  |  |  |  |  |  |  |  | Average Service Level |
| 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 | \$7,388.71 |
| 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 | \$1,411.36 |
| 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 | \$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 |  |  |  |  |  |  |  |  |  |  |

162,

| 97ع＇$¢ 1<$＇ $8 \varepsilon$ | \＄ |  | LL6＇tsl＇Lz |  | OLZ＇206 | \＄ | 91＇0066＇6 | \＄ | 661＇91L＇02 | \＄ | E6s ${ }^{\circ}$ ¢ $L^{\prime}$ Lz |  |  | 86L＇9カナ＇86ı | \＄ | Lくで6Ltotl \＄ | เ9て＇976＇88ะ | \＄ |  |  | аэィヤาэบ | savoy 7 ¢101 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $97 \varepsilon ' \varepsilon レ<' 8 \varepsilon$ | \＄ |  | Lt6＇tgr＇Lz | \＄ | OLて＇206 | \＄ | 91＇0t6＇6 | \＄ | 661＇91L＇02 | \＄ | E6S＇08L＇LZレ |  |  | 86L＇9カt＇86ı | \＄ | 12t＇6Lt＇0tL | ャ9て＇926＇88ะ | \＄ |  |  | leporans |  |  |
| D01＇6E9 |  | \％け9 | 187＇159 | \＄ | － | \＄ | － | \＄ | sz9＇0sz＇। | \＄ | scétz9 |  | \％$\varepsilon$ \＆ | 000＇SL8＇। | \＄ | 000＇sz9 | 000＇009＇z | \＄ | ャてOZ | 6102 |  | $62^{\prime}$ |  |
| 069＇980＇ | \＄ | \％99 | ¢\＆て＇ャ18 | \＄ | － | \＄ | － | \＄ | sz6＇oss＇। | \＄ | sLO＇tz6 |  | \％$\varepsilon$＇$\varepsilon$ | 000＇GLL＇Z | \＄ | 000＇sz6 | 000＇00L＇ 8 | \＄ | 1202 | 6102 |  | $8 \mathrm{Cl}^{\prime}$ |  |
| － | \＄ | \％0 | 00s＇s | \＄ | － | \＄ | － | \＄ | 00s＇s | \＄ | oos＇toz |  | \％826 | 000＇0sz | \＄ | －\＄ | 000＇0sz | \＄ | ャてOz | £zoz | ərpdn ueld delsew uoupuodsue． 1 | $\angle Z^{\prime}$ |  |
| \＆๖6＇zzz | \＄ | \％เ9 | ย6z＇\＆เ乙 | \＄ | － | \＄ | － | \＄ | 98て＇9¢t | \＄ | เ91＇E90＇L |  | \％で $\downarrow 6$ | 000＇00g＇L | \＄ | －\＄ | 000＇009＇L | \＄ | \＆zoz | $\angle 102$ |  | $92^{\prime}$ |  |
| s¢＇ $6 \varepsilon$ | \＄ | \％เ9 | ャて8＇ட\＆ | \＄ | － | \＄ | － | \＄ | 6 6e＇$^{\prime} / 2$ | \＄ | เャ9＇zsz＇เ |  | \％て＇ 6 | 000＇0¢ध＇। | \＄ | 000＇88G＇z | 000＇828＇ 8 | \＄ | $0 z 02$ | 8102 |  | ¢でし |  |
| ع06＇8ا | \＄ | \％เ9 | ＜LL＇ยレ | \＄ | － | \＄ | － | \＄ | 699＇z¢\％ | \＄ | เゅ¢＇291＇ |  | \％て＇$\downarrow 6$ | 000＇000＇t | \＄ | －\＄ | 000＇000＇t | \＄ | 8202 | 6102 |  | セでし |  |
| 960 ＇ 860 ＇ | \＄ | \％001 | －\＄ | \＄ | － | \＄ | － | \＄ | 970＇E60＇। | \＄ | toL＇sts |  | \％$\varepsilon$ ¢ $\varepsilon$ | osL＇889＇। | \＄ | osz＇9bs | 000＇s81＇z | \＄ | 8202 | 8802 |  | \＆て＇し |  |
| soc＇ 890 ＇ | \＄ | \％เs | 988＇LLO＇L | \＄ | － | \＄ | 000＇z09 | \＄ | 169＇z89＇z | \＄ | เ8て＇68ย＇। |  | \％$\varepsilon$ ¢ $\varepsilon$ | s＜8＇Izo＇t | \＄ | sza＇0樶し | 00s＇z98＇s | \＄ | 8202 | stoz |  | でし |  |
| 69t＇zoz＇レ | \＄ | \％เ9 | 9てt＇ost＇L | \＄ | － | \＄ | ゆLて＇ゆL6 | \＄ | 691＇L9z＇$¢$ | \＄ | －\＄ |  | \％0＇0 |  | \＄ | －\＄ | 691＇L97＇$¢$ | \＄ | 210z | 2102 |  | เでし |  |
| ャ99＇861＇z | \＄ | \％19 | 96t＇801\％ | \＄ | － | \＄ | － | \＄ | Os＇roe＇t | \＄ | 0s8＇Lbi＇z |  | \％$\varepsilon$ ¢ $\varepsilon$ | 000＇OSt＇9 | \＄ | 000＇OSL＇z | 000＇009＇8 | \＄ | 6102 | stoz |  | $0 \mathrm{Cl}^{\circ}$ |  |
| 908＇$¢ 19$＇z | \＄ | \％001 | －\＄ | \＄ | － | \＄ | － | \＄ | 908＇と19＇z | \＄ |  |  | \％$\varepsilon$ ¢ $\varepsilon$ | OSL＇816＇$\varepsilon$ | \＄ | Osz＇908＇レ | 000＇szz＇s | \＄ | 8202 | 8802 | ยו！Mew | $6 \mathrm{l}^{\prime}$ |  |
| 691＇88¢＇z | \＄ | \％001 | － | \＄ | － | \＄ | － | \＄ | 691＇88s＇z | \＄ | 18 ＇$^{\prime} 98 z^{\prime} 1$ |  | \％$\varepsilon$ ¢ $\varepsilon$ | OSZ＇908＇$\varepsilon$ | \＄ | osL＇89z＇レ | 000＇glo＇s | \＄ | 8202 | 8802 | บо⿺𠃊и！шәу | $8 \mathrm{~L}^{\prime} \mathrm{L}$ |  |
| L98＇669 | \＄ | \％001 | － | \＄ | － | \＄ | － | \＄ | Lse＇619 | \＄ | LO8＇0Ll＇6 |  | $\% L^{\circ} \mathrm{E} 6$ | \＄91＇06L＇6 | \＄ | 988＇668＇91 | 000＇061＇9z | \＄ | 8202 | ャてOz |  | L L＇L |  |
| 891＇8sı | \＄ | \％001 | － | \＄ | － | \＄ | － | \＄ | 891＇8s！ | \＄ | で8＇レセと＇て |  | \％$\llcorner$＇ 6 | 000＇00s＇z | \＄ | －\＄ | 000＇00s＇z | \＄ | ยzoz | Ozoz |  | $9 \mathrm{l}^{\prime}$ |  |
| 026＇LL | \＄ | \％เ9 | 96s＇$\downarrow 2$ | \＄ | － | \＄ | － | \＄ | 999＇zsı | \＄ | 9Et＇0Lt＇z |  | \％て＇$\downarrow 6$ | 100＇$\varepsilon 89$ z | \＄ | \＄ | 100＇દz9＇z | \＄ | sloz | stoz |  | Sil |  |
| ャ66＇6¢z | \＄ | \％เ9 | でく＇8ちて | \＄ | － | ， | － | \＄ | 98L＇809 | \＄ | £เ6＇＇¢о＇z |  | \％＇08 | 629＇Ets＇z | \＄ | 8L8＇696＇L \＄ | Lso＇Els＇ol | \＄ | 8102 | ャ10z |  | ＋it |  |
| GLO＇LL8＇ | \＄ | \％เ9 | ゅ¢8＇s6L＇レ | \＄ | － | \＄ | － | \＄ | 606＇CL9＇$\varepsilon$ | \＄ | カol＇tes＇｜ |  | \％0＇0 |  | \＄ | L86＇zGレ | 000＇00t＇s | \＄ | ャ10z | toz |  | \＆レ＇ |  |
| Los＇ $1+8$＇ | \＄ | \％99 |  | \＄ | － | \＄ | － | \＄ |  | \＄ | 668＇L61＇z |  | \％0＇0t | 6セL＇6Lt＇s | \＄ | 888＇s8t＇ | L8＇¢96＇9 | \＄ | 0102 | 010z |  | 2い |  |
| ع 20 ＇t6 | \＄ | \％เ9 | 200＇06 | \＄ | － | \＄ | LZL＇$\varepsilon$ L | \＄ | 208＇Ls9 | \＄ | 80て＇เと＇乙 |  | \％0＇08 | 010＇68L＇z | \＄ | 88t＇L®8＇91 | £6t＇9c9＇6ı | \＄ | －102 | z10z |  | い |  |
| 999＇stı | \＄ | \％เ9 | z¢¢＇6¢ | \＄ | － | \＄ | ． | \＄ | L00＇982 | \＄ | E66＇t19＇ャ |  | \％て＇ 66 | 000＇006＇t | \＄ | －\＄ | 000＇006＇t | \＄ | 8202 | ャてOz |  | 01.1 |  |
| 161＇LLL＇ | \＄ | \％เ9 | zos＇OzL＇ | \＄ | － | \＄ | － | \＄ | £69＇ 62 ＇z | \＄ | L08＇801＇$\varepsilon$ |  | \％て＇ 6 | 000＇00t＇68 | \＄ | －\＄ | 000＇00t＇68 | \＄ | zzoz | 8102 |  | 6.1 |  |
| 109＇เsı | \＄ | \％เ¢ | Oto＇stl | \＄ | － | \＄ | － | \＄ | 0t9＇962 | \＄ | 098＇ 08 ＇t |  | \％て＇$\downarrow 6$ | 000＇00 ${ }^{\text {＇s }}$ | \＄ | －\＄ | 000＇00＇s | \＄ | 6102 | 8102 |  | $8 \cdot 1$ |  |
| OせL＇でて | \＄ | \％เ¢ | ゅ\＆て＇દと | \＄ | － | \＄ | LせL＇Ezz | \＄ | SLL＇869 | \＄ | 加＇960＇z |  | \％＇SL | 898＇t6L＇z | \＄ | 0レて＇t9 | 890＇698＇ | \＄ | －102 | ＋102 | şuemeno．duw uogposiəu｜ 08 yW si yw | L＇し |  |
| ャ¢E＇809＇L | \＄ | \％001 | －\＄ | \＄ | － | \＄ | － | \＄ | เ¢E＇809＇L | \＄ | เ¢E＇809＇L |  | \％0＇0s | L99＇90＇sヶ | \＄ | £єє＇＇¢0＇0¢ | 000＇0so＇st | \＄ | 8202 | £ 202 | z әseud－ənua кəəen | $9{ }^{\prime}$ |  |
| くどけしく＇8 | \＄ | \％99 | 988＇t88＇9 | \＄ | － | \＄ | LTS＇st8 | \＄ | OSz＇ヤட̌＇91 | \＄ | OSて＇ヤட̇＇91 |  | \％0＇0s | 009＇8tL＇z\％ | \＄ | 009＇Lて＇¢＇\＄ | 000＇9L1＇98 | \＄ | \＆zoz | 6002 |  | s＇ı |  |
| 908＇zsL | \＄ | \％เ9 | \＆zて＇0zı | \＄ | OLZ＇206 | \＄ | 966＇96L＇z | \＄ | £とて＇9＜l＇s | \＄ | 988＇8เて＇乙 |  | \％＇0 0 | 619＇ヤ68＇L | \＄ | 10才＇0sq＇$\quad$ \＄ | 0zo＇stl＇or | \＄ | 6002 | 6002 |  | ガレ |  |
| £6t＇ 88 | \＄ | \％เ9 | 968＇998 | \＄ | － | \＄ | 819＇とzg＇। | \＄ | L06＇$\varepsilon<z ' 乙$ | \＄ | －\＄ |  | \％000 | L06＇غLZ＇z | \＄ | \＄ | LO6＇$¢$ L＇z | \＄ | ャ102 | ع10z | รอ！！！！！ก／uo！uș！ <br>  | $\varepsilon \cdot$ |  |
| $688^{\prime}$＜$¢$ | \＄ | \％เ9 | 8เて＇を๕を | \＄ | － | \＄ | เง1＇てもe＇ | \＄ | 802＇800＇z | \＄ | ゅ29＇600＇9 |  | \％${ }^{\text {c }}$ L 2 | て¢8＇てし＇8 | \＄ | 0¢9＇88 | 29t＇L90＇8 | \＄ | －102 | \＆10z |  | でし |  |
| 896＇609＇ | \＄ | \％เ¢ | 6LZ＇OカG＇L | \＄ | － | \＄ | ¢9＇6ヶย＇ | \＄ | 000＇00s＇t | \＄ | 000＇00s＇t |  | \％0＇0s | 000＇000＇6 | \＄ | \＄ | 000＇000＇6 | \＄ | 8202 | ${ }^{\text {toz }}$ | spoploud anmin－uounsinboy イuədold | $1 \cdot$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | y ont savoy | 0.4 |
| \＄ 82 |  | \％ | $\begin{gathered} 8 z 0 z \\ -6 L 0 z \end{gathered}$ |  |  |  | $\begin{gathered} \hline 500 \\ 10 \mu_{\mathrm{d}} \end{gathered}$ |  |  |  | sedeys $\operatorname{318}$ 8 <br>  |  | $\begin{gathered} \hline \% \\ \text { ヨıg } \end{gathered}$ | lso <br> Ied！ojunn <br> jon |  |  |  |  | 4ร1u］ | ${ }^{\text {Lex }}$ S | uoladuresea toeloud |  |  |
| ${ }^{8208-750}{ }^{\text {d }}$ |  |  |  |  |  |  |  | 6u！u！ |  |  |  |  |  |  |  |  |  |


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


| Residential Development Charge Calculation |  |  |
| :---: | :---: | :---: |
| Residential Share of 2019－2028 DC Eligible Costs | 76\％ | \＄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 |  |  |
| Non－Residential Share of 2019－2028 DC Eligible Costs | 24\％ | \＄5，077，187 |
| Growth in Non－Residential Square Feet to 2028 |  | 1，804，390 |
| Unadjusted Development Charge Per Square Foot |  | 81 |
| Growth in Industrial Square Feet to 2028 | 58\％ | 1，364，000 |
| Unadiusted Development Charge Per Square Foot |  | \＄2．16 |
| Growth in Non－Industrial Square Feet to 2028 | 42\％ | 440，390 |
| Unadjusted Development Charge Per Square Foot |  | \＄4．84 |



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## 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: 20192028

## 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 developmentrelated 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 developmentrelated 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 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9-2028 | Unadjusted Development Charge |  | Adjusted Development Charge |  |
| Development-Related Capital Program |  |  |  |  |  |
| Total | Net DC Recoverable | \$/capita | \$/sq.ft. | \$/capita | \$/sq.ft. |
| \$56,830,389 | \$2,477,025 | \$296.26 | \$0.38 | \$329 | \$0.43 |

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[^3]
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CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

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TABLE 2
CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)


## 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 $2 \quad$ 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 postperiod 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 nonresidential 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 |  | Develop | Charge | Developm | t 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 |

CITY OF GREATER SUDBURY
DEVELOPMENT-RELATED CAPITAL PROGRAM
WASTEWATER

| Project Description |  |  | Timing |  | $\begin{aligned} & \text { Gross } \\ & \text { Project } \\ & \text { Cost } \\ & \hline \end{aligned}$ | Grants/ <br> Subsidies/Other <br> Recoveries | $\begin{gathered} \text { Net } \\ \text { Municipal } \\ \text { Cost } \end{gathered}$ | Ineligible Costs |  | $\begin{gathered} \text { Total } \\ \text { DC Eligible } \\ \text { Costs } \end{gathered}$ | DC Eligible Costs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Start | Finish |  |  |  | BTE ${ }^{\text {R }}$ Replacement |  |  | $\begin{aligned} & \text { Prior } \\ & \text { DCs } \end{aligned}$ | Available DC Reserves | $\begin{gathered} 2019- \\ 2028 \\ \hline \end{gathered}$ | 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 | 59\% | \$ 4,809,016 |
|  | 3.2 | Walden WWTP - Design | 2014 | 2023 | 2,000,000 | \$ - | \$ 2,000,000 | 62.0\% | \$ 1,240,000 | 760,000 | \$ 211,464 | \$ - | 124,532 | 77\% | \$ 424,004 |
|  | 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 | 77\% | \$ 8,048,212 |
|  | 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 | 54\% | \$ 134,802 |
|  | 3.5 | WWTP Upgrades for Chelmsford | 2025 | 2028 | 14,690,000 | \$ - | \$ 14,690,000 | 97.8\% | 14,364,508 | 325,492 | \$ - | \$ - | 149,614 | 54\% | \$ 175,878 |
|  | 3.6 | Helene Lift Station Upgrades | 2025 | 2028 | 3,231,000 | \$ - | \$ 3,231,000 | 80.0\% | 2,584,800 | 646,200 | \$ - | \$ - | 297,029 | 54\% | \$ 349,171 |
|  | 3.7 | Update to W/WW Master Plan/General Studies | 2019 | 2023 | 5,600,000 | \$ - | \$ 5,600,000 | 97.5\% | 5,460,692 | 139,308 | \$ - | \$ - | 85,126 | 39\% | \$ 54,182 |
|  | 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 | 59\% | \$ 946,365 |
|  | 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 | 59\% | \$ 4,041,439 |
|  | 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 | 59\% | \$ 741,849 |
|  | 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 | 77\% | \$ 1,174,921 |
|  | 3.12 | Gatchell Outfall Sewer | 2014 | 2021 | 8,975,000 | \$ - | \$ 8,975,000 | 94.8\% | 8,511,638 | 463,362 | \$ - | \$ - | 191,627 | 59\% | \$ 271,735 |
|  | 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 | 77\% | \$ 1,491,563 |
|  | 3.14 | Algonquin Forcemain | 2017 | 2018 | 1,245,191 | 824,269 | 420,922 | 50.0\% | 210,461 | 210,461 | \$ - | \$ - | 87,038 | 59\% | \$ 123,423 |
|  | 3.15 | Laurier Lift Station | 2018 | 2019 | 1,500,000 | \$ - | \$ 1,500,000 | 97.8\% | 1,466,764 | 33,236 | \$ - | \$ - | 13,745 | 59\% | \$ 19,491 |
|  | 3.16 | Ramsey Lift Station | 2019 | 2022 | 1,200,000 | \$ - | \$ 1,200,000 | 50.0\% | 600,000 | 600,000 | \$ - | \$ - | 248,135 | 59\% | \$ 351,865 |
|  | 3.17 | Maley Drive Sanitary Sewer | 2028 | 2028 | 1,750,000 | \$ - | \$ 1,750,000 | 0.0\% | \$ - | 1,750,000 | \$ . | \$ - | \$ - | 100\% | \$ 1,750,000 |
|  |  | 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 |  |  |
| :--- | ---: | ---: |
| Residential Share of 2019-2028 DC Eligible Costs |  | $\$ 2 \%$ |
| Growth in Serviced Population in New Units to 2028 |  | 6,032 |
| Unadjusted Development Charge Per Capita | $\$ 1,422.10$ |  |
|  |  |  |
| Non-Residential Development Charge Calculation | $28 \%$ | $\$ 3,329,290$ |
| Non-Residential Share of 2019 - 2028 DC Eligible Costs | $1,804,390$ |  |
| Growth in Non-Residential Square Feet to 2028 | $\$ 1.85$ |  |
| Unadjusted Development Charge Per Square Foot |  |  |



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TABLE 2
CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)


## 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 $2 \quad$ 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.

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

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



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TABLE 2
CITY OF GREATER SUDBURY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
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 |  |  |  |  |  | Allocation of Capital Program Residential Sector Non-Residential Sector |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | 76\% |  |
|  |  |  |  |  |  |  |  |  |  | 24\% |  |
|  |  |  |  |  |  |  | Rates for 2019 |  |  |  |  |
|  |  |  |  |  |  |  | tion Rate |  |  | 2.0\% |  |
|  |  |  |  |  |  |  | rest Rate on | itive Balan |  | 3.5\% |  |
|  |  |  |  |  |  |  | rest Rate on | gative Bala |  | 5.5\% |  |



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

| Service | Notional Revenue <br> Losses | DCs Previously <br> 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 | $\$ 13,330.77$ | $\$ 25,039.93$ | $\$ 287,975.00$ |
| Emergency Preparedness | $\$ 61,047.44$ | $\$ 0.00$ | $\$ 301,305.77$ |
| Transit | $\$ 907,210.41$ | $\$ 129,190.00$ | $\$ 25,039.93$ |
| Roads And Related | $\$ 109,214.23$ | $\$ 0.00$ | $\$ 190,237.44$ |
| Water Services | $\$ 351,894.90$ | $\$ 0.00$ | $\$ 907,210.41$ |
| Wastewater Services | $\$ 69,559.51$ | $\$ 0.00$ | $\$ 109,214.23$ |
| Drains | $\$ 2,005,773.37$ | $\$ 0.00$ | $\$ 69,559.51$ |
| TOTAL | $\$ 2,010,359.00$ | $\$ 4,016,132.37$ |  |

## Appendix E

## Long-Term Capital And Operating Costs

## HEMSON

## APPENDIX E

|  |  | CITY OF GRE TIMATED NET OPERATI DEVELOPMENT-RELA (in constan | ATER SUDBURY G COST OF THE PROPOSED ED CAPITAL PROGRAM 2019 dollars) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Co | st Driver (in 2019\$) | Commentary | DC F | ded | Total Annual |
|  | \$/Unit | \# of Units |  | 2019-2028 | Post 2028 | Increase |
| GENERAL GOVERNMENT None |  |  | No additional operating costs arising from undertaking studies | \$0 | \$0 | \$0 |
| LIBRARY SERVICES <br> South Branch Expansion | \$50.00 | per sq.ft. added |  | \$127,457 $\$ 127,457$ | \$260,852 $\$ 260,852$ | $\$ 388,309$ $\$ 388,309$ |
| FIRE SERVICES |  |  |  | \$14,157 | \$0 | \$14,157 |
| Facilities | \$0.10 | per \$1.00 added |  | \$14,157 | \$0 | \$14,157 |
| Vehicles and Equipment | \$0.10 | per \$1.00 added |  | \$0 | \$0 | \$0 |
| POLICE SERVICES <br> Headquarters Expansion | \$35.00 | per sq.ft. added |  | $\$ 890,725$ $\$ 890,725$ | \$136,153 $\$ 136,153$ | \$1,026,878 $\$ 1,026,878$ |
| PUBLIC SAFETY |  |  |  | \$0 | \$0 | \$0 |
| None |  |  | No additional operating costs arising from radio infrastructure upgrades | \$0 | \$0 | \$0 |
| PARKS AND RECREATION |  |  |  | \$338,417 | \$322,989 | \$661,406 |
| Indoor Recreation | \$0.10 | per \$1.00 added |  | \$322,989 | \$322,989 | \$645,979 |
| Outdoor Recreation | \$0.05 | per \$1.00 added |  | \$15,428 | \$0 | \$15,428 |
| AMBULANCE SERVICES |  |  |  | \$91,134 | \$117,798 | \$208,932 |
| Station Redevelopment | \$90.00 | per sq.ft. added |  | \$91,134 | \$117,798 | \$208,932 |
| EMERGENCY PREPAREDNESS |  |  |  | \$98,528 | \$3,988 | \$102,516 |
| Buildings, Land \& Equipment | \$0.10 | per \$1.00 added |  | \$98,528 | \$3,988 | \$102,516 |
| TRANSIT |  |  |  | \$78,950 | \$67,461.94 | \$146,412 |
| Transit Garage Expansion | \$0.05 | per \$1.00 added |  | \$73,437 | \$62,751 | \$136,188 |
| PTIF Phase 2 Growth Projects | \$0.10 | per \$1.00 added |  | \$5,513 | \$4,711 | \$10,224 |
|  |  |  |  | \$263,900 | \$0 | \$263,900 |
| ROADS AND RELATED | \$50.00 | per capita + employment |  | \$263,900 | \$0 | \$263,900 |
| WATER |  |  | Rate supported service |  |  |  |
| WASTEWATER |  |  | Rate supported service |  |  |  |
|  |  |  |  | \$52,780 | \$0 | \$52,780 |
| DRAINS | \$10.00 | per capita + employment |  | \$52,780 | \$0 | \$52,780 |
| TOTAL ESTIMATED OPERATING COSTS |  |  |  | \$1,956,047 | \$909,242 | \$2,865,289 |


| Net Capital Cost of Development-Related Projects | $\begin{gathered} 2019 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2020 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2021 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2022 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2023 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2024 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2025 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2026 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2027 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2028 \\ (\$ 000) \end{gathered}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { (\$000) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |

SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS

| Net Capital Cost of Development-Related Projects | $\begin{gathered} 2019 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2020 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2021 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2022 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2023 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2024 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2025 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2026 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2027 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2028 \\ (\$ 000) \end{gathered}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { (\$000) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PUBLIC SAFETY <br> 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 |

## APPENDIX E TABLE

CITY OF GREATER SUDBURY
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS

| Net Capital Cost of Development-Related Projects | $\begin{gathered} 2019 \\ (\$ 000) \\ \hline \end{gathered}$ | $\begin{gathered} 2020 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2021 \\ (\$ 000) \\ \hline \end{gathered}$ | $\begin{gathered} 2022 \\ (\$ 000) \\ \hline \end{gathered}$ | $\begin{gathered} 2023 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2024 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2025 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2026 \\ (\$ 000) \end{gathered}$ | $\begin{gathered} 2027 \\ (\$ 000) \\ \hline \end{gathered}$ | $\begin{gathered} 2028 \\ (\$ 000) \\ \hline \end{gathered}$ | $\begin{aligned} & \text { TOTAL } \\ & \mathbf{( \$ 0 0 0 )} \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |

[^4](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).
HEMSON

## 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.

## HEMSON

| Table 1 <br> Summary of Municipal Assets Considered General Services |  |
| :---: | :---: |
| Service and Amenities | Estimated Useful Life |
| General Government <br> - Growth-Related Studies | Not Infrastructure |
| Library Services <br> - Library Branch <br> - Studies <br> - Collection Materials | 50 years Not Infrastructure 10 years |
| Fire Services <br> - Buildings <br> - Training Vehicles <br> - Equipment | 50 years <br> 10 years <br> 10-15 years |
| Police Services <br> - Personal Equipment <br> - Police Headquarters | 10 years 50 years |
| Public Safety <br> - Equipment | 20 years |
| Parks and Recreation <br> - Indoor Recreation Facilities <br> - Sports Complex <br> - Skate Park <br> - Soccer Field | 50 years <br> 20 years <br> 20 years |
| Ambulance Services <br> - Station <br> - Equipment | 50 years 10 years |
| Emergency Preparedness <br> - Buildings <br> - Generators | 50 years 15 years |
| Transit <br> - Transit Garage <br> - 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 <br> - Property Acquisition <br> - Roads Projects <br> - Active Transportation <br> - Growth-Related Studies | Not Infrastructure <br> 60 years <br> 25 years <br> Not Infrastructure |
| Water Services <br> - Water Infrastructure <br> - Growth-Related Studies | 60 years <br> Not Infrastructure |
| Wastewater Services <br> - Wastewater Infrastructure <br> - Growth-Related Studies | 60 years Not Infrastructure |
| Drains <br> - 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 <br> Capital |  |  | Calculated AMP Annual <br> Provision by 2028 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | DC Recoverable | Non-DC Funded | DC Related |  | Non-DC Related |  |
|  | $\$$ | - | $\$$ | - | $\$$ | - |

TABLE 4
CITY OF GREATER SUDBURY
CALCULATED ANNUAL PRIVISION BY 2028 - ENGINEERED SERVICES

| Service | 2019-2028Capital 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)

## HEMSON


[^0]:    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 | $\$ 1,747,817$ |

[^1]:    CITY OF GREATER SUDBURY
    CALCULATION OF MAXIMUM ALLOWABLE
    POLICE SERVICES

[^2]:    CITY OF GREATER SUDBURY
    CALCULATION OF MAXIMUM ALLOWABLE
    PUBLIC SAFETY

    |  |  |
    | :--- | ---: |
    | 10-Year Funding Envelope Calculation |  |
    | 10 Year Average Service Level (2009-2018) | 556.33 |
    | Net Population and Employment Growth (2019-2028) | 5,278 |
    | Maximum Allowable Funding Envelope | $\$ 297,304$ |
    | Discounted Maximum Allowable Funding Envelope | $\$ 297,304$ |

[^3]:    

[^4]:    Notes: (1) For total development-related capital program see Appendix B and C.

