



# FINANCE AND ADMINISTRATION COMMITTEE AGENDA

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Finance and Administration Committee Meeting  
**Tuesday, October 22, 2019**  
Tom Davies Square - Council Chamber

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**COUNCILLOR MIKE JAKUBO, CHAIR**

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**Deb McIntosh, Vice-Chair**

4:00 p.m. FINANCE AND ADMINISTRATION COMMITTEE MEETING  
COUNCIL CHAMBER

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## **DECLARATIONS OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF**

## **CONSENT AGENDA**

(For the purpose of convenience and for expediting meetings, matters of business of repetitive or routine nature are included in the Consent Agenda, and all such matters of business contained in the Consent Agenda are voted on collectively.

A particular matter of business may be singled out from the Consent Agenda for debate or for a separate vote upon the request of any Councillor. In the case of a separate vote, the excluded matter of business is severed from the Consent Agenda, and only the remaining matters of business contained in the Consent Agenda are voted on collectively.

Each and every matter of business contained in the Consent Agenda is recorded separately in the minutes of the meeting.)

## **ADOPTING, APPROVING OR RECEIVING ITEMS IN THE CONSENT AGENDA**

### **(RESOLUTION PREPARED FOR ITEM C-1)**

### **ROUTINE MANAGEMENT REPORTS**

- C-1. Report dated September 26, 2019 from the General Manager of Community Development regarding Healthy Community Initiative Fund Applications. **5 - 10**  
**(RESOLUTION PREPARED)**

(This report is requesting approval(s) of eligible Healthy Community Initiative Fund application(s) in accordance with By-law 2018-129.)

## **REGULAR AGENDA**

### **REFERRED & DEFERRED MATTERS**

- R-1. Report dated October 9, 2019 from the General Manager of Corporate Services regarding Sudbury and District Energy Corporation (SDEC) Agreement. **11 - 18**  
**(RESOLUTION PREPARED)**

(This report provides additional information requested by the Committee at the August 13, 2019 Finance and Administration Committee meeting regarding the heating and cooling of Tom Davies Square.)

### **MEMBERS' MOTION**

- M-1. **Request For Business Case For Junction Creek Waterway Park Trail**

As presented by Councillor Landry-Altmann:

WHEREAS the Junction Creek Waterway Park (JCWP), established in 1991, is Greater Sudbury's unique non-motorized trail system that connects the urban community;

AND WHEREAS the JCWP serves as a path to promote active living, healthy lifestyle and is a gateway to the natural environment, a corridor for civic engagement, and as a route toward economic growth;

AND WHEREAS the 2.2 km section of the JCWP which connects the Downtown to the Flour Mill is used extensively at all times of day, and its users would benefit from the installation of lighting to further promote its safe and extended use;

AND WHEREAS Council for the City of Greater Sudbury supports that “protecting and expanding the existing pedestrian and bicycle network in the City is essential to creating quality of place” and will encourage people to choose active transportation over driving, thereby reducing our carbon footprint and traffic congestion;

AND WHEREAS municipalities across Ontario are implementing initiatives to encourage active transportation as a viable alternative to private automobile for short-distance trips and as a method of promoting a more active and healthy lifestyle;

THEREFORE BE IT RESOLVED that the City of Greater Sudbury directs staff to prepare a business case to install lighting along the 2.2 km section of the JCWP trail from the Downtown to the Flour Mill for Council’s consideration during the 2020 budget deliberations.

### **CORRESPONDENCE FOR INFORMATION ONLY**

- |  |                |
|--|----------------|
| I-1. Report dated October 7, 2019 from the General Manager of Corporate Services regarding 2019 Capital Budget Variance Report - July.<br><b>(FOR INFORMATION ONLY)</b><br><br>(This report identifies the capital projects completed as of July 31, 2019 as well as activity within the Holding Accounts.)                            | <b>19 - 35</b> |
| I-2. Report dated October 4, 2019 from the General Manager of Corporate Services regarding 2019 Operating Budget Variance Report - August.<br><b>(FOR INFORMATION ONLY)</b><br><br>(This report provides a year end projection based on expenditures and revenues to the end of August, 2019.)   | <b>36 - 41</b> |
| I-3. Report dated October 8, 2019 from the General Manager of Corporate Services regarding Asset Management Status Report.<br><b>(FOR INFORMATION ONLY)</b><br><br>(This report provides an update on the state of the City's Asset Management Program.)   | <b>42 - 67</b> |
| I-4. Report dated October 4, 2019 from the Interim General Manager of Community Safety regarding Update on Station Revitalization Project.<br><b>(FOR INFORMATION ONLY)</b><br><br>(This report provides an update on asset condition data being used to formulate recommendations with respect to Community Safety Stations Renewal.) | <b>68 - 73</b> |

### **ADDENDUM**

## **CIVIC PETITIONS**

## **QUESTION PERIOD**

## **ADJOURNMENT**

## Request for Decision

### Healthy Community Initiative Fund Applications

Presented To: Finance and  
Administration  
Committee

Presented: Tuesday, Oct 22, 2019

Report Date Thursday, Sep 26, 2019

Type: Routine Management  
Reports

### Resolution

THAT the City of Greater Sudbury approves the Healthy Community Initiative Fund requests, as outlined in the report entitled "Healthy Community Initiative Fund Applications", from the General Manager of Community Development, presented at the Finance and Administration Committee meeting on October 22, 2019;

AND THAT any necessary by-laws be prepared.

### Relationship to the Strategic Plan / Health Impact Assessment

This report supports Council's Strategic Plan with respect to the goal: Create a Healthier Community, as it aligns with the Population Health Priorities of Building Resiliency, Investing in Families, Creating Play Opportunities, Promoting Mental Health Awareness, Achieving Compassionate City Designation and Implementing an Age-Friendly Strategy. The Healthy Community Initiative funds support community-based projects and initiatives that are affordable and promote inclusiveness for the benefit of citizens.

#### Signed By

**Report Prepared By**

Lyne Côté Veilleux  
Co-ordinator of Community Initiatives &  
Quality Assurance  
*Digitally Signed Sep 26, 19*

**Division Review**

Jeff Pafford  
Director of Leisure Services  
*Digitally Signed Sep 26, 19*

**Financial Implications**

Apryl Lukezic  
Co-ordinator of Budgets  
*Digitally Signed Oct 3, 19*

**Recommended by the Department**

Steve Jacques  
General Manager of Community  
Development  
*Digitally Signed Oct 4, 19*

**Recommended by the C.A.O.**

Ed Archer  
Chief Administrative Officer  
*Digitally Signed Oct 4, 19*

### Report Summary

By-law 2018-129 requires Council's approval for all eligible Healthy Community Initiative Capital fund requests exceeding \$10,000, and Grant requests exceeding \$1,000. The General Manager of Community Development is recommending that funding requests identified in the report be approved as proposed.

### Financial Implications

The Healthy Community Initiative (HCI) Fund is allocated within prescribed budgets. Approval of an HCI capital project includes approval of operating costs to be provided in the base budget in subsequent budget years for the operating department.

## **Background**

By-law 2018-129, requires Council's approval for all Grant requests which meet Healthy Community Initiative (HCI) funding criteria and exceed \$1,000 and all Capital requests which meet HCI funding criteria and exceed \$10,000. Eligible applications for Grant requests of \$1,000 or less, and eligible Capital requests of \$10,000 or less may be approved by the General Manager of Community Development.

## **HCI Fund Applications and Financial Summary**

Appendix A - Healthy Community Initiative Fund - Applications, lists HCI Fund requests by Ward as recommended by the General Manager of Community Development for approval by Council. All projects listed in Appendix A have been evaluated against By-law 2018-129 and its related criteria and have been verified to ensure sufficient funds are available within each Ward's funding allocation.

Appendix B – Healthy Community Initiative Fund – Application Outcomes, provides a list of HCI Fund applications that were approved or denied by the General Manager of Community Development since the last report presented at the Finance and Administration Committee meeting on September 17, 2019.

Appendix C – Healthy Community Initiative Fund Financials, includes the recommended approvals contained in this report as well as a summary of HCI Fund allocation balances up to October 22, 2019. The amounts may increase due to reimbursement of under-spent funds from completed and reconciled projects/initiatives.

## **Next Steps**

Upon Council approval, applicants will receive written notification confirming their approved funding and the intended use of funds and grant recipients will also receive a Final Report form. The Final Report form is to be completed by the applicant and returned post-event/project completion for reconciliation by Financial Services. Grant recipients will receive funding via electronic fund transfer or by cheque (where applicable) for the approved amount, whereas a capital funded project will be managed by the City of Greater Sudbury, working closely with the applicant.

Should an HCI fund request not be approved, the applicant will be notified of same.

## **Resources Cited**

Healthy Community Initiative Fund, By-law 2018-129  
<http://agendasonline.greatersudbury.ca/index.cfm?pg=feed&action=file&attachment=24310.pdf>

**Healthy Community Initiative (HCI) Fund  
Applications for Council Approval – October 22, 2019**

**CAPITAL FUNDS**

Ward	Recipient/ Project/ Location	Purpose for Funds	Estimated Operating Costs/Yr	Amount Requested	Amount Recommended for Approval by the GM
5	Alzheimer Society Sudbury-Manitoulin, North Bay & Districts / Outdoor exercise park / North East Centre of Excellence for Seniors' Health, Sudbury	To assist with costs to purchase and install rubberized tiles for safe accessibility to the exercise equipment.	Approx. \$500/yr	\$12,750	\$12,750

**GRANTS**

Ward	Recipient/Initiative	Purpose for Funds	Amount Requested	Amount Recommended for Approval by the GM
No items to report				



## Healthy Community Initiative Fund

### Applications: Approved/Denied by the General Manager, Community Development

For the period of August 31, 2019 to September 25, 2019

#### Successful Applications

<i>Capital Funds</i>				
Ward	Group / Project	Estimated Operating Costs/Yr	Amount Requested	Amount Approved
4	Sudbury Shared Harvest / Edible food garden sign at Elm West Playground	\$100	\$1,195	\$1,195

<i>Grants</i>			
Ward	Group / Project	Amount Requested	Amount Approved
No items to report			

#### Unsuccessful Applications

Ward	Group / Project	Amount Requested	Reason(s) for Denial
No items to report			

**Healthy Community Initiative (HCI) Fund**  
**Financials for the Period Ending October 22, 2019**

**Schedule 1.1 – Capital Funds**

Capital	2019 Allocation	Uncommitted Funds from 2018 (carry forward)*	Approved by Community Development GM 2019	Approved by Council 2019	Proposed for Approval by Council	End Balance of Uncommitted Funds After Resolution*	Pending HCI Funding Requests (to Sept. 25/19)
Ward 1	\$ 24,500	\$ 17,816	\$ 0	\$ 19,000	\$	\$ 23,316	\$ 0
Ward 2	\$ 24,500	\$ 12,417	\$ 2,700	\$ 30,000	\$	\$ 4,217	\$ 0
Ward 3	\$ 24,500	\$ 39	\$ 0	\$ 24,500	\$ -	\$ 39	\$ 0
Ward 4	\$ 24,500	\$ 618	\$ 1,195	\$ 0	\$ -	\$ 23,923	\$ 0
Ward 5	\$ 24,500	\$ 34,954	\$ 0	\$ 0	\$ 12,750	\$ 46,704	\$ 0
Ward 6	\$ 24,500	\$ 40,068	\$ 4,000	\$ 20,000	\$ -	\$ 40,568	\$ 0
Ward 7	\$ 24,500	\$ 15,774	\$ 0	\$ 0	\$ -	\$ 40,274	\$ 0
Ward 8	\$ 24,500	\$ 39,224	\$ 970	\$ 17,000	\$ -	\$ 45,754	\$ 0
Ward 9	\$ 24,500	\$ 50,258	\$ 4,000	\$ 29,000	\$ -	\$ 41,758	\$ 5,000
Ward 10	\$ 24,500	\$ 35,993	\$ 0	\$ 0	\$ -	\$ 60,493	\$ 0
Ward 11	\$ 24,500	\$ 29,344	\$ 0	\$ 53,840	\$ -	\$ 4	\$ 0
Ward 12	\$ 24,500	\$ 8,662	\$ 5,000	\$ 0	\$ -	\$ 28,162	\$ 0

**Schedule 1.2 – Grants**

Grant	2019 Allocation	Uncommitted Funds from 2018 (carry forward)	Approved by Community Development GM 2019	Approved by Council 2019	Proposed for Approval by Council	End Balance of Uncommitted Funds After Resolution*	Pending HCI Funding Requests (to Sept. 25/19)
Ward 1	\$ 12,250	N/A	\$ 1,398	\$ 1,030	\$ -	\$ 9,822	\$ -
Ward 2	\$ 12,250	N/A	\$ 3,133	\$ 4,031	\$ -	\$ 5,086	\$ 700
Ward 3	\$ 12,250	N/A	\$ 2,583	\$ 9,667	\$ -	\$ 0	\$ -
Ward 4	\$ 12,250	N/A	\$ 1,583	\$ 9,530	\$ -	\$ 1,137	\$ -
Ward 5	\$ 12,250	N/A	\$ 3,583	\$ 3,780	\$ -	\$ 4,887 <sup>a</sup>	\$ -
Ward 6	\$ 12,250	N/A	\$ 583	\$ 1,030	\$ -	\$ 10,637	\$ -
Ward 7	\$ 12,250	N/A	\$ 2,083	\$ 1,030	\$ -	\$ 9,137	\$ 700
Ward 8	\$ 12,250	N/A	\$ 1,083	\$ 4,530	\$ -	\$ 6,637	\$ -
Ward 9	\$ 12,250	N/A	\$ 2,283	\$ 6,680	\$ -	\$ 3,287	\$ -
Ward 10	\$ 12,250	N/A	\$ 5,033	\$ 2,030	\$ -	\$ 5,187	\$ -
Ward 11	\$ 12,250	N/A	\$ 1,833	\$ 1,530	\$ -	\$ 8,887	\$ -
Ward 12	\$ 12,250	N/A	\$ 1,828	\$ 3,230	\$ -	\$ 7,192	\$ -

\* The amounts may increase due to reimbursement of under-spent funds from completed and reconciled projects/initiatives.

## Request for Decision

### Sudbury and District Energy Corporation (SDEC) Agreement

Presented To: Finance and Administration Committee

Presented: Tuesday, Oct 22, 2019

Report Date: Wednesday, Oct 09, 2019

Type: Referred & Deferred Matters

### Resolution

THAT the City of Greater Sudbury directs staff to enter into a sole source agreement with the Sudbury and District Energy Corporation (SDEC), as they are the only company that has the infrastructure in place to meet the requirements of the City, for the provision of heating and cooling at Tom Davies Square and to negotiate rates for a period of 20 years, as outlined in the report entitled "Sudbury and District Energy Corporation (SDEC) Agreement", from the General Manager of Corporate Services, presented at the Finance and Administration Committee meeting on October 22, 2019.

### Relationship to the Strategic Plan / Health Impact Assessment

This report refers to the provision of heating and cooling to Tom Davies Square and the replacement of aging infrastructure.

### Report Summary

An agreement was negotiated in 1999 between the former City of Sudbury and the Sudbury District Energy Corp (SDE) to supply heating to Tom Davies Square (TDS) and heating and cooling to the Sudbury Community Arena. The 20 year contract expires in November 2019.

An analysis of options (renegotiating an agreement with SDE or investing in capital infrastructure to self-generate heating and cooling) was completed by staff. At the Finance and Administration Committee meeting of August 13, 2019, in an original reported, entitled "SDEC Agreement" it was recommended that the City of Greater Sudbury renegotiate the agreement with SDE.

A decision was deferred by the Finance and Administration Committee on August 13, 2019, pending responses to several questions. This report provides responses to those questions.

#### Signed By

##### Report Prepared By

Rob Blackwell  
Corporate Project Management  
Coordinator  
*Digitally Signed Oct 9, 19*

##### Financial Implications

Liisa Lenz  
Coordinator of Budgets  
*Digitally Signed Oct 9, 19*

##### Recommended by the Department

Kevin Fowke  
General Manager of Corporate  
Services  
*Digitally Signed Oct 9, 19*

##### Recommended by the C.A.O.

Ed Archer  
Chief Administrative Officer  
*Digitally Signed Oct 9, 19*

## **Financial Implications**

Should the City proceed to enter into the agreement recommended in this report, the 2020 operating budget will need to be increased approximately \$137,000 to reflect the capital portion of the agreement in regards to cooling. This operating expense will negate the requirement for approximately \$2 million in capital funding as the City will no longer need to replace the current chillers that are at the end of their useful lives.

## **Background**

An agreement was negotiated in 1999 between the former City of Sudbury and the Sudbury District Energy Corp (SDE) to supply heating to Tom Davies Square (TDS) and heating and cooling to the Sudbury Community Arena. The 20-year contract expires in November 2019. SDE has committed to an extension to January 1, 2020.

At the August 13<sup>th</sup>, 2019 Finance and Administration Committee Meeting a report entitled “SDEC Agreement” was tabled. That report recommended another 20-year agreement with recently negotiated rates that resulted in net savings of \$660K for heating and cooling Tom Davis Square taking into account comparable rates to self-generate heating and cooling and required capital expenditure to upgrade and maintain boilers and chillers at TDS.

The Committee had several questions that required further analysis. A decision on the agreement was deferred.

This report provides clarification and some further analysis in response to the questions and issues raised at the August 13<sup>th</sup> meeting.

Link to original report:

<http://agendasonline.greatersudbury.ca/index.cfm?pg=feed&action=file&agenda=report&itemid=5&id=1370>

Questions/Issues:

- Implications for a 10-year contract with an option to extend for 10 years
- Implications for costs if we include 199 Larch St and “the Junction” in the future
- Implications if self-generating option is discounted @ 2.6% instead of 3.23%
- Can we purchase SDEC if we are going to be the primary user in Sudbury would it make sense to buy it and run it as a profit centre?

## **Analysis**

### ***Implications of a 10 years agreement with an option to renew***

A comparison of the annual costs for heating and cooling for SDE provided energy for a 20-year contract compared to a 10-year contract suggests that the shorter term contract would result in an increased total cost (for heating and cooling) of approximately \$76,200 per year.

The present value comparison for a 10-year agreement with a 10-year renewable option (to provide a 20-year comparison), suggests that the SDEC option would be approximately \$860K more expensive than the self-generating option. There is inherent risk in this option as the present value calculation does not consider changes that could impact the contract for the “optioned” period (years 11 – 20), the rates for these years could potentially be higher than the rates that the City has been able to negotiate.

### ***Implications for costs if we include 199 Larch St and “the Junction” in the future***

Discussions have been occurring with SDE regarding the existing cooling function at 199 Larch St, and they have expressed interest in connecting the building to the district loop as there may be mutual benefits in fully utilizing the capacity of the energy systems in that facility.

In addition to the potential for an agreement for 199 Larch St. and the existing cooling function, there may also be potential for additional capital cost avoidance in supplementing or replacing the heating system that will require future replacement/repairs. It is anticipated that the heating system for 199 Larch St. will be near the end of its life cycle in approximately 10 years. Adding this facility to the district loop for heating could potentially be considered at that time.

High level cost estimates could be provided for future developments (i.e “The Junction”) based on known factors (square footage). SDE staff have advised that any cost estimates for heating/cooling for future facilities would be based on individual buildings and needs.

Regarding potential for including the “Place des Arts” development in the district energy program, it is reported that the design for that project had been completed with a self-generating design.

### ***Implications of lower interest rates if we debt finance for capital upgrade to self-generate***

Lower interest rates, for the corporation, would reflect a lower “discount” rate for a capital project (since we would not likely “borrow” funds to complete the capital work). There would be an annual difference of \$7,797 if the capital investment is discounted at 2.6% over a 20-year period, instead of 3.23% with a self-generating heating/cooling option.

### ***Can we purchase SDEC?***

The short answer is “yes”. In the right circumstance, and for the right consideration, Toromont Power Systems has responded that they would consider a sale. They would also consider a sale with a contract to operate/maintain. Toromont has provided examples of other Municipalities where they have either sold the direct energy operation to a municipality or sold and were retained to operate the facility. Toromont’s Greater Sudbury operations also encompasses an emergency generation system and heating and cooling generation plant at Health Sciences North. The representatives could not provide an order of magnitude regarding a potential price tag for a purchase, as this would require significant analysis on their end as well.

If City Council wished to pursue this option, an in-depth, detailed analysis of the business model and financial implications would be required.

## **Background**

An agreement was negotiated in 1999 between the former City of Sudbury and the Sudbury District Energy Corp (SDE) to supply heating to Tom Davies Square (TDS) and heating and cooling to the Sudbury Community Arena. The 20-year contract expires in November 2019.

As part of the overall district energy concept, significant infrastructure was created to support the transportation of energy (hot water, steam, chilled water) to various buildings in the downtown core. These buildings' heating and cooling energy requirements are supplied by a centralized heating and cooling plant. The Energy Service is delivered in the form of hot and chilled water from centralized facilities. The buildings use hot and chilled water to provide for their space heating, domestic hot water, and cooling requirements. Figure 1 illustrates the buildings in the downtown core currently serviced by SDE.

The City of Greater Sudbury (CGS) currently uses SDE for heating 200 Brady and cooling and heating the Sudbury Community Arena. The original contract for services for TDS and the Sudbury Community Arena provided for a "fixed capacity charge" to assist the service provider in funding capital costs for the infrastructure, and incremental "energy costs" that were calculated based on actual energy consumption.

In addition to the SDE contract expiring, the chillers currently being utilized to provide cooling for TDS are reaching end of useful life and would require significant capital investment to replace. Since the original agreement with SDE. Not renewing the SDE contract would also result in CGS having to further invest in a solution to heat TDS and find a solution to heat and cool the Sudbury Community Arena.

## **Options and Financial Information**

A recent cost/benefit analysis, based on historical costs for heating and cooling, anticipated capital costs to self-generate and estimates from SDE, have been completed to compile options to ensure that CGS has a cost-effective means of heating and cooling the affected facilities moving forward. Additionally, SDE has committed to ensuring that cost of heating and cooling utilizing their system will not exceed the costs that could be anticipated if CGS chose to self-generate heating and cooling.

Considerations for the financial impact of any decision taken regarding the heating and cooling of TDS include several factors. As SDE infrastructure is currently in place for heating and any additional capital costs for cooling would be borne by SDE (and recovered as a "fixed capacity charge"), there is no immediate impact to current or future capital budgets for CGS.

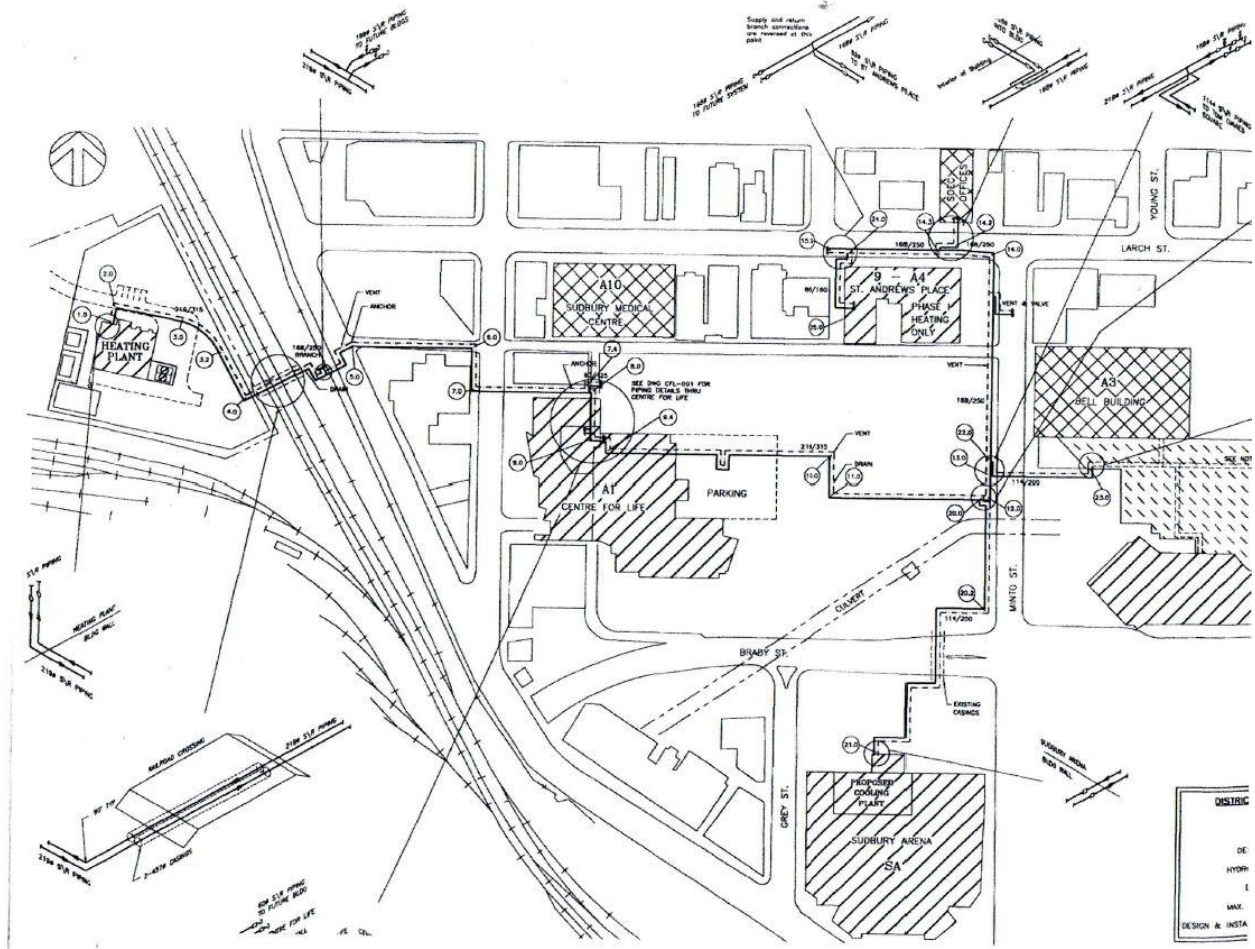


Figure 1: SDE Map – Downtown

A solution that includes self-generating heating and cooling for TDS would require significant capital investment as the current infrastructure does not exist to adequately provide the necessary level of service. Estimates for the initial capital investment for heating are approximately \$977,400. Capital investment for a self-generated cooling solution is estimated to be approximately \$2M. These estimates are for TDS but do not address the requirements of the Sudbury Community Arena, which currently relies on SDE for heating and cooling.

As referenced in Table 1, when comparing the cost of providing heating and cooling using SDE or self-generating heating and cooling, the overall costs are relatively equal on an annual basis, but when a longer term calculation is applied using present value over a 20 year term, there is a significant advantage in maintaining the relationship with SDE. As per "Note 2" in the table below, this longer-term calculation includes the requirement to make approximately \$3M in capital expenditures in 2020.



**Table 1: Annual Costs**

	<b>SDEC</b>	<b>Self-Generated</b>	<b>Variance</b>
<b>Heating</b>			
<b>Operating</b>	\$125,700	\$125,700	
<b>Capital</b>	\$98,300 <sup>1</sup>	\$67,102 <sup>2</sup>	
<b>Sub-Total</b>	<b>\$224,000</b>	<b>\$192,802</b>	<b>\$31,198</b>
<b>Cooling</b>			
<b>Operating</b>	\$61,300	\$61,300	
<b>Capital</b>	\$106,200 <sup>1</sup>	\$137,306 <sup>2</sup>	
<b>Sub-Total</b>	<b>\$167,500</b>	<b>\$198,606</b>	<b>(\$31,106)</b>
<b>TOTAL</b>	<b>\$391,500</b>	<b>\$391,408</b>	<b>\$92</b>
Notes:			
<sup>1</sup> Annual Fixed Capacity Charge - operating budget expense			
<sup>2</sup> Capital annualized @ 3.23% over 20 years			

**Table 2: Present Value - 20 yrs**

	<b>SDEC</b>	<b>Self-Generated</b>	<b>Variance</b>
<b>Heating</b>	\$3,781,799	\$3,517,782	\$264,017
<b>Cooling</b>	\$2,831,495	\$3,755,877	<b>(\$924,382)</b>
<b>TOTAL</b>	<b>\$6,613,294</b>	<b>\$7,273,659</b>	<b>(\$660,365)</b>

A net present value calculation is used as a comparison tool to show the impact of various options for an investment that has differing costs over a period. In the above example the cost avoidance of not having to do a large capital investment in the cooling system shows that the decision to procure heating and cooling provides a lower cost to the City.

## Other Considerations

### Capital Costs Avoidance

Many competing priorities for capital funding across the organization and partnering with SDE removes the requirement for further capital funding for heating and cooling at TDS and the Sudbury Arena.

### Community Impact

An agreement will see a continuance of the long-standing partnership that benefits not only CGS but neighbouring downtown businesses and institutions.

**Green Initiatives**

An agreement would result in reduced carbon dioxide emissions, resulting in a reduced carbon footprint (reduction of approximately 73 tons of carbon dioxide emissions).

**Economic Drivers**

There is potential for CGS to advocate for SDE as a creative incentive for downtown businesses and initiatives, to include district energy as a source of heating and cooling for new development or replacement of heating and cooling systems for existing businesses.

**Conclusion**

The CGS renegotiate the sole source agreement with SDE, including a rate structure, for a period of 20 years. SDE has committed to ensuring that costs for a new contract will not exceed costs anticipated if self-generating heating/cooling. This option avoids the risk of a major capital project that would require the procurement, installation and ongoing maintenance of self-generating. It also ensures that the Sudbury Community Arena has a consistent source of heating and cooling and with the continued presence of SDE in the downtown core, other buildings currently being serviced, and future development can access the service.

## For Information Only

### 2019 Capital Budget Variance Report - July

Presented To: Finance and  
Administration  
Committee

Presented: Tuesday, Oct 22, 2019

Report Date Monday, Oct 07, 2019

Type: Correspondence for  
Information Only

### Resolution

For Information Only

### Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

### Report Summary

The purpose of this report is to provide information on the completed capital projects from January 1, 2019 to July 31, 2019, as well as the activity within the three holding account reserves.

### Financial Implications

This report has no financial implications.

#### Signed By

##### **Report Prepared By**

Apryl Lukezic  
Co-ordinator of Budgets  
*Digitally Signed Oct 7, 19*

##### **Manager Review**

Jim Lister  
Manager of Accounting/Deputy  
Treasurer  
*Digitally Signed Oct 7, 19*

##### **Division Review**

Ed Stankiewicz  
Executive Director of Finance, Assets  
and Fleet  
*Digitally Signed Oct 8, 19*

##### **Financial Implications**

Apryl Lukezic  
Co-ordinator of Budgets  
*Digitally Signed Oct 7, 19*

##### **Recommended by the Department**

Kevin Fowke  
General Manager of Corporate  
Services  
*Digitally Signed Oct 8, 19*

##### **Recommended by the C.A.O.**

Ed Archer  
Chief Administrative Officer  
*Digitally Signed Oct 8, 19*

The Capital Budget Policy states that the CFO will provide the Finance and Administration Committee or Council with a Capital Variance Report after each quarter end as follows:

- a. March month end (no activity to report in 2019)
- b. June month end (July month-end used in 2019)
- c. September month end
- d. December year end

In accordance with the Capital Budget Policy, this capital variance report includes two sections: **Part A** – Completed Capital Report; and **Part B** – Holding Account Reserves Activity.

### **Part A – Completed Capital Report**

This section of the report identifies capital projects in excess of \$200,000 which have been completed for the period of January 1, 2019 to July 31, 2019, as well as the cancelled projects for the same period. Variance explanations are included for variances over \$100,000 on completed capital projects (Appendix A – Table 1) as well as cancelled capital projects (Appendix A – Table 3).

The variances were as a result of tender pricing or relating to site conditions/scope changes. Most of the capital projects have achieved their approved scope.

The adjustments column on Appendix A – Table 1 and Appendix A – Table 2 represent transfers completed prior to January 1, 2019 between capital projects under the previous Capital Budget Policy. The Capital Budget Policy (in effect up to December 31, 2018) enabled staff to reallocate funds when projects were projected to exceed the approved budgets due to tender pricing or site conditions/scope changes in order to ensure completion of the approved scope of the project.

Capital projects reported as completed on Appendix A – Table 1 have not had surpluses or deficits transferred to the Holding Account Reserves as of this report. This is due to the use of estimates being used for final project cost. The final surplus or deficit on each project will be reflected as transfers to/from the Holding Account Reserve in future capital variance reports.

Appendix A – Completed Capital contains:

#### **1. Table 1 –**

##### **Completed Capital Projects over \$200,000 with variances over \$100,000**

This table provides a listing of all completed capital projects over \$200,000 with explanations of variances over \$100,000.

## **2. Table 2 –**

### **Completed Capital Projects over \$200,000 with variances below \$100,000**

This table provides a listing of all completed capital projects over \$200,000 with variances below the threshold of \$100,000.

## **3. Table 3 – Cancelled Capital Projects**

This table provides a listing of all cancelled capital projects with variance explanations.

## **Part B – Holding Account Reserves Activity**

The second part of this report provides the activity details of the three Holding Account Reserves.

Appendix B – Holding Account Reserves Activity contains the following information:

- 1. Capital General Holding Account Reserve – Tables 1-3**
- 2. Wastewater Holding Account Reserve – Tables 4-6**
- 3. Water Holding Account Reserve – Tables 7-9**

These three Holding Account Reserves were created in 2019 after Council approved the revised Capital Budget Policy and these reserves are to fund all project deficits (overspending) from other project surpluses (underspending).

The overall continuity schedule of the Holding Account Reserve details the transactions to and from, which highlight under and overspending.

Table 1 highlights the transactions from January 1<sup>st</sup> to July 31<sup>st</sup>, which include the original transfer from the Capital Financing Reserve Fund – General, along with transfers due to over and underspending. Other transfers have been made with CAO and Council approvals, as well as transfers for emergency purchases as defined in the Purchasing By-law.

Table 2 highlights the surplus transfers to the Holding Account Reserve by project.

Table 3 shows the transfers from the Holding Account Reserve along with the corresponding explanations. It is to be noted that any project requiring more than \$100,000 from the Holding Account Reserve requires the approval of the CAO as it exceeds 10% of the original budget but is below \$250,000 total funding from the Holding Account Reserve, which requires Council approval as per the Capital Budget Policy.

Tables 4-6 represent the same logic for the Wastewater Holding Account Reserve.

Tables 7-9 represent the same logic for the Water Holding Account Reserve.

Appendix A - Table 1 - Variances over \$100,000  
City of Greater Sudbury  
Completed Capital Projects over \$200,000  
Completed between January 1, 2019 to July 31, 2019

Division	Project Description	Year Started	Budget	Council Approved Budget	Adjustments	Revised Budget	Final Cost	Transfer (to) / from Holding Account	Total Variance (Final Cost less Council Approved Budget)	Accomplishments	Variance Explanation
Variances Over \$100,000				(A)	(B)	(A) + (B) = (C)	(D)	(E)	=(A-D) or (B+E)		
<b>Growth &amp; Infrastructure</b>											
<b>Roads</b>	Birch Street Subdivision Azilda	2017	2017 Capital Budget	740,000	(130,000)	610,000	513,089	(96,911)	(226,911)	Completed as per original scope.	Tender prices were favourable compared to budget estimate.
<b>Roads</b>	Consulting Services - Future Projects	2015	2015 & 2016 Capital Budget	700,000	(377,032)	322,968	289,780	(33,188)	(410,220)	Consulting and pre-engineering work for various projects completed.	Less consulting work was required than budgeted.
<b>Roads</b>	CWWWF - Tilton Lake Road - Culvert	2017	Resolution CC2016-339	330,000	(137,874)	192,126	189,505	(2,621)	(140,495)	Completed as per original scope.	Tender prices were favourable compared to budget estimate.
<b>Roads</b>	Sidewalk/Curb Various Projects	2017	2017 Capital Budget	500,000	11,332	511,332	634,497	123,165	134,497	Completed as per original scope.	Tender prices were unfavourable compared to budget estimate.
<b>Roads</b>	Surface Treatment	2018	2016 Capital Budget	1,245,000	(110,894)	1,134,106	1,133,017	(1,089)	(111,983)	Completed as per original scope.	Tender prices were favourable compared to budget estimate.
<b>Roads</b>	Talon Street from Will Street to Josephine Street	2017	2017 Capital Budget	230,000	(100,010)	129,990	128,158	(1,831)	(101,842)	Completed as per original scope.	Tender prices were favourable compared to budget estimate.
<b>Bridge Rehabilitation</b>	Balsam Street Bridge	2014	2009 Capital Budget	575,000	629,122	1,204,122	1,203,428	(694)	628,428	Original Scope was achieved. Estimate showed more budget was required than originally anticipated. No change in original scope.	Original budget request insufficient for construction cost.
<b>Bridge Rehabilitation</b>	Black Lake Road Bridge	2015	2013 Capital Budget	450,000	872,372	1,322,372	1,306,811	(15,561)	856,811	Original Scope was achieved. Estimate showed more budget was required than originally anticipated. No change in original scope.	Original budget request insufficient for construction cost.
<b>Bridge Rehabilitation</b>	Garson Coniston Road Bridge	2017	2014 & 2017 Capital Budget	1,050,000	(321,368)	728,632	709,975	(18,657)	(340,025)	Original Scope was achieved. Tender amount significantly less than budget request. No change in original scope.	Original budget request greater than tender value.
<b>Bridge Rehabilitation</b>	Government Road Bridge (Coniston)	2015	2011 Capital Budget	600,000	1,289,841	1,889,841	1,889,464	(377)	1,289,464	Original Scope was achieved. Estimate showed more budget was required than originally anticipated. No change in original scope.	Original budget request insufficient for construction cost.
<b>Bridge Rehabilitation</b>	Little Panache Lake Narrows Bridge	2015	2011 Capital Budget	550,000	863,594	1,413,594	1,374,941	(38,653)	824,941	Original Scope was achieved. Estimate showed more budget was required than originally anticipated. No change in original scope.	Original budget request insufficient for construction cost.
<b>Bridge Rehabilitation</b>	Riverside Drive Bridge	2015	2013 Capital Budget	900,000	979,034	1,879,034	1,837,591	(41,444)	937,591	Original Scope was achieved. Estimate showed more budget was required than originally anticipated. No change in original scope.	Original budget request insufficient for construction cost.
<b>Water Linear</b>	Beatrice Crescent Culvert - Watermain Work	2018	2013 Capital Budget	200,000	(67,339)	132,661	48,310	(84,351)	(151,690)	The original project scope included replacement of a section of watermain under the culvert crossing Beatrice Street, during the culvert replacement contract. The original project scope was maintained.	The Capital Budget amount was based on preliminary design. The actual field conditions encountered differed from what was anticipated during detailed design.
<b>Water Linear</b>	Loach's Road - Eden Point to 40m North of Aspenwood Court (Lining)	2018	2018 Capital Budget	350,000	194,662	544,662	544,662	(0)	194,662	The original project scope included rehabilitation (lining) of approximately 560m of watermain and replacement of valves & hydrants, in advance of roads resurfacing work. The original project scope was maintained.	The Capital Budget amount was based on preliminary design. The tendered bid amounts were higher than expected.

Appendix A - Table 1 - Variances over \$100,000  
City of Greater Sudbury  
Completed Capital Projects over \$200,000  
Completed between January 1, 2019 to July 31, 2019

Division	Project Description	Year Started	Budget	Council Approved Budget	Adjustments	Revised Budget	Final Cost	Transfer (to) / from Holding Account	Total Variance (Final Cost less Council Approved Budget)	Accomplishments	Variance Explanation
Water Linear	MacLachlan Street from Spruce Street to South End	2016	2016 Capital Budget	325,000	(172,875)	152,125	151,248	(877)	(173,752)	The original project scope included replacement of approximately 90m of watermain, services and appurtenances. The original project scope was maintained.	The Capital Budget amount was based on preliminary design. The detailed design confirmed less rock would be encountered than what was assumed by the conceptual design. The tendered bid amounts were lower than expected.
Water Linear	Various Bridges & Culverts - Watermain Work	2018	2013 Capital Budget	300,000	(208,522)	91,478	86,042	(5,436)	(213,958)	The original project scope included watermain replacement under various culverts that were being replaced in 2018. The watermain located under the Marier St. culvert in Azilda was replaced with this funding.	This account is used for watermain replacement at various culvert & bridge locations. The Capital Budget amount was based on preliminary design, however until the detailed design is well underway, the scope of work on the underground infrastructure is not typically confirmed.
Water Plants	Well Building Upgrades	2014	2013 Capital Budget	500,000	(382,698)	117,302	80,059	(37,243)	(419,941)	Project complete.	Surplus result of accounts consolidation.
<b>Corporate Services</b>											
Fleet	Vehicle/Equipment Rebuilding	2018	2018 Capital Budget	200,000	(89,284)	110,716	94,845	(15,870)	(105,155)	Not fully achieved as overspending has occurred in the similar account for 2019.	Surplus funds will be transferred to the Capital Financing Reserve Fund - Fleet and be used for other project deficits at year end.
Transit	Automatic Vehicle Locator	2017	2017 Capital Budget	200,000	(101,241)	98,759	97,519	(1,241)	(102,481)	Project is part of PTIF program and completed in full and on time. The scope of work did not change as there was favourable pricing compared to estimate.	Underbudget due to favourable pricing compared to budget. \$100,000 was re-allocated to another PTIF project based on revised department needs.

Shaded transfers have/will go to their respective reserve fund or be adjusted for grant funding.

Appendix A - Table 2 - Variances under \$100,000  
City of Greater Sudbury  
Completed Capital Projects over \$200,000  
Completed between January 1, 2019 to July 31, 2019

Division	Project Description	Year Started	Budget	Council Approved Budget	Adjustments (A)	Revised Budget	Final Cost	Transfer (to)/ Holding Account (B)	Total Variance (Final Cost less Council Approved Budget)	Accomplishments
Variances Under \$100,000				(A)	(B)	(A) + (B) = (C)	(D)	(E)	=(A-D) or =(B+E)	
<b>Growth &amp; Infrastructure</b>										
<b>Roads</b>	Lamothe Street from Barry Downe Road to Leon Avenue/Arvo Street from Sparks Street to 0.4km North	2016	2016 Capital Budget	820,000	5,468	825,468	818,035	(7,433)	(1,965)	Completed as per original scope.
<b>Bridge Rehabilitation</b>	Mikkola Road Bridge	2015	2012 & 2017 Capital Budget	1,670,000	88,061	1,758,061	1,753,938	(4,123)	83,938	Original Scope was achieved. Estimate showed more budget was required than originally anticipated. No change in original scope
<b>Bridge Rehabilitation</b>	Old Soo Road Culvert	2017	2016 & 2017 Capital Budget	500,000	34,725	534,725	527,742	(6,983)	27,742	Original Scope was achieved. Estimate showed more budget was required than originally anticipated. No change in original scope
<b>Bridge Rehabilitation</b>	Vermillion River Bridge (Panache Lake Road)	2015	2013 Capital Budget	650,000	(37,837)	612,163	598,122	(14,041)	(51,878)	Original Scope was achieved. Estimate showed less budget was required than originally anticipated. No change in original scope
<b>Water Linear</b>	Attlee Avenue - Gemmell Street to Lasalle Boulevard	2018	2018 Capital Budget	800,000	51,777	851,777	851,777	-	51,777	The original project scope included rehabilitation (lining) of approximately 650m of watermain and replacement of valves & hydrants, in advance of roads resurfacing work. The original project scope was maintained.
<b>Water Linear</b>	McAllister Avenue - Lasalle Boulevard to South End	2018	2018 Capital Budget	575,000	69,084	644,084	644,084	-	69,084	The original project scope included rehabilitation (lining) of approximately 450m of watermain and replacement of valves & hydrants, in advance of roads resurfacing work. The original project scope was maintained.
<b>Water Linear</b>	System Improvements (Development Related)	2017	2017 Capital Budget	200,000	(37,861)	162,139	162,139	-	(37,861)	This account is used to fund watermain upgrades at various locations in accordance with the City's Development Cost Sharing Policy. The adjustment / variance amount was used for the trunk watermain to service the industrial park in Coniston, in accordance with the report that was accepted by Council.
<b>Wastewater Linear</b>	Algonquin Sewer	2016	2015 Capital Budget	220,000	(82,219)	137,781	129,495	(8,286)	(90,505)	There was additional scope change, such as subdrain installation, asphalt pavement removal, concrete curb and gutter, concrete structures, sodding, etc.
<b>Wastewater Plants</b>	Various Plant Repairs/Equipment Upgrades/Operational Support	2015	2015 Capital Budget	200,000	(35,471)	164,529	164,885	356	(35,115)	Achieved scope.



Appendix A - Table 3 - Cancelled Capital Projects  
 City of Greater Sudbury  
 Completed Capital Projects over \$200,000  
 Completed between January 1, 2019 to July 31, 2019

Division	Project Description	Budget	Original Council Approved Budget	Final Cost	Transfer to Holding Account	Explanation
Cancelled Projects						
Growth & Infrastructure						
Roads	Poplar Street from Stanley Street to West End	2018 Capital Budget	40,000	-	40,000	Asphalt surfacing was not required as water / wastewater component was cancelled.
Planning & Development	Mapping/Ortho Photography (Update of Existing Data)	2018 Capital Budget	104,403	-	103,970	Costs were funded from the Drains Watershed Studies account as required for the watershed project. Minor variance between original budget and transfer to holding account was due to a transfer to another Mapping account in 2018.

**CITY OF GREATER SUDBURY**  
**Continuity of Reserve - Capital General Holding Account**  
**Appendix B - Table 1**

<b>Opening Balance - January 1, 2019</b>		-
<b>Transfer from Capital Financing Reserve Fund - General</b>		<b>4,000,000</b>
<b>Transfer to Holding Account - Project Surpluses</b>		
Assets	255,432	
CD Facilities	5,556	
Drains	168,844	
Leisure	2,622	
Planning	121,427	
Roads	1,093,988	
Social Services	200,000	
Transit	57	
	<b>Appendix B - Table 2</b>	<b>1,847,925</b>
<b>Transfer from Holding Account - Project Deficits</b>		
Administration	(1,188)	
Assets	(4,120)	
Children & Citizen Services	(2,118)	
CAO	(12,081)	
Drains	(24,000)	
Environmental Services	(100,000)	
Fire	(490)	
Leisure	(41,504)	
Pioneer Manor	(248)	
Planning	(21,006)	
Roads	(1,644,714)	
Transit	(102)	
	<b>Appendix B - Table 3</b>	<b>(1,851,571)</b>
<b>Transfer from Holding Account - CAO Approval</b>		
Environmental Services	(34,000)	
	<b>Appendix B - Table 3</b>	<b>(34,000)</b>
<b>Transfer from Holding Account - Council Approvals</b>		
Drains	(1,830,000)	
	<b>Appendix B - Table 3</b>	<b>(1,830,000)</b>
<b>Transfer from Holding Account - Emergency Purchases</b>		
Assets	(82,299)	
CD Facilities	(42,370)	
Leisure	(63,800)	
Pioneer Manor	(83,477)	
Roads	(220,000)	
	<b>Appendix B - Table 3</b>	<b>(491,946)</b>
<b>Ending Balance - July 31, 2019</b>		<b>1,640,408</b>

**Appendix B - Table 2 - Transfers to Holding Account (Project Surpluses)**

<b>Transfers to Holding Account</b>		
<b>Section</b>	<b>Description</b>	<b>Holding Account Contribution</b>
Assets	Solar Panels	255,432
CD Facilities	Energy Retrofits	1,337
CD Facilities	Various Engineering Studies	1,800
CD Facilities	Various Facilities	1,739
CD Facilities	Various Parks	679
Drains	Facer Street	168,844
Leisure	Laurentian Playground	2,316
Leisure	Ski Hill Upgrades	306
Planning	GPS Equipment	17,457
Planning	Mapping Photography	103,970
Roads	Arvo Street	7,433
Roads	Azilda Subdivisions	96,911
Roads	Balsam St. Bridge	694
Roads	Bethune Avenue	4,107
Roads	Black Lake Road	15,561
Roads	Bonin Street	50,000
Roads	Carmen Street	1,221
Roads	Carol Street	5,357
Roads	Crescent Avenue	2,315
Roads	CWWWF - Tilton Lake Road - Culvert	2,621
Roads	Danforth Avenue	120,000
Roads	Field Street	2,568
Roads	Future Roads Projects	574
Roads	Future Roads Projects	1,066
Roads	Future Roads Projects	19,362
Roads	Future Roads Projects	13,826
Roads	Garson Coniston Rd Bridge	18,657
Roads	Glendale Court	2,031
Roads	Government Rd Bridge(Coniston)	377
Roads	Gregg Lane	1,274
Roads	Guide Rail Installations	4,322
Roads	Lamothe Street	6,560
Roads	Little Panache Bridge	38,653
Roads	Marier Street	6,690
Roads	Mikkola Road Bridge	4,123
Roads	MR55 to McCharles LkRd 1.75kmW	76,659
Roads	Northway Avenue	5,552
Roads	Old Soo Road Culvert	6,983
Roads	Panache Lake Rd Bridge	14,041
Roads	Poplar Street from Stanley Street to West End	40,000
Roads	Power Street	289
Roads	Property Acquisition	4,861
Roads	Riverside Drive Bridge	41,444
Roads	Second Avenue (Coniston)	462,624
Roads	St Nicholas	6,174
Roads	Surface Treatment	2,325
Roads	Surface Treatment	1,089
Roads	Talon Street	1,831
Roads	Trembley Street	1,221
Roads	Various Bridge Repairs	2,594
Social Services	Community Hubs/Recomm Space	200,000
Transit	Handi Transit	57
		<b>1,847,925</b>

**Appendix B - Table 3 - Transfers from Holding Account (Project Deficits)**

Transfers from Holding Account					
Section	Description	Original Budget	Max Draw	Holding Account Draw	Explanation for Funding from Holding Account
Administration	Central Mailing Equipment	75,429	100,000	1,188	Insignificant overage compared to original budget - no explanation required.
Assets	Skylight Replacement	165,000	100,000	4,120	The balance of the project between TDS and Larch is off. 8343 has \$83k remaining and should be used to balance the \$8.7k overage from TDS portion.
CAO	Network Wireless Infrastructure	200,000	100,000	11,978	Increased growth and demand by city staff requiring wireless access within city facilities, and installaton of high density access points at key locations to support higher numbers of simultaneous connections.
CAO	Network Wireless Infrastructure	20,000	100,000	103	Insignificant overage compared to original budget - no explanation required.
Children & Citizen Services	Capreol Citizen Centre Roof Repairs	79,845	100,000	2,118	Insignificant overage compared to original budget - no explanation required
Drains	Countryside SW Pond Project Costs	2,677,982	250,000	24,000	Scope increased due to poor soils and required additional inspection and contract administration.
Environmental Services	Azilda Landfill Stage 1 Final Cover	1,000,000	100,000	100,000	The original estimate was completed in 2016 and the scope was revised based on more accurate capping quantities and the addition of one specification that was missed in the original estimate. Four bids with a range in bid item pricing were received (Bid A: \$1,133,225.72; Bid B \$1,560,751.63; Bid C \$2,131,261.44 and Bid D \$2,571,688.90) with the lowest bidder selected.
Fire	Support Vehicle	207,582	100,000	490	Insignificant overage compared to original budget - no explanation required. (dept response - Prices for support vehicles and outfit have increased.)
Leisure	Capreol Splash Pad	100,088	100,000	1,367	No change in original scope of the project, over budget due to inflationary increase in equipment and materials cost.
Leisure	Fire Alarm Panels	34,547	100,000	5,850	Additional electrical permit fees related to fire control panel replacement for six community arenas.
Leisure	Millennium Accessibility	145,746	100,000	5,318	Additional work required to commission the accessible lift.
Leisure	Onaping Splash Park-Contract Costs	227,500	100,000	935	No change in original scope of the project, over budget due to inflationary increase in equipment and materials cost.
Leisure	St Joseph's Parking Lot	1,275,000	127,500	23,004	Required additional trenching and concrete wall repair works, were not part of the original scope.
Leisure	Tennis Court Resurfacing	35,300	100,000	5,029	Additional asphalt and fencing for basketball court at St. Joseph Park.
Pioneer Manor	Therapeutic Equipment	120,895	100,000	248	Minor variance in price from original estimate.
Planning	Elgin Street Greenway	210,799	100,000	10,158	The overage for the Elgin Greenway was due to the need to review the design in light of changes to accessibility legislation. Project is not complete at this time.
Planning	Survey & GPS Equipment	70,000	100,000	10,848	Actual costs were higher than anticipated as the trade-in amount received from trade-in of old equipment was recorded separately and contributed to reserve fund in accordance with City policies.
Roads	Beatty Street - Roads	2,040,000	204,000	204,000	Tender prices were higher than the budget estimate.
Roads	Brady Durham Greenstairs	1,641,515	164,152	164,152	Note - deficit to be covered by Holding Account (additional \$20,000 to be approved by CAO (row 48 below based on to date spending)
Roads	CKSO Road	2,280,000	228,000	100,000	Tender prices were higher than the budget estimate.
Roads	Dominion - Roads	3,357,564	250,000	250,000	Tender prices were higher than the budget estimate.
Roads	Elm Street - Roads	1,925,000	192,500	192,500	Tender prices were higher than the budget estimate.
Roads	Gutcher Ave	486,691	100,000	2,534	Insignificant overage compared to original budget - no explanation required
Roads	Hydraulic Crusher	100,000	100,000	1,608	Insignificant overage compared to original budget - no explanation required
Roads	Mary Street - Roads	300,000	100,000	100,000	Tender prices were higher than the budget estimate.
Roads	Melvin Ave	6,925,000	250,000	100,000	Tender prices were higher than the budget estimate.
Roads	Regent Street	2,100,000	210,000	75,883	Tender prices were higher than the budget estimate.
Roads	Roy Ave	2,280,000	228,000	100,000	Tender prices were higher than the budget estimate.
Roads	St Brendan Homewood to Marion	4,900,000	250,000	100,000	Tender prices were higher than the budget estimate
Roads	Surface Treatment	3,771,000	250,000	250,000	Tender prices were higher than the budget estimate.
Roads	Surface Treatment	862,005	100,000	407	Insignificant overage compared to original budget - no explanation required
Roads	Westmount Avenue	607,036	100,000	3,631	Insignificant overage compared to original budget - no explanation required
Transit	Terminal/Bus Shelters	12,756	100,000	102	Insignificant overage compared to original budget - no explanation required
				<b>1,851,571</b>	

Appendix B - Table 3 - continued

**CAO Approvals**

Section	Description	Original Budget	Max Draw	Draw	Details
Environmental Services	Azilda Landfill Stage 1 Final Cover	1,000,000	100,000	34,000	Max allowable draw made, additional funds needed for to award tender.
				<b>34,000</b>	

**Council Approvals**

Section	Description	Draw	Details
Drains	Whitson Paquette	1,830,000	As per City Council resolution 2019-229 in order to award tender.
		<b>1,830,000</b>	

**Emergency Purchases**

Section	Description	Draw	Details
Assets	Valley East FHT-Contract Costs	45,915	The shingle roof leaked due to excessive ice damming from heavy snowfalls, causing water damage to interior of Family Health Team, causing tenants to relocate from their offices temporarily. This was an unplanned event and repair.
Assets	Mould Remediation-Contract Costs	11,884	This is under Economic Development (Tourism and Culture) had students (from an agreement with a local group) for the summer, but the group did not have proper quarters to house the students. Parks attempted to provide a trailer, but it was insufficient. The existing facility was unoccupied for a long time, where the mould grew. Since the building was not occupied the mould was not addressed due to lack of funding. The group needed to move into the facility for the size of rooms required, but the mould needed to be mitigated first.
Assets	Welcome Sign	24,500	This is under Economic Development. The sign was installed in the early 2000's and has received maintenance. During a routine inspection, it was highlighted that the footings to the Highway 69 sign was failing. The condition of the footing would not allow for it to wait until 2020. This was an unplanned repair.
CD Facilities	Sudbury Arena Roof	42,370	This roof is on the north side where the Wolves Den and cafeteria is located. Water was actively leaking on the serving desk during hockey and other events. It was an unplanned repair. Staff attempted to make a temporary repair and patch, but the roof material was water logged and unable to patch the membrane.
Leisure	McClelland Arena-Heating,Ventilation,Dehumidifi	23,800	HVAC unit failed at McClelland Arena - Community Hall and Fitness Centre, required replacement as those units use freon which is being phased out.
Leisure	Naughton Community Centre	40,000	The roof was past life and actively leaking into the rooms below. The membrane was waterlogged, and patching was unable to be performed. This was an unplanned repair.
Pioneer Manor	Outside Security	27,000	Health and Safety enhancements to exterior parking lot lighting, signage and security cameras as a result of repeated vehicle break-ins and vandalism at night.
Pioneer Manor	Generator Repair	6,106	Emergency Backup Generator failed during monthly testing. Mandatory repair required for legislative compliance.
Pioneer Manor	Upgrade BAS	19,843	Upgrade for Building Automation System (BAS) as a result of a new IT server. Mandatory repair required for legislative compliance.
Pioneer Manor	Transformer Upgrades	30,528	Preventive maintenance inspection identified hot spots in 600v transformer requiring immediate repair.
Roads	Griffith Storm Sewer (estimate)	220,000	Storm sewer must be relocated to accommodate work being completed in the area.
		<b>491,946</b>	

**CITY OF GREATER SUDBURY**  
**Continuity of Reserve - Wastewater Rate Holding Account**  
**Appendix B - Table 4**

<b>Opening Balance - January 1, 2019</b>		-
<b>Transfer from Capital Financing Reserve Fund - Wastewater</b>		<b>1,500,000</b>
<b>Transfer to Holding Account - Project Surpluses</b>		
Wastewater Linear	306,588	
Wastewater Plants	71,643	
	<b>Appendix B - Table 5</b>	<b>378,232</b>
<b>Transfer from Holding Account - Project Deficits</b>		
Wastewater Linear Draw	(356)	
Wastewater Plants Draw	-	
	<b>Appendix B - Table 6</b>	<b>(356)</b>
<b>Ending Balance - July 31, 2019</b>		<b>1,877,875</b>

**Appendix B - Table 5 - Transfers to Holding Account (Project Surpluses)**

<b>Transfers to Holding Account</b>		
<b>Section</b>	<b>Description</b>	<b>Holding Account Contribution</b>
Wastewater Linear	Access Road	2,323
Wastewater Linear	Algonquin Sewer	8,286
Wastewater Plants	Operational Optimization	70,000
Wastewater Plants	Procedural Manual W WW	39,288
Wastewater Linear	Frobisher Depot Upgrades	10,000
Wastewater Linear	Lamothe Street	6,560
Wastewater Plants	Meatbird Transfer Station	170,132
Wastewater Plants	Capreol Lagoon	23,880
Wastewater Plants	Jacob St. Lift Station Upgrades	3,159
Wastewater Plants	Health and Safety Upgrades	41,991
Wastewater Plants	Wanapitae Lagoon	2,613
		<b>378,232</b>

Appendix B - Table 6 - Transfers from Holding Account (Project Deficits)

Transfers from Holding Account					
Section	Description	Original Budget	Max Draw	Holding Account Draw	Reason for Draw
Wastewater Plants	Various Plant Repairs/Equipment Upgrades/Operational Support	200,000	100,000	356	Insignificant overage compared to original budget - no explanation required.
				356	



**CITY OF GREATER SUDBURY**  
**Reserve - Water Rate General Holding Account**  
**Appendix B - Table 7**

<b>Opening Balance - January 1, 2019</b>			-
<b>Transfer from Capital Financing Reserve Fund - Water</b>			<b>1,500,000</b>
<b>Transfer to Holding Account - Project Surpluses</b>			
	Water Linear	135,598	
	Water Plants	159,612	
		<b>Appendix B - Table 8</b>	<b>295,210</b>
<b>Transfer from Holding Account - Project Deficits</b>			
	Water Linear	(50,000)	
	Water Plants	-	
		<b>Appendix B - Table 9</b>	<b>(50,000)</b>
<b>Ending Balance - July 31, 2019</b>			<b>1,745,210</b>

**Appendix B - Table 8 - Transfers to Holding Account (Project Surpluses)**

<b>Transfers to Holding Account</b>		
<b>Section</b>	<b>Description</b>	<b>Holding Account Contribution</b>
Water Linear	Beatrice Crescent Culvert - Watermain	84,351
Water Linear	Lamothe Street	6,759
Water Linear	Lorne Street	28
Water Linear	MacLachlan Street	877
Water Linear	Maley Drive Watermain	9,104
Water Linear	NotreDame (Azilda)	9,374
Water Linear	Pressure Monitoring	6,485
Water Linear	Various Bridges & Culverts - Watermain Work	5,436
Water Linear	Vermilion Water System	13,183
Water Plants	Fencing	8,842
Water Plants	Health and Safety Upgrades	9,158
Water Plants	Miscellaneous Plant Repairs	9,158
Water Plants	Onaping Wells Corrosion Upgd	1,682
Water Plants	Operating Manuals	8,395
Water Plants	Ramsey Lake Outfall	18,483
Water Plants	SCADA Upgrades	2,442
Water Plants	Source Protection Plan	2,049
Water Plants	Storage Tank Inspection	1,400
Water Plants	Storage Tank Inspection	21,432
Water Plants	Storage Tank Inspection	1,591
Water Plants	Wahnapiatae WTP	9,269
Water Plants	Well Building Upgrades	37,243
Water Plants	Well Repairs	28,467
		<b>295,210</b>

**Appendix B - Table 9 - Transfers from Holding Account (Project Deficits)**

Transfers from Holding Account					
Section	Description	Original Budget	Max Draw	Holding Account Draw	Reason for Draw
Water Linear	Melvin Ave	232,496	100,000	50,000	Field conditions encountered differed from those assumed during design. Watermain break repair completed under ENG 18-32 as CO #23 (\$11,081); also additional structure work required in ENG 19-31. Project is in progress.
				<b>50,000</b>	

## For Information Only

### 2019 Operating Budget Variance Report - August

Presented To: Finance and  
Administration  
Committee

Presented: Tuesday, Oct 22, 2019

Report Date Friday, Oct 04, 2019

Type: Correspondence for  
Information Only

### Resolution

For Information Only

### Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

### Report Summary

This report provides the Finance and Administration Committee with a forecast of the City's year-end position based on revenues and expenditures to the end of August 2019. The projected deficit for 2019 is approximately \$7.0 million.

### Financial Implications

There are no financial implications associated with this report.

#### Signed By

#### Report Prepared By

Liisa Lenz  
Coordinator of Budgets  
*Digitally Signed Oct 4, 19*

#### Manager Review

Jim Lister  
Manager of Accounting/Deputy  
Treasurer  
*Digitally Signed Oct 4, 19*

#### Division Review

Ed Stankiewicz  
Executive Director of Finance, Assets  
and Fleet  
*Digitally Signed Oct 4, 19*

#### Financial Implications

Liisa Lenz  
Coordinator of Budgets  
*Digitally Signed Oct 4, 19*

#### Recommended by the Department

Kevin Fowke  
General Manager of Corporate  
Services  
*Digitally Signed Oct 7, 19*

#### Recommended by the C.A.O.

Ed Archer  
Chief Administrative Officer  
*Digitally Signed Oct 8, 19*

City of Greater Sudbury  
Net Revenue and Expenditure Projection  
(Based on results up to August 31, 2019)  
For the year ended December 31, 2019



	Annual Budget	August month-end Projections	Surplus (Deficit)	Notes
<b>Corporate Rev and Exp Summary</b>				
Revenue Summary	(304,099,813)	(303,353,855)	(745,958)	1
Other Revenues and Expenses	31,421,149	31,322,908	98,241	
<b>TOTAL CORPORATE REVENUES</b>	<b>(272,678,664)</b>	<b>(272,030,947)</b>	<b>(647,717)</b>	
<b>Executive and Legislative</b>				
Office of the Mayor	696,664	696,664	0	
Council Memberships & Travel	77,411	77,411	0	
Council Expenses	1,194,363	1,191,243	3,120	
Auditor General	382,911	383,279	(368)	
Office of the C.A.O.	3,165,232	2,899,917	265,315	2
<b>Executive and Legislative</b>	<b>5,516,581</b>	<b>5,248,514</b>	<b>268,067</b>	
<b>Corporate Services</b>				
Corporate Services -GM Office	542,040	542,040	0	
Legal & Clerks Services	2,096,100	1,796,442	299,658	3
Security and By-Law	426,612	463,570	(36,958)	
Information Technology	110,644	109,670	974	
Human Resources and O.D.	1,044	159,817	(158,773)	
Finance, Assets and Fleet	13,449,802	14,237,513	(787,711)	4
<b>Corporate Services</b>	<b>16,626,242</b>	<b>17,309,052</b>	<b>(682,810)</b>	
<b>Economic Development Summary</b>				
Economic Development	4,724,491	4,699,983	24,508	
<b>Economic Development Summary</b>	<b>4,724,491</b>	<b>4,699,983</b>	<b>24,508</b>	
<b>Community Development Services</b>				
G.M. Office	404,084	382,086	21,998	
Housing Services	21,125,986	20,940,802	185,184	
Long Term Care-Senior Services	4,636,257	5,428,299	(792,042)	5
Social Services	5,561,819	5,386,118	175,701	
Children and Citizen Services	10,059,155	10,195,819	(136,664)	
Leisure-Recreation	20,545,864	20,760,579	(214,715)	6
Transit	14,238,559	14,932,388	(693,829)	7
<b>Community Development Services</b>	<b>76,571,724</b>	<b>78,026,091</b>	<b>(1,454,367)</b>	
<b>Growth and Infrastructure</b>				
Growth I.S. Other	215,028	215,028	0	
Inf Capital Planning	6,043,315	6,014,946	28,369	
Engineering Services	0	154,523	(154,523)	
Water - Wastewater	0	0	0	
Linear Infr Maintenance	39,237,367	43,356,573	(4,119,206)	8
Environmental Services	14,873,908	14,633,077	240,831	9
Planning and Development	5,512,700	5,314,336	198,364	
Treatment & Compliance	0	0	0	
Building Services	0	0	0	
<b>Growth and Infrastructure</b>	<b>65,882,318</b>	<b>69,688,483</b>	<b>(3,806,165)</b>	

City of Greater Sudbury  
Net Revenue and Expenditure Projection  
(Based on results up to August 31, 2019)  
For the year ended December 31, 2019



	Annual Budget	August month-end Projections	Surplus (Deficit)	Notes
<b>Community Safety</b>				
C.S. G.M.'s Office	0	0	0	
Emergency Management	471,758	430,354	41,404	
CLELC Section	(854,896)	(806,023)	(48,873)	
Paramedic Services	10,755,750	10,774,597	(18,847)	
Fire Services	25,725,100	26,039,312	(314,212)	10
<b>Community Safety</b>	<b>36,097,712</b>	<b>36,438,240</b>	<b>(340,528)</b>	
<b>Service Partners</b>				
Service Partners	7,271,988	7,271,988	0	
Police Services	59,987,608	60,322,929	(335,321)	11
<b>Outside Boards</b>	<b>67,259,596</b>	<b>67,594,917</b>	<b>(335,321)</b>	
<b>TOTAL EXPENDITURES</b>	<b>272,678,664</b>	<b>279,005,280</b>	<b>(6,326,616)</b>	
<b>TOTAL</b>	<b>\$0</b>	<b>\$6,974,333</b>	<b>(\$6,974,333)</b>	

## **Executive Summary**

This report provides the Finance and Administration Committee with a forecast of the City's year-end position based on revenues and expenditures to the end of August 2019. The projected deficit for 2019 is approximately \$7.0 million.

## **Background**

The purpose of this report is to provide Council with an updated projection of the municipality's year-end position including potential year-end variances based on results as of August 31st. The monitoring and reporting of variances is conducted in accordance with the Operating Budget Policy and bylaw. Council is provided with a variance report quarterly. This report is an update from the May month-end projection provided to the Finance and Administration Committee in August 2019.

Attached is a chart that reflects the annual net budget, year-end position and variance for each area. In accordance with the Operating Budget Policy, the following explanations relate to areas where a variance of greater than \$200,000 resulted within a division or section.

## **Variance Explanations**

### **1) Revenue Summary**

This area is reflecting a projected net over expenditure of \$750,000 as follows:

- Increased tax write-offs of \$500,000 as a result of recent decisions on property appeals.
- A shortfall in supplementary taxation of \$400,000 due to lower than anticipated assessment growth in year.
- The Ontario Municipal Partnership Fund allocation was announced higher than anticipated at the time of budget preparation by \$130,000.
- Payments in lieu of taxation have resulted in higher than anticipated revenues by \$20,000.

### **2) Office of the CAO**

This area is reflecting a projected net under expenditure of \$260,000 as follows:

- Under expenditure in salaries and benefits for communication and community engagement of \$260,000 due to vacancies.

### **3) Legal and Clerks Services**

This area is reflecting a projected net under expenditure of \$300,000 as follows:

- A shortfall in revenues from Provincial Offences Act fees net of the victim fine surcharge of \$40,000.
- Under expenditure in salaries and benefits of \$260,000 due to vacancies in year.
- Over expenditures in legal costs of \$70,000 for external legal resources resulting from a number of protracted litigation files.
- Under expenditure in adjudication and collection services of \$120,000.
- Under expenditure of \$20,000 for services of the Integrity Commissioner.
- Under expenditures in materials and office expenses for Archives of \$10,000.

### **4) Finance, Assets & Fleet**

This area is projecting a combined net over expenditure of \$790,000. The projected variances per section are as follows: Finance – under expenditure of \$320,000; Assets - under expenditure of \$100,000; and Fleet – over expenditure of \$1,210,000.

The Finance net under expenditure of \$320,000 is primarily a result of:

- Higher than anticipated user fees for taxation of \$290,000.
- Under expenditure in salaries and benefits due to vacancies of \$70,000.

- Increased costs of \$40,000 related to printing of the property tax bills, the 2019 budget document, and mailing of tax bills and registered letters.

The Fleet net over expenditure of \$1,210,000 is primarily a result of:

- Over expenditure in transit maintenance costs of \$1.04M are primarily the results of continued costs associated with maintaining an aging bus fleet, particularly parts and unanticipated emergency repair that had to be contracted out. Furthermore, recommendations from the Transit Action Plan to add service and bus availability have further increased costs and will continue to do so until the end of the year.
- Over expenditure in fleet services of \$170,000, largely a result of fleet vehicles remaining in service beyond their useful lives. Staff continue to work on finding better prices for parts, improve ordering and maintenance practices and continue to pursue contracts for other parts and services.

## **5) Long Term Care**

The projected year-end net over expenditure of \$790,000 is a result of:

- Under expenditure in utility costs of \$230,000 due to savings from the use of more efficient technology.
- Increase in revenues of \$110,000 as a result of supplier incentives.
- Over expenditure in salaries and benefits of \$860,000 due to increased benefits related to introduction of short-term and long-term disability programs for CUPE employees.
- Lower than anticipated Case Management Index (CMI) funding rate of \$340,000, offset by an increase of \$70,000 in provincial funding related to extensions of special funding programs.

## **6) Leisure and Recreation**

This area is projecting a net over expenditure of \$210,000 as follows:

- A shortfall in user fee revenues of \$280,000 for arenas, fitness centres, ski hills, pools, and community halls.
- An over expenditure of \$240,000 due to additional winter maintenance required to remove snow load for leisure facilities.
- An over expenditure of \$110,000 due to repairs and maintenance of aging leisure facilities.
- Under expenditures in salary and benefits of \$65,000 due to vacancies in year and a reduction in part time hours to respond to programming requirements.
- Under expenditures in utility costs of \$310,000 due to efficiencies and energy saving initiatives.
- Increased licensing and lease revenues of \$45,000 due to Kivi Park sports and tower rental revenue.

## **7) Transit**

The projected year-end net over expenditure in Transit of \$690,000 consists of the following:

- Over expenditure in salary and benefits for transit bus operators of \$420,000 primarily due to changes as a result of the collective bargaining process, unplanned resources required for the successful launch of the new GOVA services, as well as modified work and unplanned overtime.
- Over expenditure due to increased shelter and bus stop snow removal of \$140,000 as a result of harsh winter conditions.
- Over expenditure in transit bus maintenance \$130,000 is due to continued component and farebox failures and vehicle body work requirements.

## **8) Linear Infrastructure Maintenance**

The projected year-end net over expenditure in Linear Infrastructure Services of \$4.1 million is a result of:

- Roads winter control is anticipating an over expenditure of \$4.7 million by year-end. This is largely due to snow accumulation requiring additional plowing and removal, as well as additional street sweeping and pothole repairs. The City received 262 cm. of snow (8.6 feet) to date in 2019, compared to the 30-year average of 164 cm., or 5.4 feet.
- Summer operations is anticipating a \$600,000 surplus from the extensions of winter control related activities and therefore a delay in summer maintenance commencing.



## **9) Environmental Services**

This area is reflecting a projected net under expenditure of \$240,000 as follows:

- An increase in tipping fee revenues based on higher than average fee rates to date.

## **10) Fire Services**

The projected year-end net over expenditure in Fire Services of \$310,000 consists of the following:

- Over expenditures in salaries and benefits of \$310,000 in overtime as a result of front-line staff shortages, offset by WSIB absences.

## **11) Police Services**

The projected year-end net over expenditure in Police Services of \$340,000 consists of the following:

- Higher than budgeted relief staffing primarily in communications and criminal investigations division.
- Higher than anticipated overtime due to significant disclosure timing requirements and staffing.
- Higher than budgeted outside legal counsel.
- Reduced Prisoner Transportation and Court Security Revenue of approximately \$43,000.

## **Water / Wastewater Services**

Water / Wastewater Services is projecting an overall net over expenditure of \$90,000 as follows:

- User fee revenues are projected to be under budget by \$825,000 as actual billed consumption is estimated to be 13.3 million cubic metres while the budget for 2019 is 13.5 million cubic metres.
- Administrative salaries and benefits are projected to be under budget by approximately \$550,000 due to staffing vacancies in positions approved during previous budget deliberations. This has resulted in the delay in the implementation of capital projects recommended in the Water Wastewater Master Plan and Asset Management Plan.
- Distribution and Collection Services is projected to be under budget by approximately \$350,000 as a result of City crews assuming the responsibility for performing emergency repairs to its linear infrastructure. Due primarily to favourable weather conditions there were a below average number of breaks in 2017 and 2018. There have been 53 watermain breaks through the end of August 2019. That compares to 59 in 2018 (93 annual) and 63 in 2017 (88 annual). Using own crews to complete emergency repairs has resulted in less planned maintenance work being performed. This will be mitigated in the future with additional permanent staff approved during recent collective bargaining negotiations.
- In summary, Water is projecting an under expenditure of \$545,000 which will be contributed to the Capital Financing Reserve Fund – Water in accordance with policy. Wastewater is projecting an over expenditure of \$635,000 which will be funded by a contribution from the Capital Financing Reserve Fund-Wastewater in accordance with policy.

## **Summary**

This is the third year-end projection report. Results based on May month-end anticipated a deficit of \$7.3 million. Since then staff have worked to reduce the anticipated deficit and plans for salary gapping and reduced discretionary spending are helping. Staff will continue to follow this approach in efforts to further mitigate the deficit. As previously discussed, the anticipated annual debt repayments for large projects in the amount of \$3.65 million can also be used to offset the deficit at year-end as the City has not issued debt for these projects. If required, staff will also identify capital projects to be cancelled and redirect those funds.

As per the attached chart, the City's projected net year-end position after the mitigation efforts noted above will be funded from the Tax Rate Stabilization Reserve and the Capital Financing Reserve Fund – General in accordance with the Reserve and Reserve Fund by-law.

## For Information Only

### Asset Management Status Report

Presented To: Finance and  
Administration  
Committee

Presented: Tuesday, Oct 22, 2019

Report Date Tuesday, Oct 08, 2019

Type: Correspondence for  
Information Only

### Resolution

For Information Only

### Relationship to the Strategic Plan / Health Impact Assessment

This report is directly linked to the Asset Management and  
Service Excellence pillar of the Strategic Plan 2019-2027.

### Report Summary

This report outlines asset management planning, progress and  
the performance of asset classes.

### Financial Implications

There are no financial implications associated with this report.

#### Signed By

#### Report Prepared By

Nicholas Zinger  
Corporate Asset Management  
Coordinator  
*Digitally Signed Oct 8, 19*

#### Division Review

Shawn Turner  
Director of Assets and Fleet Services  
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#### Financial Implications

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Co-ordinator of Budgets  
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#### Recommended by the Department

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General Manager of Corporate  
Services  
*Digitally Signed Oct 8, 19*

#### Recommended by the C.A.O.

Ed Archer  
Chief Administrative Officer  
*Digitally Signed Oct 8, 19*

# Asset Management Status Report

## 1. Background

The City is responsible for the maintenance and operation of a wide variety of infrastructure assets. These infrastructure assets are critical for the delivery of service levels expected by the residents of the City of Greater Sudbury.

In 2017, City Council approved an Enterprise Asset Management Policy aimed at ensuring its municipal infrastructure systems are supported by plans and financing decisions that demonstrate effective service support and appropriate regard for managing lifecycle costs.

The City, like most Canadian municipalities, must overcome multiple challenges in managing assets including aging infrastructure; expectations of higher levels of service with minimal financial impact; increasingly demanding and complicated legislation with environmental requirements; and mitigation of the increased risk involved with the execution of service delivery. Greater Sudbury by comparison is a vast geographical area, sparsely populated (outside of some relatively small urban areas) and experiences significant climate shifts with the changing seasons. Consequently, the City is moving to implement a focused and calculated approach to address these challenges through the development of detailed asset management plans.

On December 13, 2017 the province approved *O. Reg. 588/17: Asset Management Planning for Municipal Infrastructure* under the *Infrastructure for Jobs and Prosperities Act, 2015*. The City has been working to develop departmental asset management plans for all of its infrastructure assets that comply with legislation. This includes describing the asset's expected performance level (that is, its "service level") based on technical data. This information is required to comply with *O. Reg. 588/17*, and must be based on data from at most the two calendar years prior to 2021 or 2023, the legislated Phase 1 and 2 completion deadlines.

The purpose of this report, further to the Asset Management Strategy presented to Council in April 2018, is to present the state of the City's Asset Management Program. It describes the major steps and milestones to develop and implement the City's Asset Management Plan in accordance with the provincial regulation *O. Reg. 588/17*.

A State of the Infrastructure Report (SOIR) will be prepared at least once per term of Council as outlined in the Enterprise Asset Management Policy. The SOIR will provide comprehensive information regarding the major asset classes managed by the City. To complement the SOIR, staff will prepare asset status reports annually to discuss asset management planning activities and progress. The asset status reports will also include

information on the performance of asset classes. This is the first asset status report to be provided to Council prior to the annual budget.

The performance of an asset is largely predicated on its condition. Infrastructure condition reporting involves both technical data and professional judgment. For example an asset, according to its technical data, may be deemed to be reliable for only a limited period. But our professional judgment suggests it could remain in service longer. If we keep the asset in service beyond its expected lifecycle, we also accept the increased risk of asset failure or emergency repairs.

The asset condition information in this report reflects our best available data and professional judgment. Work continues to refine data collection activities and manage the evolution of our asset management program.

## **2. Evolution of Asset Management Plans**

The corporation must perform key steps during the development of its asset management plans.

### **2.1. Level of Service**

A service level is a direction or requirement for a particular service area against which performance may be measured. For assets, technical data like performance specifications inform service levels. The assumption when reviewing asset condition against performance specifications is that there is a sufficient, appropriate maintenance program in place to support the asset's performance.

Periodic condition assessments help determine whether the combination of actual utilization levels and maintenance activities align with the specifications. A series of data collection processes and data storage requirements support the condition assessments. For Greater Sudbury, these processes need to be refined because in some examples, there is insufficient data. This leads to greater reliance on professional judgment informed by repair histories, expenditure reviews and other point-in-time assessments that do not provide as much assurance as reliable condition data.

### **2.2. Failure Prediction**

Failure prediction is performed to assess the potential for an asset to deliver an expected level of service over time. Current and historical condition and performance data is analyzed to determine the current position of an asset within its life-cycle. This information informs a judgment about how much remaining service life is available.

### **2.3. Risk Management and Assessment**

Risk management is a major component of asset life-cycle management. The City's risk management goals involve identifying, understanding and managing the potential for infrastructure assets to meet planned service objectives. Adopting best practices for

managing and maintaining assets increases the potential for achieving planned service objectives.

Risk assessment helps prioritize and optimize capital spending and decision making. The corporation evaluates both the Probability of Failure (PoF) and the Consequence of Failure (CoF) when prioritizing capital budget choices. This helps clarify and build a shared understanding about the risk associated with a decision to not engage in a project.

The PoF is an estimate of how likely an asset is to not meet its service expectations. The CoF is an estimate of the effect on outcomes if an asset actually fails. The consequences of failure could range from a service interruption to a catastrophic result depending on asset class. Where these assessments indicate an unacceptably high risk, a capital project is deemed to be relatively higher priority as the cost of the project is often less than the element of risk or consequence.

Overall, the probability and consequences of failure allow the corporation to focus on assets that have the greatest impact on service delivery.

## **2.4. Asset Life-Cycle Planning and Optimization**

The majority of the City's assets have life-cycles that span several decades. As a result, infrastructure decisions arguably have a more substantial effect on the community's sustainability than year-to-year operational decisions.

For that reason, capital investments need to examine the entire life-cycle cost associated with the decision to make the investment. Life-cycle management supports decision making that will optimize capital planning by considering costs of planning, design, construction, acquisition, commissioning, operation, maintenance and rehabilitation, decommissioning and disposal costs. Reducing or disposing of assets the City does not require to meet its current or future operational needs is one of the City's asset management guiding principles.

## **2.5. Financial Strategy**

In accordance with the province's legislation, at a minimum the City will be planning for life-cycle activities that maintain existing or achieve proposed levels of service for a 10-year period. Planning will include the estimated annual capital and operating costs for each year of a 10-year plan. This will include life-cycle maintenance and repair activities, as well as forecast to accommodate potential increases in service demand.

As part of each budget cycle, these asset level of service and life-cycle considerations will be taken into account when recommending the priority capital investments that will make their way into the capital budget. Council retains the ultimate authority to decide which investments are made.

### 3. City of Greater Sudbury Asset Value

The corporation has a historical capital investment of \$2.83B (2018) invested into infrastructure assets that is detailed in Chart No. 1. The chart has been developed with capital investment history contained within the City's Tangible Capital Asset Database.

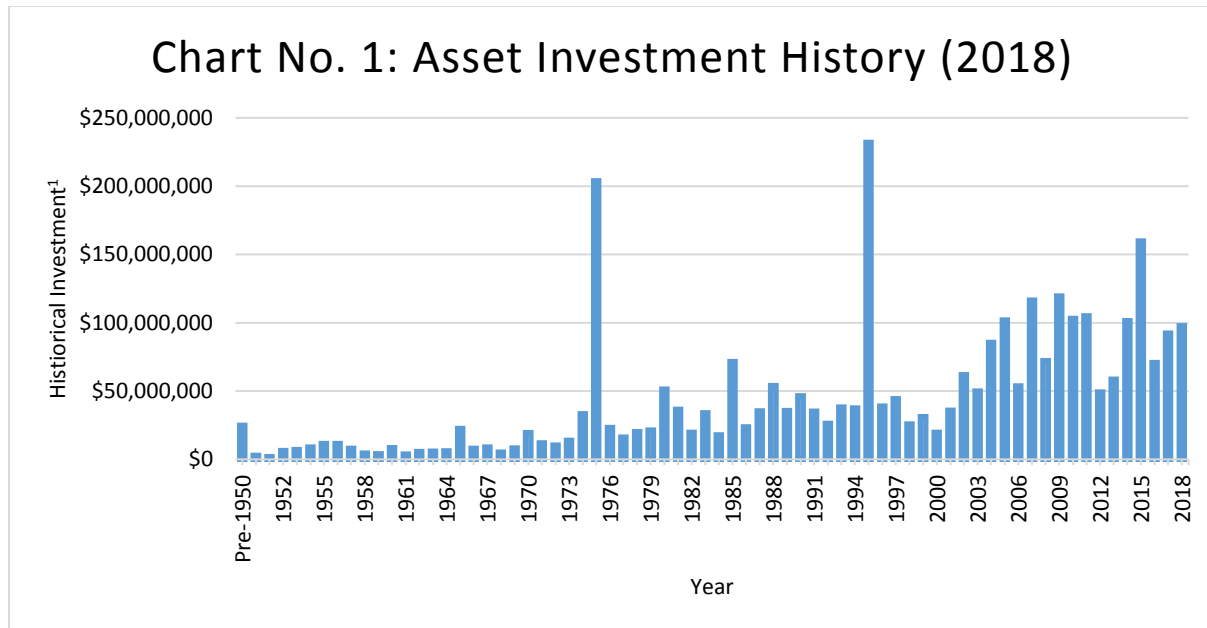


Chart No. 1 Note:

<sup>1</sup>. The value of \$2.83B (2018) is the historical investment into infrastructure assets by the City of Greater Sudbury. Previous asset management planning by KPMG has indicated further investment of \$3.14B over ten years was required.

This historical investment of \$2.83B (2018) invested into infrastructure assets spans across a large portfolio that translates into \$10.1B of replacement costs. This replacement value has increased significantly from the value of \$7.2B presented by KPMG in December 2016. The three primary reasons for the increased replacement costs is the addition of the Greater Sudbury Housing Corporation to the City portfolio, the significant data collection that has been completed across the organization during asset management planning and the clarity and understanding that the City now has from data collection and analysis.

Replacement values of infrastructure assets are presented in the following Chart No. 2; the values are presented in millions.

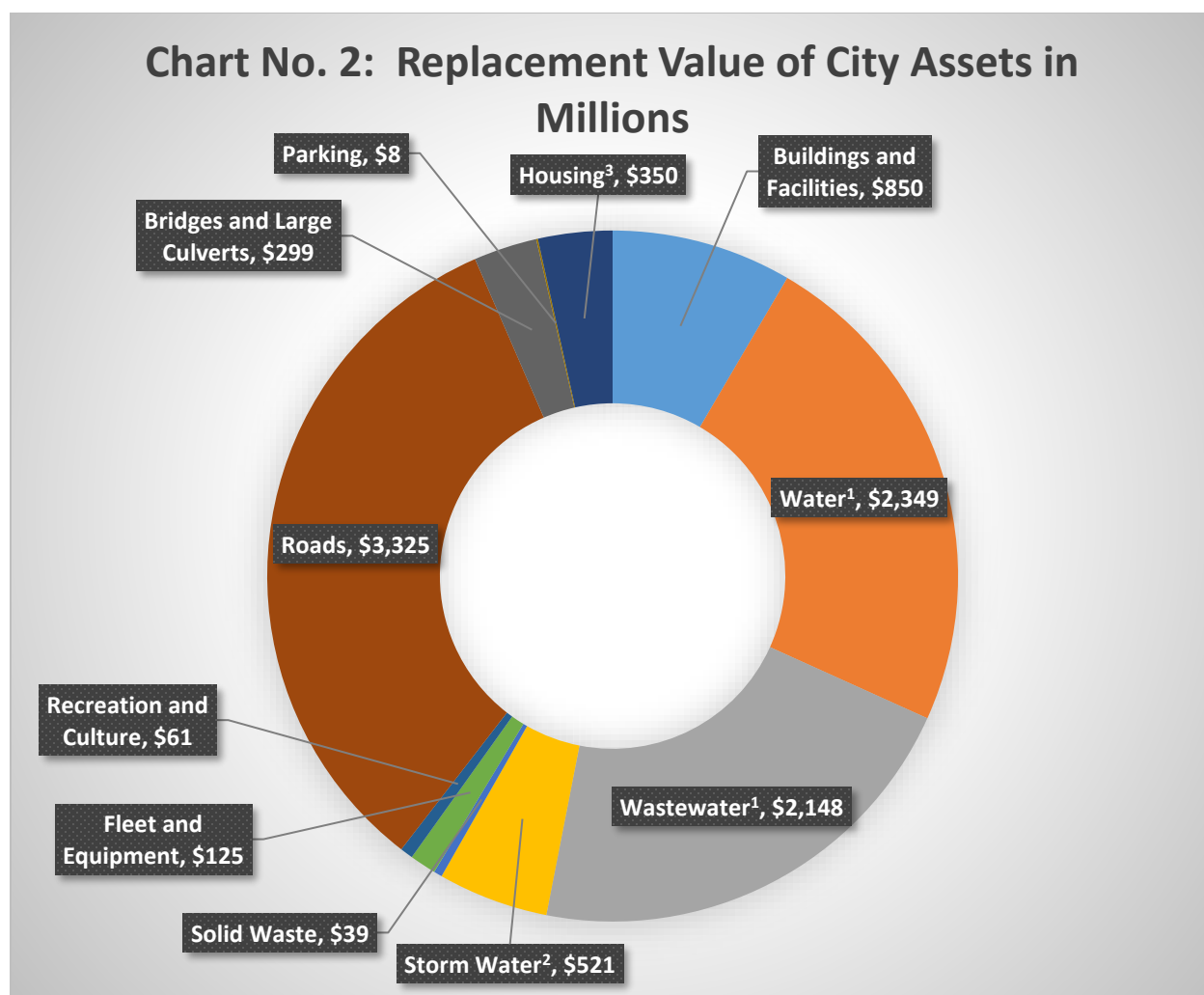


Chart No. 2 Notes:

<sup>1</sup>. The replacement value reported in 2016 was the historical construction costs inflated to 2015 dollars. The current replacement values are driven by data collected and analyzed during the development of the asset management plan.

<sup>2</sup>. The replacement value reported in 2016 was the historical construction costs of storm water drains and ponds. The historical costs were inflated to 2015 dollars. The current replacement values are from data collected and analyzed during the development of the asset management plan. This includes the storm water linear pipe network, ditches, catch basins, manholes, etc.

<sup>3</sup>. New addition to the City asset portfolio.

The additional Water and Wastewater replacement cost has previously been presented to Council in April of 2017 and the additional Storm Water Management replacement cost was previously presented to Council in June of 2018.

## 4. City of Greater Sudbury Asset Portfolio

The following questions have been identified to provide details of infrastructure and its performance.

## **4.1. What infrastructure assets does the City own?**

### **Buildings and Facilities**

Buildings and facilities are utilized to deliver services across the City. The City owns and operates over 400 buildings. Buildings managed by various City departments include arenas, pools, ski chalets field houses, libraries, museums, community centers, municipal offices, depots, garages, long-term care facilities, fire and paramedic halls, etc.

The Greater Sudbury Housing Corporation owns a portfolio of 1,848 social housing rental units that provide accommodation to approximately 4,300 community members.

### **Water**

The City's water supply consists of six water supply systems. Assets that deliver water treatment and distribution within these six water systems include linear water mains, system and control valves, valve chambers, hydrants, service connections, meter stations, water meters, pump houses, distribution facilities, storage facilities, treatment facilities and well facilities.

### **Wastewater**

The City's wastewater collection consists of thirteen wastewater collection systems. Assets that collect and treat wastewater within the thirteen wastewater systems include the rock tunnel, linear gravity and forcemain sanitary sewer, lateral connections, control valves, drop shafts, maintenance holes, lift stations, collection facilities and treatment facilities.

### **Storm Water**

The storm water management inventory consists of assets that include linear gravity storm water mains, ditches, manholes, catch basins, discharges, inlets, ponds and oil and grit separators.

### **Solid Waste**

The solid waste inventory consists of assets including landfills, solid waste management facility, transfer stations and scales, monitoring wells, landfill access roads, storm water ponds, leachate management systems and ponds and a landfill gas management system.

### **Fleet and Equipment**

The City owned fleet consists of heavy, medium and light duty licensed vehicles and various machinery and equipment assets.

A wide variety of services are delivered by the corporate fleet from snow plowing to waste disposal and excavation to arena ice resurfacing.

The transit fleet consists of buses that provide conventional public transportation. The fleet consists of accessible forty foot buses that operate on defined transit routes.



The Fire inventory of assets is primarily vehicles and equipment. These include fire trucks, hoses, compressors, bunker gear, jaws-of-life, marine rescue boat and a Hazmat Trailer.

Much like Fire, the Paramedic inventory of assets is also primarily vehicles and equipment. These include ambulance, power load stretchers, power stair chairs, defibrillators, narcotic security cabinets, vending lockers, laryngoscopes, off-road vehicles and trailers including a Special Operations Unit Trailer.

### **Parks and Recreation**

Leisure and Parks Services maintain over 300 outdoor sport playing surfaces, 1,400 hectares of parkland and 177 km of trails. Outdoor sports playing surfaces include playgrounds, soccer and baseball fields, basketball courts, tennis and pickleball courts, skating paths and outdoor rinks, ski hills, BMX and skate parks and splash pads.

### **Roads, Bridges and Large Culverts and Parking**

The City of Greater Sudbury's road network spans 3535 km and is prioritized into five road classifications; namely primary arterial, secondary arterial, tertiary arterial, collector and local. The road classifications have been developed to include for operating conditions that incorporate the concept of Complete Streets.

The bridge and large culvert inventory consists of a total of 182 structures, 94 of the structures are considered bridges and 88 are considered to be large culverts. For the purposes of inspection and reporting, bridges and large culverts are characterized as any structure with a span greater than 3 meters

The parking inventory includes municipal parking lots, parking meters, parking ticket systems and parking payment machines.

## 4.2. What is the condition of the City's infrastructure assets?

Infrastructure asset information is discussed below. Additional asset conditions details are provided in Appendix A.

### 4.2.1. Buildings and Facilities

Briefly, asset information for Buildings and Facilities can be summarized as follows. The Asset Level of Service (ALoS) is the condition and performance expectation for a given asset in order to produce desired levels of service. For scorecard definition on the evaluation of the quality of financial estimate, please refer to Appendix B.

Table No. 1: Buildings and Facilities Asset Information		
	Current Status	Notes
Asset Level of Service definitions Phase 2 – Existing ALoS (2023) Phase 3 – Target ALoS (2024)	<b>10%</b> Complete	<ul style="list-style-type: none"><li>• Preliminary ALoS Framework prepared</li><li>• Additional data collection is required to validate the ALoS framework</li></ul>
Data Standards	<b>60%</b> Complete	<ul style="list-style-type: none"><li>• BCA submissions are to be completed using industry standards to ensure consistency</li><li>• BCA's will establish PoF</li><li>• CoF to be developed</li></ul>
Data availability	<b>10%</b> complete	<ul style="list-style-type: none"><li>• Data collection for buildings &amp; facilities is underway</li></ul>
Financial Estimate To Maintain Level of Service	<b>\$32,500,000</b>	<ul style="list-style-type: none"><li>• Annual expenditure requirement</li><li>• Provided by KPMG Long-Term Financial Plan April 2017</li></ul>
Quality of Financial Estimate	<b>D</b>	<ul style="list-style-type: none"><li>• Quality will improve with additional dataset.</li></ul>

The 2020 Capital Budget includes funds for software that will assist in managing building condition assessment data. The tool will aid with legislative compliance to ensure that the City's data is current (within 2 years). An early example is Greater Sudbury Housing Corporation which has successfully incorporated its unit inventory into a capital planning tool.

A Facility Condition Index (FCI) is assigned for all buildings and facilities that have a BCA. The FCI is a percentage calculated as: the deferred capital need divided by the facility replacement cost in current dollars (2018). For the Buildings that have had a BCA completed in 2018, the FCI is detailed in Appendix A.

#### 4.2.2. Water and Wastewater

Briefly, asset information for Water and Wastewater can be summarized as follows:

Table No. 2: Water and Wastewater Asset Information		
	Current Status	Notes
Asset Level of Service definitions Phase 1 – Existing ALoS (2021) Phase 3 – Target ALoS (2024)	<b>70%</b> Complete	<ul style="list-style-type: none"> <li>• Phase 1 existing asset level of service definitions are complete for linear assets</li> <li>• Phase 1 existing asset level of service definitions in development for plants &amp; facilities</li> <li>• Phase 3 target asset level of service definitions require additional data collection and analysis</li> </ul>
Data Standards	<b>75%</b> Complete	<ul style="list-style-type: none"> <li>• Recommendations from the Asset Management Plan Water and Wastewater include identification of additional data and performance measure reporting</li> <li>• CoF is established; however data for PoF to be improved for plants and linear assets</li> <li>• The current CCTV inspection program follows the Pipeline Assessment Certification Program (PCAP)</li> <li>• The CCTV program will bolster the PoF</li> <li>• BCA submissions are to be completed using industry standards</li> <li>• Process engineering equipment will require a customized format within BCAs</li> </ul>
Data availability	<b>75%</b> complete	<ul style="list-style-type: none"> <li>• Assets are known and documented</li> <li>• Data collection for water and wastewater assets are ongoing</li> </ul>
Financial Estimate To Maintain Level of Service	<b>\$110,000,000</b>	<ul style="list-style-type: none"> <li>• Annual expenditure requirement until 2021; \$90,000,000 from 2022 - 2026</li> </ul>
Quality of Financial Estimate	<b>B – Linear Pipe D – Plants &amp; Facilities</b>	<ul style="list-style-type: none"> <li>• Quality will improve with additional datasets</li> <li>• Facility BCA and condition assessments have not yet been incorporated</li> </ul>

The asset condition framework for water and wastewater linear infrastructure is based on asset life expectancy and asset age for the development of the Asset Management Plan Water and Wastewater; asset conditions are available in Appendix A. However, a more detailed analysis is required to refine the available data to reflect existing conditions.

### 4.2.3. Storm Water

Briefly, asset information for storm water management can be summarized as follows:

<b>Table No. 3: Storm Water Management Asset Information</b>		
	<b>Current Status</b>	<b>Notes</b>
Asset Level of Service definitions Phase 1 – Existing ALoS (2021) Phase 3 – Target ALoS (2024)	<b>65%</b> Complete	<ul style="list-style-type: none"> <li>• Phase 1 existing asset level of service definitions complete</li> <li>• Phase 3 target asset level of service definitions require additional data collection and analysis</li> </ul>
Data Standards	<b>75%</b> Complete	<ul style="list-style-type: none"> <li>• CoF is well established; however data for PoF to be improved</li> <li>• The storm water asset management plan recommends additional data collection techniques such as CCTV camera inspection of linear pipe</li> <li>• Presently initiating a CCTV inspection program that will follow the Pipeline Assessment Certification Program (PCAP)</li> <li>• The CCTV program will bolster the PoF</li> </ul>
Data availability	<b>75%</b> complete	<ul style="list-style-type: none"> <li>• Assets are known and documented</li> <li>• Data collection for storm water assets is ongoing</li> </ul>
Financial Estimate To Maintain Level of Service	<b>\$9,559,000</b>	<ul style="list-style-type: none"> <li>• 30-Year Annual expenditure requirement</li> </ul>
Quality of Financial Estimate	<b>C</b>	<ul style="list-style-type: none"> <li>• Quality will improve with additional datasets and level of service targets</li> <li>• Based on local experiences and unique to Greater Sudbury area; for example acidic soils.</li> </ul>

The City's storm water management system (STM) is relatively new with the majority of asset installation in the decades following 1960's and 70's.

The STM system consists of approximately 540 km of linear gravity main; consisting of a majority 43% concrete pipe with an estimated useful life between 90 and 120 years. Further data collection is required as the material type and condition of 133 km of gravity mains are unknown.

### 4.2.4. Solid Waste

Within the first and second quarter of 2020, the City intends to develop a condition framework to accurately reflect solid waste assets. Developing this framework will involve a review of the solid waste asset inventory, identifying data collection

requirements, developing performance measures for asset level of service and determining the current level of service provided by specific assets.

#### 4.2.5. Fleet and Equipment

Briefly, information for fleet, fire, paramedic and transit assets can be summarized as follows:

<b>Table No. 4: Fleet, Fire, Paramedic and Transit Asset Information</b>		
	<b>Current Status</b>	<b>Notes</b>
Asset Level of Service definitions Phase 2 – Existing ALoS (2023) Phase 3 – Target ALoS (2024)	<b>25%</b> Complete	<ul style="list-style-type: none"> <li>Phase 2 existing asset level of service definitions have been prepare for Fleet Services and Transit Services. Paramedic Services ALoS framework is in draft.</li> </ul>
Data Standards	<b>80%</b> Complete	<ul style="list-style-type: none"> <li>Data is driven by asset age and collection of mileage or engine run-time hours</li> </ul>
Data availability	<b>75%</b> Complete	<ul style="list-style-type: none"> <li>Assets are known and documented</li> <li>Data collection is ongoing</li> </ul>
Financial Estimate To Maintain Level of Service	<b>\$6,600,000</b>	<ul style="list-style-type: none"> <li>Annual expenditure requirement</li> <li>Value reflects Fleet and Transit Assets only</li> </ul>
Quality of Financial Estimate	<b>B</b>	<ul style="list-style-type: none"> <li>Reliable inventory and age data; minimal assumptions for Fleet and Transit</li> </ul>

All licensed vehicle assets have mileage collected. Mileage is collected by automatic vehicle locators, during servicing and at City owned and operated fill stations. The mileage collected can be used to expand upon age-based condition. Condition is determined using a weighted age-based and mileage condition grade and applied to licensed fleet assets in order to determine the state of the asset and its replacement schedule.

Engine run time hours are collected for various Machinery and Equipment, primarily heavy equipment and MTs. Machinery and Equipment Heavy includes Loaders and Graders while the MTs includes Sidewalk Plows and various MT Tractors.

#### 4.2.6. Parks and Recreation

Within the first and second quarter of 2020, the City intends to develop a condition framework to accurately reflect parks and recreation assets. Currently, the parks and recreation asset inventory has been under review and data collection requirements have been identified. Additional performance measures for asset level of service are forthcoming.

The asset condition details provided in Appendix A, are age-based with the exception of the regional parks, community parks, neighbourhood parks, playgrounds and tot lots. These assets are visually inspected by City staff on a rotating basis.

#### 4.2.7. Roads, Bridges and Large Culverts and Parking

Briefly, asset information for roads, bridges and large culverts and parking can be summarized as follows:

<b>Table No. 5: Roads, Bridges and Large Culverts and Parking Asset Information</b>		
	<b>Current Status</b>	<b>Notes</b>
Asset Level of Service definitions Phase 1 – Existing ALoS (2021) Phase 3 – Target ALoS (2024)	<b>5%</b> Complete	<ul style="list-style-type: none"><li>• Phase 1 existing asset level of service for roads, bridges and large culverts developed within first quarter 2020.</li><li>• Asset level of service definitions have been prepared for Parking</li></ul>
Data Standards	<b>70%</b> Complete	<ul style="list-style-type: none"><li>• PoF is established through condition data; however data for CoF to be improved</li><li>• Pavement Condition Index (PCI)</li><li>• Gravel Roads visual inspection</li><li>• Bridge Condition Index (BCI)</li></ul> Under Review: <ul style="list-style-type: none"><li>• Potential for Safety Improvement</li><li>• Congestion Index</li></ul>
Data availability	<b>65%</b> complete	<ul style="list-style-type: none"><li>• Assets are known and documented</li><li>• 2019 PCI data collection complete. PCI data must be processed and imported into Pavement Management System.</li><li>• Biennial Bridge and Large Culvert Structural Inspection complete</li><li>• Gravel Roads visual inspection to begin in June 2020.</li></ul>
<b>Continued on Next Page.</b>		

	<b>Current Status</b>	<b>Notes</b>
Financial Estimate To Maintain Level of Service	<b>\$169,800,000 For Roads \$4,887,000 for Bridges and Large Culverts</b>	<ul style="list-style-type: none"> <li>• Annual expenditure requirement</li> <li>• Provided by KPMG in Long-Term Financial Plan April 2017</li> <li>• Bridge and large culvert value provided with 2018 Bridge and Large Culvert Structural Inspection</li> </ul>
Quality of Financial Estimate	<b>D – Roads B – Bridges</b>	<ul style="list-style-type: none"> <li>• Quality will improve with additional datasets</li> <li>• With the 2019 PCI dataset, preparation will be made to improve the ongoing reporting by incorporating condition</li> </ul>

The City's Pavement Condition Index (PCI) is a composite index calculated from structural cracking, non-structural cracking, rutting and roughness. Available network PCI scores are provided in Appendix A.

Structures are made up of various components that deteriorate at different rates. Therefore, the biennial bridge inspection program follows the Ontario Structure Inspection Manual (OSIM) guidelines that visually evaluate each component of the structure and classify component condition. The individual component condition scores are compiled into a Bridge Condition Index (BCI). A summary of the 2018 Bridge & Large Culvert Structural Inspection Report is provided in Appendix A.

### **4.3. How are the City's assets performing?**

The City's Tangible Capital Asset Database can perform straight-line asset depreciation which demonstrates, where the City's assets are in their **theoretical** useful lives. Straight-line depreciation is a conservative approach to allocating an asset's useful life over time. Many of the City's major assets have a more rapid depreciation curve. For illustrative purposes, the percentage of straight-line theoretical useful life consumption (conservative) compared to historical investment is detailed in Chart No. 3.

### Chart No. 3: Asset Investment (2018) by Percent (%) Consumed

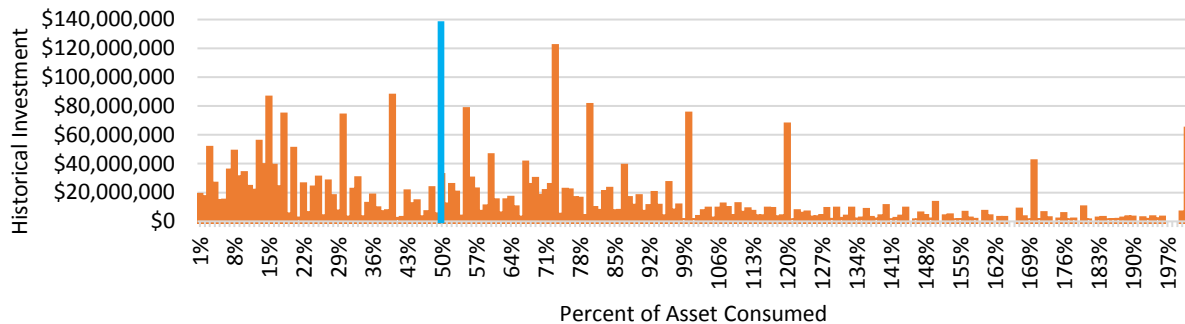


Chart No. 3 displays the amount of **theoretical** useful life that has been consumed in all asset classes. The blue line represents 50% of asset life consumed. The chart demonstrates that 57% of the City's infrastructure investment has consumed greater than half its theoretical useful life. Meanwhile, 20% of infrastructure investment is beyond its theoretical useful life.

Through the development of levels of service and maintenance plans, the City is afforded the opportunity to address asset consumption. For example, light duty fleet vehicles have a short theoretical useful life. Therefore, the level of service can be to maintain the light duty vehicle fleet to an average condition that coincides with a more reasonable service life and accrued mileage. Maintenance plans will be developed to aid in extending the life of assets whenever possible.



## 5. Milestones and Next Steps

The following Table No. 8 outlines the upcoming legislative dates and the current status of various departmental asset management plans.

<b>Table No. 6: Legislated Milestones and Current Status</b>				
<b>AM Plan</b>	<b>Division</b>	<b>Legislated Completion Date Phase 1 and 2</b>	<b>Current Status</b>	<b>Expected Completion for Council Approval</b>
<b>Phase 1 - Core Infrastructure</b>				
W/WW Linear AM Plan	Infrastructure and Capital Planning Services	July 1, 2021	Phase 1 Complete	Complete
W/WW Plants and Facilities AM Plan	Infrastructure and Capital Planning Services	July 1, 2021	<ul style="list-style-type: none"> <li>Building Condition Assessments to begin with standing offer in Third Quarter 2019</li> </ul>	First Quarter 2021
Roads AM Plan	Infrastructure and Capital Planning Services	July 1, 2021	<ul style="list-style-type: none"> <li>LoS framework under development.</li> <li>Pavement condition data is being collected in 2019</li> </ul>	First Quarter 2021
Bridges/Large Culvert AM Plan	Infrastructure and Capital Planning Services	July 1, 2021	<ul style="list-style-type: none"> <li>LoS framework under development with 2018 Bridge and Large Culvert Structural Data</li> </ul>	First Quarter 2021
STM AM Plan	Infrastructure and Capital Planning Services	July 1, 2021	<ul style="list-style-type: none"> <li>Phase 1 90% complete; submission expected in Q4.</li> </ul>	Third Quarter 2020
<b>Phase 2 - All other Infrastructure</b>				
Fleet AM Plan	Assets and Fleet Services	July 1, 2023	<ul style="list-style-type: none"> <li>LoS defined</li> <li>Risk Framework under development</li> </ul>	First Quarter 2022
Transit AM Plan	Transit Services	July 1, 2023	<ul style="list-style-type: none"> <li>LoS defined</li> <li>Risk Framework under development</li> </ul>	First Quarter 2022
Parking AM Plan	Security and By-Law Services	July 1, 2023	<ul style="list-style-type: none"> <li>LoS framework under development</li> </ul>	First Quarter 2022
Parks (Recreation) AM Plan	Leisure Services	July 1, 2023	<ul style="list-style-type: none"> <li>Data review, LoS framework under development</li> </ul>	First Quarter 2022
Paramedic Services AM Plan	Paramedic Services	July 1, 2023	<ul style="list-style-type: none"> <li>Data review, LoS framework under development</li> </ul>	Third Quarter 2022
Fire Services AM Plan	Fire Services	July 1, 2023	<ul style="list-style-type: none"> <li>Review existing data</li> </ul>	Third Quarter 2022

<b>Table 6: Legislated Milestones and Current Status</b>				
<b>AM Plan</b>	<b>Division</b>	<b>Legislated Completion Date Phase 1 and 2</b>	<b>Current Status</b>	<b>Expected Completion for Council Approval</b>
<b>Phase 2 - All other Infrastructure</b>				
Buildings and Facilities AM Plan	Assets and Fleet Services Leisure Services	July 1, 2023	<ul style="list-style-type: none"> <li>Standardized facility condition scope complete</li> <li>Data collection is underway</li> </ul>	Fourth Quarter 2022
Long-Term Care AM Plan (Pioneer Manor)	Long-Term Care Services	July 1, 2023	<ul style="list-style-type: none"> <li>Building Condition Assessment in fourth quarter 2019</li> </ul>	Fourth Quarter 2022
Greater Sudbury Housing Corporation AM Plan	Housing Services	July 1, 2023	<ul style="list-style-type: none"> <li>Data collection and review</li> </ul>	Fourth Quarter 2022
Solid Waste (Landfill) AM Plan	Environmental Services	July 1, 2023	<ul style="list-style-type: none"> <li>Review existing data</li> </ul>	Fourth Quarter 2022
<b>Phase 3 - All Infrastructure</b>				
All assets in Corporate Asset Management Plan	All departments listed above	July 1, 2024	<ul style="list-style-type: none"> <li>To begin following the completion of Phase 1 for core infrastructure assets.</li> <li>To begin following the completion of Phase 2 for all other infrastructure assets.</li> </ul>	First Quarter 2024

Per legislation, the City will perform an annual review of asset management progress following the implementation of the Phase 3 asset management plan. The review will monitor asset management planning implementation and progress. The reviews will be completed annually for July 1<sup>st</sup>.

Regulation also states that asset management policy and plan updates are to be prepared every 5 years. To ensure internal and external transparency, policies and plans have or will be posted to the City's website and shared with ministries or any persons as requested.

## 6. Conclusion

This report provides information on the current state of asset management and the steps staff will be taking to implement an enterprise wide approach to evolving the asset management planning.

The timeline for development and implementation of the City's asset management program has been outlined by the Province under the Ontario Regulation 588/17. The success of the City's asset management program relies on the collaboration of all City

departments. Staff within Corporate Services will work with individual departments to ensure the City meets and achieves the steps and milestones as outlined.

Asset management will continue to provide the City with a framework for consistent, calculated, reliable and transparent decision making. Staff will update Council regularly on the status of the City's asset management planning.

## **7. Legislative References**

1. Ministry of Infrastructure Ontario (2011) Building Together – Guide for municipal asset management plans. (Online: <https://www.ontario.ca/page/building-together-guide-municipal-asset-management-plans>). Queen's Printer for Ontario 2012.
2. Infrastructure for Jobs and Prosperity Act, 2015. (Online: <https://www.ontario.ca/laws/statute/15i15>). Queen's Printer for Ontario 2015.
3. Ontario Regulation 588/17. (Online: <https://www.ontario.ca/laws/regulation/r17588>). Queen's Printer for Ontario 2018.

## 8. Appendix A: Condition Assessments

The following Table A1, provides a description of the conditions that are assigned to infrastructure assets within this Appendix A.

Table A1: Condition Scores Explained												
Rating	Description	Buildings FCI	WM and SAN Life Consumed	Fleet Light and Medium Mileage	Fleet Heavy Duty Life Consumed	Ambulance and Firetruck Mileage	GOVA Bus Mileage	Parks/Parking Life Consumed	Roads PCI	Bridges BCI		
Very Good	Well maintained, new or recently rehabilitated	0 to 5%	0 to 30%	0 to 40,000	0 to 50%	0 to 40,000	75,000 to 0	0 to 20%	240,000 to 0	0 to 20%	>85	-
Good	Acceptable, generally in mid stage of expected service life	5 to 10%	30 to 50%	40,001 to 100,000	51 to 100%	40,001 to 100,000	75,001 to 150,000	21 to 40%	240,001 to 480,000	21 to 40%	56 - 85	≥70
Fair	Signs of deterioration, requires attention, some deficiencies	10 to 30%	50 to 75%	100,001 to 150,000	101 to 125%	100,001 to 150,000	150,001 to 200,000	41 to 60%	480,001 to 720,000	41 to 60%	41 - 55	60 - 70
Poor	Approaching end of life, condition below standard, exhibits deterioration	30 to 50%	75 to 95%	150,001 to 200,000	126 to 150%	150,001 to 225,000	200,001 to 250,000	61 to 80%	720,001 to 960,000	61 to 80%	26 - 40	≤60
Very Poor	Near or beyond service life, widespread deterioration	>50%	>95%	>200,001	>151%	>225,001	>250,001	>81%	>960,001	>81%	<25	-

## Buildings and Facilities:

A Facility Condition Index (FCI) is assigned to all buildings and facilities that have a BCA. The FCI is calculated as: the deferred capital need divided by the facility replacement cost in current dollars (2018). For the Buildings that have had a BCA completed in 2018, the mean Facility Condition Index is 10.7; this is detailed in Table No. A2.

<b>Table No. A2: Facility Condition Index (FCI)</b>		
<b>Facility Type</b>	<b>BCA Quantity</b>	<b>Mean FCI</b>
Arena	12	7.8%
Community Centre	4	4.1%
Fire Halls and EMS <sup>1, 2</sup>	24	40.6%
Lionel E. Lalonde	1	4.1%
Playground Fieldhouse	9	11.4%
Pool	5	6.2%
Public Works	1 (Naughton)	37.6%
Ski Hill	6	16.7%
<b>Total =</b>	<b>62</b>	<b>10.7%</b>

Table No. A2 Notes:

<sup>1</sup>. The Fire Hall and EMS FCI indicates that the deferred capital needs of the Fire and Paramedic Service facilities on average are approaching half of the facility replacement costs. The Beaver Lake, Vermillion, Falconbridge, Skead, Coniston and Wahnapiatae facilities have an FCI indicating deferred capital need for these facilities are as high as the facilities replacement cost.

<sup>2</sup>. Fire Hall 25 – Red Deer Lake was demolished in 2019.

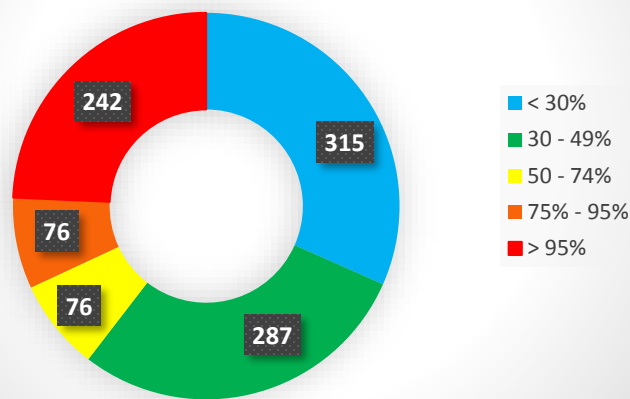
The GSHC uses a software tool as a data repository to track the condition of its buildings and to project future capital work. The data repository analyzes condition data at a property, building and component level. The data identifies the actions required to maintain a state of good repair (SoGR). SoGR is the condition than an asset is able to operate at a full level of performance. The facility condition index of the housing inventory is provided in Table No. A3.

<b>Table No. A3: Facility Condition Index (FCI) Housing</b>					
<b>Property Type</b>	<b>No. of Buildings</b>	<b>No. of Units</b>	<b>Percentage of Units</b>	<b>Current FCI (Site)</b>	<b>Current FCI (Building)</b>
High Rise Apartment	6	766	41%	125%	16%
Low Rise Apartment	25	294	16%	72%	11%
Townhouse	8	547	30%	39%	9%
Single / Duplex / Semi	241	241	13%	---	15%

## Water and Wastewater

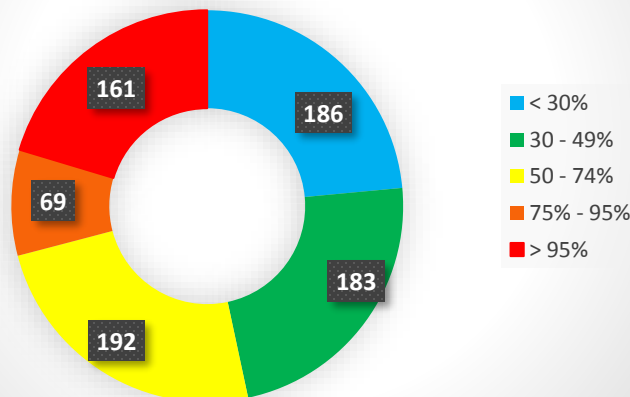
The asset condition framework for water and wastewater linear infrastructure is based on asset life expectancy and asset age for the development of the Asset Management Plan Water and Wastewater. However, a more detailed analysis is required to refine the available data to reflect existing conditions. The condition of watermain by consumption is provided in Chart No. A1.

**Chart No. A1: Watermains Expected Useful Life Consumption (km)**



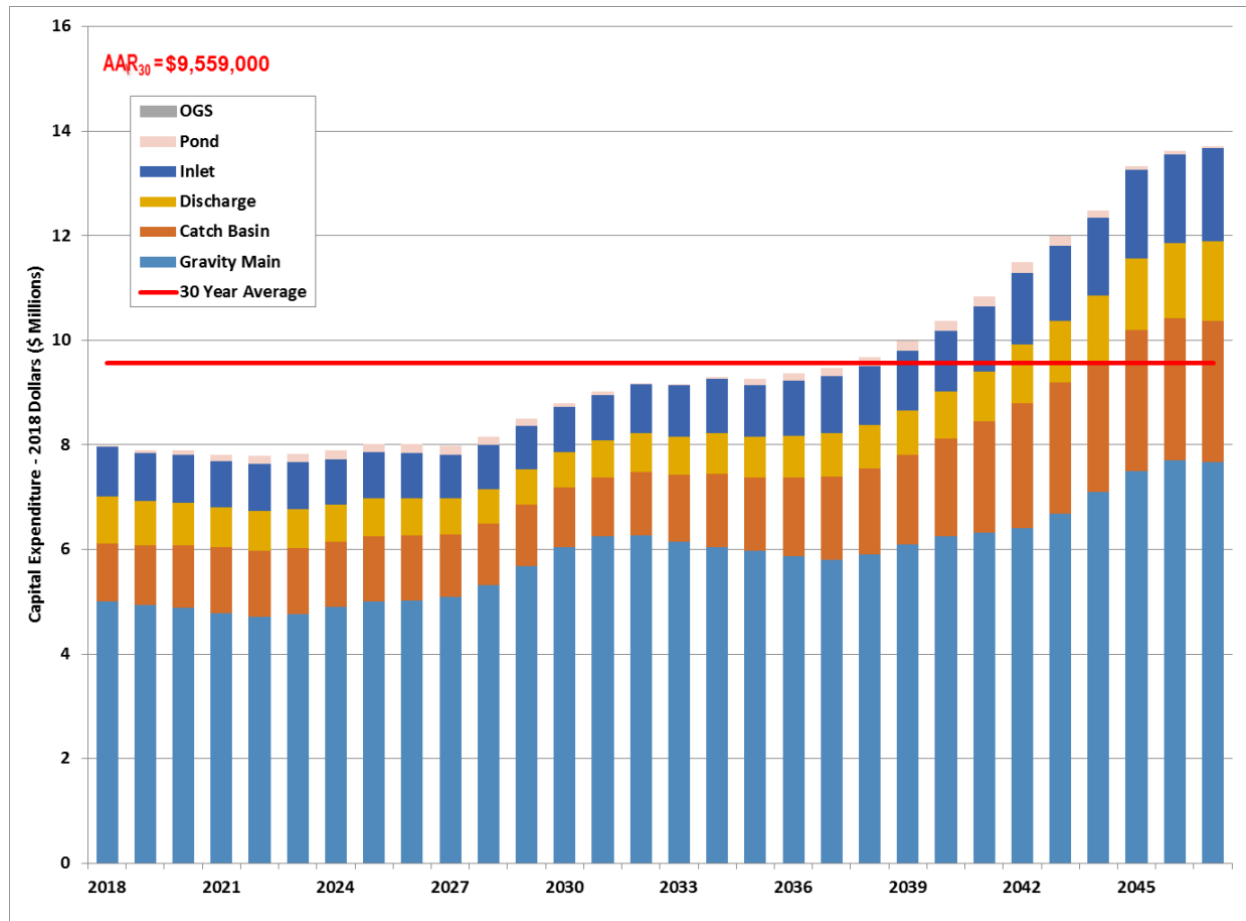
The condition of sanitary sewer main by consumption is provided in Chart No. A2.

**Chart No. A2: Sanitary Sewer Expected Useful Life Consumption (km)**

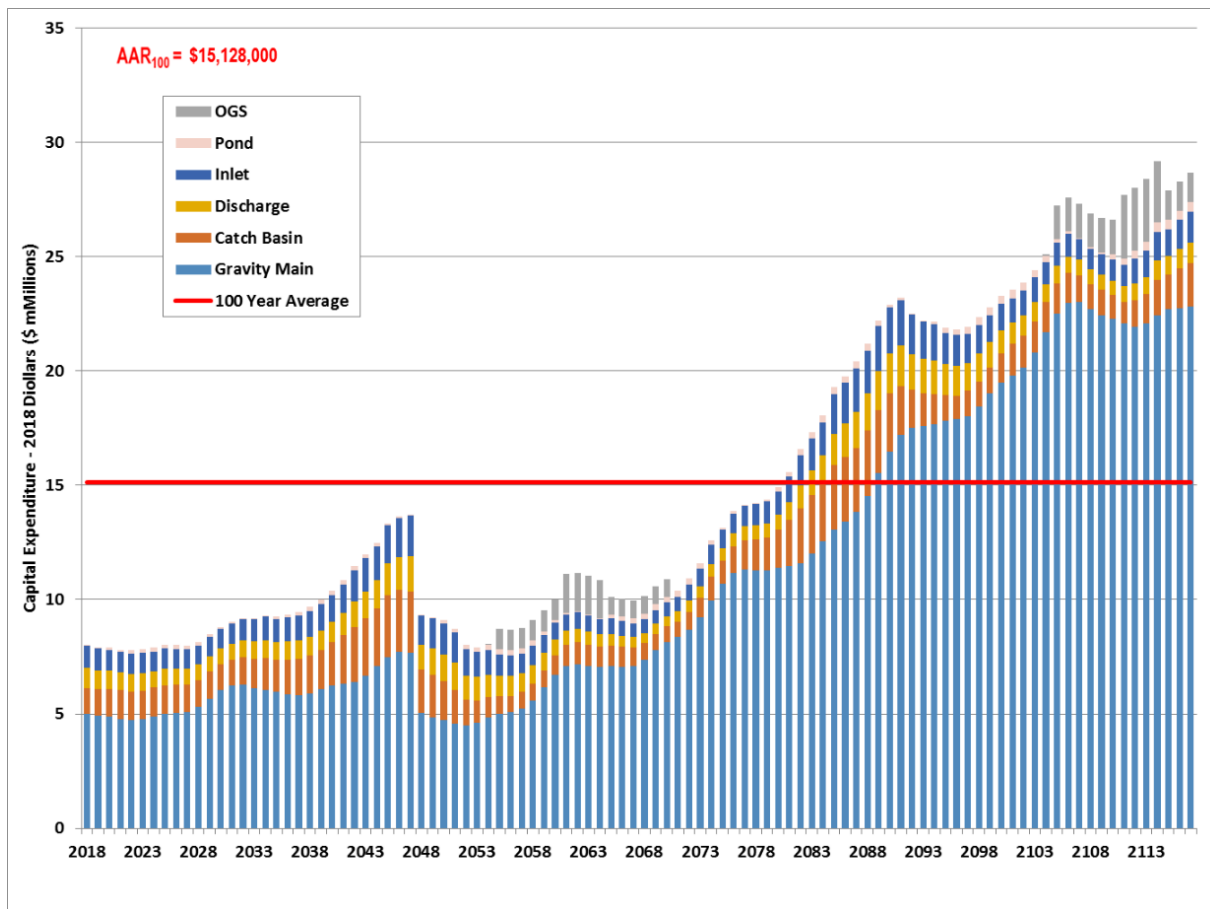


## Storm Water Management

A Weibull Continuous Probability Distribution is used to analyze reliability, asset service life and model asset failure. To consider the premature failure of assets due to improper installation, severe soil and environmental conditions and assets that function beyond their estimated useful lives, the Weibull failure rate and reliability functions were analyzed to develop condition driven investment profiles. The investment profiles are featured below in Chart No. A3 and A4.



**Chart No. A3:** 30 Year Investment Profile for Storm Water Assets (Optimistic Scenario)



**Chart No. A4:** 100 Year Investment Profile for Storm Water Assets (Optimistic Scenario)

The 30 and 100 year investment profiles indicate that, although the STM system is relatively new, capital investment and additional maintenance programs are required to ensure the STM system continues to serve the community.

One of the maintenance program recommendations is to address data gaps with CCTV condition assessment inspections to establish a baseline condition, and collect attribute and inventory information, like material. This was initiated in 2019.



## Fleet and Equipment

The condition of the City's licensed fleet, machinery and equipment assets are summarized in Table No. A4.

<b>Table No. A4: Fleet, Fire, Paramedic and Transit Asset Condition</b>		
<b>Service Area</b>	<b>Asset Type</b>	<b>Average Condition</b>
<b>Fleet</b>	Vehicles - Heavy Duty	56 - Fair
	Vehicles - Medium Duty	48 - Fair
	Vehicles - Light Duty	55 - Fair
	Machinery and Equipment Heavy	43 - Fair
	Machinery and Equipment MTs	46 - Fair
<b>Fire</b>	Fire Truck	40 - Fair
<b>Paramedic</b>	Ambulance	45 - Fair
	Conveyance Equipment*	66 - Good
	Defibrillator*	41 - Fair
	Operating Equipment*	62 - Good
<b>Transit</b>	Transit Bus	42 - Fair

\* Does not have mileage or engine runtime collected and incorporated into the condition score; age-based condition only.

## Parks and Recreation

The condition of the City's parks and recreation assets are summarized in Table No. A5. The conditions provided are age-based with the exception of the regional parks, community parks, neighbourhood parks, playgrounds and tot lots. These assets are visually inspected by City staff on a rotating basis; where 1 is poor, 2 is satisfactory and 3 is good. Going forward, data collection projects for recreational and cultural assets will build upon the baseline conditions below.

<b>Table No. A5: Parks and Recreation Asset Condition</b>		
<b>Service Area</b>	<b>Asset Type</b>	<b>Condition</b>
Rec Space	Splash Park (ie. DJ Hancock Splash Park, Memorial Splash Park)	83 - Very Good
	Trails (ie. Junction Creek Trail, Bell Park Trail and Boardwalk)	58 - Fair
Parks	Regional Parks, Community Parks, Neighbourhood Parks, Playgrounds and Tot Lots (ie. Bell Park and Delki Dozzi)	2.1 - Satisfactory

## Roads, Bridges and Large Culverts and Parking

The City's Pavement Condition Index (PCI) is a composite index calculated from structural cracking, non-structural cracking, rutting and roughness. The network PCI is summarized as follows:

<b>Table No. A6: Network Pavement Condition Index</b>	
<b>Asset Type</b>	<b>Average PCI</b>
Arterial Roads	58
Collector Roads	49
Local Roads	46

The average PCI values are based on 2015 data which has been projected forward and includes any completed rehabilitation work. A data collection project for pavement condition is currently underway.

Structures are made up of various components that deteriorate at different rates. Therefore, the biennial bridge inspection program follows the Ontario Structure Inspection Manual (OSIM) guidelines that visually evaluate each component of the structure and classify component condition. The individual component condition scores are compiled into a Bridge Condition Index (BCI). A summary of the 2018 Bridge & Large Culvert Structural Inspection Report is provided in Table No. A7.

<b>Table No. A7: Bridge Condition Index</b>		
<b>Asset Type</b>	<b>BCI <math>\geq 70</math></b>	<b>BCI <math>\leq 70</math></b>
Vehicle Bridge	53	20
Vehicle Culvert	65	22
Pedestrian Bridge	17	4
Pedestrian Culvert	0	1

The age-based condition grades of the City's parking assets can be found in Table No. A8.

<b>Table No. A8: Parking Asset Age-Based Condition</b>		
<b>Service Area</b>	<b>Asset Type</b>	<b>Average Age-Based Condition</b>
Parking	Parking Lots	47 – Fair
	Operating Equipment	67 - Good

## 9. Appendix B: Data Quality Rating

The data rating used to determine the quality of the financial estimates are demonstrated in Table No. B1.

<b>Table No. B1: Quality of Asset Datasets</b>	
<b>Data Quality Rating</b>	<b>Description</b>
<b>A</b>	<ul style="list-style-type: none"><li>• No Assumptions with condition and age data</li><li>• Reliable data inventory and source</li><li>• Examples: Closed Circuit Television Inspection, Building Condition Assessment, Pavement Condition Assessment, Bridge Condition Assessment, Structural Report</li></ul>
<b>B</b>	<ul style="list-style-type: none"><li>• Dataset contains less than 10% assumptions</li><li>• Moderately reliable data inventory and source</li><li>• Example: aging condition data or studies</li></ul>
<b>C</b>	<ul style="list-style-type: none"><li>• Data contains greater than 10% assumptions</li><li>• Moderately reliable data inventory and source</li><li>• Example: aging condition data or studies</li></ul>
<b>D</b>	<ul style="list-style-type: none"><li>• Data from unreliable or out of date documents</li><li>• Many assumptions of condition, age and replacement values</li><li>• Example: purchasing records, condition data or studies older than 5 years</li></ul>
<b>E</b>	<ul style="list-style-type: none"><li>• Moderately reliable data for age or value, but not both</li><li>• Only 1 moderately reliable data source</li></ul>
<b>F</b>	<ul style="list-style-type: none"><li>• No data available</li></ul>

## For Information Only

### Update on Station Revitalization Project

Presented To: Finance and  
Administration  
Committee

Presented: Tuesday, Oct 22, 2019

Report Date Friday, Oct 04, 2019

Type: Correspondence for  
Information Only

### Resolution

For Information Only

### Relationship to the Strategic Plan / Health Impact Assessment

This report supports strategic initiative 1. Asset Management and Service Excellence Planning. More specifically, it is directly related to 1.4 Reinforce Infrastructure for New Development E. Complete a Community Safety Station revitalization review to address the long-term fiscal and operational sustainability of the facilities.

### Report Summary

This report identifies the goals and objectives of the proposed Community Safety Department Revitalization project, provides a high level assessment of the current facility conditions and next steps in the project. Building condition assessments were used to calculate Facility Condition Index values for each of the buildings and determined the majority are in a poor to very poor state. Additionally, the current CSD Station Revitalization project is uncovering evidence that many of the current facilities do not meet the functional and operational needs of the Department. A later report will provide Council with options to consider regarding the management of CSD facilities.

### Financial Implications

There are no financial implications associated with this information report.

As outlined in the Conclusion/Next Steps of this report, the funding for the comprehensive asset management plan of these facilities has been included in the 2020 Capital Budget for Council's consideration.

#### Signed By

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*Digitally Signed Oct 4, 19*

**Financial Implications**

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# **Update on CSD Station Revitalization Project**

## **Purpose**

The purpose of this report is to provide Council with an update on asset condition data being used to formulate recommendations with respect to Emergency Services Station Revitalization. This report deals with the condition of the facility assets within Community Safety only, it is not intended to contemplate specific service levels, response times, or firefighter staffing.

## **Background**

In 2017, Council authorized an Enterprise Asset Management Strategy. The purpose of the policy is to provide guidance applicable to the whole organization and all of its services to minimize the risk of service interruption or increased cost due to asset failure while supporting the consistent delivery of expected service levels.

The Ministry of Infrastructure has set Municipal Asset Management Planning Regulations (O. Reg. 588/17) which require all municipalities to inventory assets, measure current levels of service and estimate costs to maintain those service levels. Work is proceeding on detailed asset management planning, which includes gaining an understanding of the building condition of each of the City's roughly 600 buildings and facilities.

The Community Safety Department (CSD) operates 25 buildings to provide fire and paramedic services to the community. In 2014 assessments of those facilities identified a requirement for \$12M over the next 1-5 years (short-term) and \$5M over the next 5-10 years (long-term). Only the Capreol Paramedic Station was not assessed at that time. The Auditor General has noted the generally poor state of CSD facilities and associated risks during value for money audits of both Fire and Paramedic Services.

The condition of these buildings has not improved since 2014 and the state of CSD facilities remains generally poor. These reports have driven the need for a coordinated approach in managing CSD facilities, thus a consultant was contracted to provide an independent assessment on best practices in managing Fire and Paramedic facilities. A final report is forthcoming; however, this report will provide a preliminary look at what we have found in relation to most recent building condition assessments.

## **Analysis**

The consultant's team visited every CSD facility with a member of the Assets & Fleet Services Division. The consultant has additionally been given a variety of information

and documents previously released in relation to the facilities. Key staff were interviewed including CSD Leadership, all Executive Leadership Team members, the City Auditor General, and Assets & Fleet Services Leadership. Also, representatives from the respective employee labour groups were consulted with to inform them of the project and to help the consultant better understand the challenges that exist within the Community Safety facilities. Lastly, a survey of front line staff was taken and will be detailed as part of the final report.

The goals and objectives of the proposed CSD Station Revitalization Plan are to:

- Present a series of facilities management options that consider renovating, rebuilding, consolidation and new builds.
- Within the plan, identify and prioritize those stations that should be renovated, consolidated and built new.
- Complete a review of station location to identify those stations that would improve the delivery of fire and paramedic services by relocating them to better serve the community.
- Address the long-term sustainability of the stations as it relates to their location, size, age, condition and for the health and safety of our staff who occupy these facilities.
- At a minimum, maintain current service levels.
- Provide sustainable long-term funding plans based upon the delivered facility management options that provide for consideration of various options in the revitalization of CSD stations.
- Develop at a minimum three options that each will form a business case for consideration by City Council during the 2021 budget process.
- Provide analysis and recommendations regarding the transfer of all stations under the Assets Division.

The methodology undertaken involves first assessing building condition and then comparing the condition to required asset level of service. Asset level of service is the condition and performance expectation of the buildings to support desired levels of service.

## **Current Conditions**

A BCA is an evaluation of a building's structure and mechanical systems. It also includes other property elements such as lighting, façade, drainage, roadways, etc. The BCA evaluation attempts to determine costs associated with bringing the building up to a

state of good repair (SOGR). SOGR can be defined as the condition in which the asset is returned to the condition upon which it was built. SOGR does not factor in any improvements or upgrades such as shower facilities, adequate garage and training space, etc. It simply means the costs to bring the building back to its former original condition.

It cannot be understated that bringing the stations up to a SOGR will not address the current functional and operational needs of today's fire and paramedic services. Therefore, this is not a viable option.

The current CSD Station Revitalization project is uncovering evidence that some of the current facilities do not meet current functional and operational needs of the Department. In terms of housing modern apparatus and vehicles, the current facilities do not allow for flexible options for fleet management in that some vehicles do not fit appropriately in some stations. Additionally, the appropriate storage of equipment such as firefighter bunker gear, pumps, hoses, and hand tools are hampered by limited space in many facilities. It has also been made clear that other functional issues exist within some of these facilities such as inadequate training space and a lack of proper washroom/locker room facilities to meet the needs of the employees. Further, BCAs have provided information about the potential for costly upgrades to be required based on the presence of designated substances (like lead and asbestos) and non-compliance with accessibility legislation.

Based upon the BCAs, the Assets Division has been able to arrive at a Facility Condition Index (FCI) for each building. FCI can be defined as a standard facility management scale used to objectively assess the current needs of a building in relation to its replacement value. The calculation is presented as a ratio of needs against value and produced as a percentage. Different industries and services will determine their comfort level with their FCI results, but a standard practice suggests a facility in a good to very good state would fall within 0%-10%, fair state would fall within 10%-30%, poor state within 30%-50%, and very poor state greater than 50%.

The following table details the FCI for CSD facilities.



STATION	Capreol EMS Station	FS 1 Van Horne	FS 2 Minnow Lake	FS 3 New Sudbury	FS 4 Long Lake	FS 5 Copper Cliff
FCI	22.2%	35.6%	17.8%	35.9%	23.1%	70.7%
STATION	FS 6 Waters	FS 7 Lively	FS 8 Whitefish	FS 9 Beaver Lake	FS 10 Azilda	FS 11 Chelmsford
FCI	30.0%	65.7%	39.8%	101.1%	3.4%	19.7%
STATION	FS 12 Dowling	FS 13 Vermillion	FS 14 Levack	FS 15 Val Caron	FS 16 Val Therese	FS 17 Hanmer
FCI	43.7%	137.8%	54.0%	81.5%	27.1%	71.5%
STATION	FS 18 Capreol	FS 20 Garson	FS 21 Falconbridge	FS 22 Skead	FS 23 Coniston	FS 24 Wahnapiatae
FCI	41.5%	44.2%	108.5%	97.7%	107.5%	118.0%

The following table summarizes the FCI ratings for the CSD stations.

Very Good 0 to 5%	Good 5 to 10%	Fair 10 to 30%	Poor 30 to 50%	Very Poor >50%
1 Facility	0 Facilities	6 Facilities	6 Facilities	11 Facilities

The evidence gathered to date suggests that state of CSD facilities has declined since the last BCAs conducted in 2014. This is not however without attempting to remedy outstanding concerns, as approximately \$3.3M has been spent on the buildings since the last BCA. Even with those repairs, the estimated costs to repair these facilities over the next 10 years has increased by \$17.2M since 2014.

## Conclusion/Next Steps

Fire and Paramedic Services require functional facilities that house staff, vehicles, and equipment to support the delivery of services. When these facilities falter it becomes harder to deliver efficient services and harder to ensure the health and safety of our employees. The majority of CSD facilities are in a poor to very poor state.

Staff intend to return in the future to seek direction from Council on a comprehensive asset revitalization plan to maintain CSD facilities in not only the short, but long-term as well. A capital project to further this work has been included for Council's consideration in 2020 budget deliberations. The final report on this matter will provide options for Council to consider regarding management and sustainability of CSD facilities. Council will continue to be informed as progress is made on this project.

## Resources Cited

- City of Greater Sudbury Enterprise Asset Management Policy
- Asset Management Status Report to Council October 22, 2019