

City of Saint John Finance Committee - Open Session AGENDA

Wednesday, May 29, 2019 4:50 pm

8th Floor Common Council Chamber (Ludlow Room), City Hall

			Pages
1.	Call to	o Order	
2.	Appro	oval of Minutes	
	2.1	Minutes of March 13, 2019	1 - 3
3.	Cons	ent Agenda	
	3.1	2019 General Operating Fund Year End Projection	4 - 7
	3.2	2019 Saint John Water Year End Projection	8 - 11
	3.3	Safe Clean Drinking Water Project (SCDWP) Reserve Fund	12 - 13
4.	Busin	ess Items	
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	4.2	2018 State of the Infrastructure Report	102 - 206
	4.3	2020-2021 General and Utility Capital Budgets	207 - 257
	4.4	Greening our Fleet Policy	258 - 280



The City of Saint John

MINUTES – OPEN SESSION FINANCE COMMITTEE MEETING MARCH 13, 2019 AT 4:50 PM 8th FLOOR COMMON COUNCIL CHAMBER (LUDLOW ROOM), CITY HALL

Present: Mayor D. Darling

Councillor D. Merrithew Councillor G. Sullivan Councillor S. Casey Councillor D. Reardon Councillor G. Norton

Also

Present: City Manager J. Collin

Deputy City Manager N. Jacobsen

Commissioner of Finance and Treasurer K. Fudge

Commissioner Growth & Community Development J. Hamilton

Commissioner Saint John Water B. McGovern

Comptroller Finance C. Graham

Senior Manager Financial Planning H. Nguyen Director Corporate Performance S. Rackley-Roach

Assistant Comptroller Finance and Administrative Services C. Lavigne

Deputy Commissioner Administrative Services I. Fogan

Comptroller Finance C. Graham

Deputy Commissioner Parks & Public Spaces T. O'Reilly

Senior Financial Analyst J. Forgie

Fire Chief K. Clifford

Corporate Performance N. Moar Administrative Assistant K. Tibbits

Meeting Called To Order

Councillor Merrithew called the Finance Committee open session meeting to order.

1.1 Approval of Minutes – January 30, 2019

Moved by Councillor Reardon, seconded by Councillor Casey: RESOLVED that the minutes of January 30, 2019, be approved.

MOTION CARRIED.

1.2 Debt Management Policy

Mr. Fudge reviewed the Debt Management Policy which will establish criteria for the issuance of debt to ensure acceptable levels of debt. The policy also communicates to the public that the City is committed to managing its long-term debt. It is a best practice for a municipality to have a Debt Management Policy. The policy excludes Saint John Water who will require a separate Debt Management Policy.

Finance Committee Meeting Open Session March 13, 2019

Moved by Councillor Reardon, seconded by Councillor Sullivan:

RESOLVED that the Finance Committee recommends that Common Council approve the Draft City of Saint John Debt Management Policy FAS-006.

MOTION CARRIED.

1.3 Wage Escalation Policy

Mr. Fudge reviewed the Wage Escalation Policy. Wages and benefits comprise the largest category of expense in terms of the percentage to the overall operating budget. Wages and benefits have increased from 55% to 58% of the overall operating budget since 2013. To address the structural deficit, it is necessary to address the escalation of wages and benefits. To be sustainable, expenditure growth must align with revenue growth. The Wage Escalation policy ensures that the ability to pay is considered when negotiating future wage arrangements.

In response to a question regarding binding arbitration, Mr. Fudge noted that changes to provincial legislation are very important and if arbitrated settlements result in higher than can be afforded increases, it poses serious challenges to the municipality. The policy states that the City does not want wage increases to cause tax increases or service reductions. The policy, for collective bargaining purposes, provides a mandate to the City Manager and senior staff that the City is striving to bargain within an affordable wage package framework.

Moved by Mayor Darling, seconded by Councillor Norton:

RESOLVED that the Finance Committee:

- approves the Draft Wage Escalation Policy
- recommends that Common Council approve the Wage Escalation Policy FAS-007
- recommends that if approved by Common Council that a copy of the Wage Escalation Policy be sent to Agencies, Boards and Commissions where the City is the majority funder with a request that those ABCs adopt the same policy

MOTION CARRIED.

1.4 Public Engagement

Mr. Fudge commented on the development of the long-term financial plan. On March 25th as part of the best practice of long-term financial planning, the public will be asked to provide feedback through a budget simulator tool. This feedback will be one of many inputs used in the development of the financial plan. It is hoped that themes in the overall responses can be identified, to determine how citizens want the City to prioritize tax dollars and service levels. This is also an opportunity to educate the public on the challenges in balancing the City's operating budget.

The structural deficit in 2021 is projected at \$12M. Through a number of initiatives and austerity projects, the City is targeting \$3M to address a portion of that gap. The public, through the budget simulator tool, is tasked at budgeting the City's 2021 budget shortfall of \$9M.

Moved by Mayor Darling, seconded by Councillor Sullivan: RESOLVED that item 1.4 Public Engagement, be received for information.

MOTION CARRIED.

Adjournment

Moved by Mayor Darling, seconded by Councillor Reardon: RESOLVED that the open session meeting of the Finance Committee be adjourned.

Finance Committee Meeting Open Session March 13, 2019

MOTION CARRIED.

The Finance Committee open session meeting held on March 13, 2019 was adjourned at 6:05 p.m.



FINANCE COMMITTEE REPORT

Report Date	May 24, 2019
Meeting Date	May 29, 2019

Chairman Councillor Merrithew and Members of Finance Committee

SUBJECT: 2019 General Operating Fund Year End Projection

OPEN OR CLOSED SESSION

This matter is to be discussed in open session of Finance Committee.

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
Kevin Fudge		John Collin

RECOMMENDATION

It is recommended that the Finance Committee receive and file this report.

EXECUTIVE SUMMARY

City staff have provided input into the preparation of a year end forecast for the General Operating Fund based on actual results as of April 30, 2019, estimated revenues to be earned and estimated expenditures to occur. The General Operating Fund is estimating a year end surplus of \$775 thousand or 0.49% of budget.

PREVIOUS RESOLUTION

N/A

STRATEGIC ALIGNMENT

The recommendation aligns with Council's priority of fiscal responsibility.

REPORT

Based on the April year to date results and projections provided by Department Heads, the General Operating Fund is presently projected to be in a surplus position at year-end by approximately \$775 thousand or 0.49% of the total

budget. Based on a General Operating Budget of approximately \$161 million, a variance of 0.49% would be widely considered to be tracking on budget.

It should be understood that the projection is compiled based on departmental best estimates as at April 30, 2019. While there are no significant events that have come to the attention of staff to require modification of these estimates at this time, actual year-end results may differ depending on weather conditions as well as other unexpected events.

Appendix 1 (attached) represents year-end projections by service areas for the General Fund.

Overall revenues are trending towards a positive variance of approximately \$721 thousand, or 0.45% of budget, which includes:

- Growth and Community Development Positive variance of approximately \$249 thousand due to withdraws from the Growth Reserve for which offsetting approved growth initiative expenses are recorded, as well as higher than expected activity in Building, Plumbing and Demolition Permits;
- 2. <u>Finance & Administration</u> Positive variance of \$627K due mostly to \$425K in FCM funding to carry out building condition assessments as part of phase 2 of Asset Management and \$125K in higher than expected interest revenue;
- 3. <u>Corporate Services</u> Negative variance of (\$102K) due to a reclassification issue service level agreements for IT services budgeted as revenue but actual revenues recorded as recoveries in expenses. Overall not impact on the bottom line.

Overall expenses are projected to be in a surplus position of approximately \$55 thousand, or 0.04% of budget by the end of the year. The most significant variances are highlighted below:

- Growth and Community Development Negative variance of approximately (\$254 thousand) mostly associated with growth initiatives that is offset by growth reserve revenue for approximately \$213 thousand which includes increased Heritage Grants, investment in Dangerous Building Program and other growth initiatives;
- Transportation and Environment Services Positive variance of approximately \$222 thousand due to a combination of projected staff vacancies as well as current positive tracking of fuel and maintenance on fleet;

- 3. <u>Finance and Administrative Services</u> Negative variance of approximately (\$447 thousand) due mostly to building condition assessments being conducted for Asset Management for which offsetting FCM funding is recorded as revenue;
- 4. Other Charges Projected positive variance of approximately \$429 thousand due to interest expense tracking lower than budget with better than expected debenture terms.

The above budget projections are based on staff's best estimates as of April results. Staff will continue to monitor the results of operations for the balance of the year and report back to Council at a later date.

SERVICE AND FINANCIAL OUTCOMES

The forecast is a service based budget projection based on the cost of providing services to the community.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

Input has been received from all Service Areas

ATTACHMENTS

N/A

The City of Saint John Budget to Projected Variance Report

For the Year Ended December 31, 2019

City of Saint John	2018	2019	2019	2019	2019	
2019 Budget	Approved Budget	Year-to-date Budget	Year-to-date Actual	Annual Budget	Year-end Projection	Variance
REVENUES						
Property taxes	121,319,088	41,192,350	41,192,350	123,577,054	123,577,054	-
PILT Adjustment	-	3,826	3,826	3,826	3,826	-
Equalization & Unconditional Grant	16,603,206	5,784,448	5,784,448	17,353,344	17,353,344	-
Financial Assistance	4,717,196	-	-	7,117,402	7,117,402	-
Surplus 2nd previous year	1,338,515	28,852	28,852	86,557	86,557	-
Growth & Community Development Services	2,503,571	741,123	803,969	2,507,734	2,756,436	248,702
Public Safety Services	1,887,022	457,516	789,118	1,695,896	1,698,569	2,673
Transportation & Environment Services	3,982,308	1,326,864	1,131,276	4,060,970	4,004,120	(56,850)
Finance & Administrative Services	3,654,886	1,247,628	1,423,858	3,743,000	4,370,719	627,719
Corporate Services	85,000	37,332	1,695	112,000	10,500	(101,500)
TOTAL REVENUES	156,090,792	50,819,939	51,159,392	160,257,783	160,978,527	720,744
EXPENDITURES						
Growth & Community Development Services	11,230,732	4,047,459	4,130,510	11,415,903	11,670,560	(254,657)
Public Safety Services	55,385,779	18,512,193	17,853,378	57,061,724	57,039,749	21,975
Transportation & Environment Services	43,720,502	13,641,945	14,031,761	45,108,732	44,887,139	221,593
Finance & Administrative Services	9,503,272	2,964,266	2,597,336	8,985,886	9,432,969	(447,083)
Corporate Services	7,928,039	2,723,721	2,539,878	8,318,049	8,233,754	84,295
Other Charges	28,322,468	5,507,033	4,485,206	29,367,489	28,938,600	428,889
TOTAL EXPENDITURES	156,090,792	47,396,617	45,638,069	160,257,783	160,202,771	55,012
General Fund Surplus (Deficit)	-	3,423,322	5,521,323		775,756	775,756



FINANCE COMMITTEE REPORT

Report Date	May 24, 2019
Meeting Date	May 29, 2019

Chairman Councillor Merrithew and Members of Finance Committee

SUBJECT: Saint John Water Year End Projection

OPEN OR CLOSED SESSION

This matter is to be discussed in open session of Finance Committee.

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager	
Craig Lavigne	Brent McGovern	John Collin	

RECOMMENDATION

It is recommended that the Finance Committee receive and file this report.

EXECUTIVE SUMMARY

Saint John Water has prepared a year end forecast based on actual results as of April 30, 2019, estimated revenues to be earned and estimated expenditures to occur. Saint John Water is estimating a year end deficit of (\$135,271) or 0.28% of budget.

PREVIOUS RESOLUTION

N/A

STRATEGIC ALIGNMENT

The recommendation aligns with Council's priority of fiscal responsibility.

REPORT

Saint John Water has prepared a year-end projection based on actual results at April 30, 2019 and estimated revenue and expenditures for the remaining eight months. The Utility is currently estimating a year-end deficit of (\$135,271) or 0.28%.

There are still several risks that could significantly change this number, namely that there are eight months left in 2019, so there is a large amount of

assumptions. Revenue can be extremely difficult to predict, particularly on the meter revenue as consumption is tied into the Commercial and Industrial users and the Utility does not have insight to the customers' future consumption.

Operationally, there is always the risk of watermain breaks, major equipment failure that can have an impact on estimated expenditures.

<u>Revenues</u> - estimating a favorable variance of \$1,347,835 largely due to meter revenue and interest revenue. Meter revenue is a large driver of the positive variance and is due to a particular Industrial customer continuing to use potable water when they were budgeted to use raw water. This will change as the Safe Clean Drining Water Project (SCDWP) moves toward substantial completion and final watermain connections are made.

Interest revenue is the other major driver of the estimated surplus. The 2019 budget was passed with the expectation that the SCDWP would have been substantially completed in late 2018. However, substantial completion and payment is not due to occur until approximately June 2019, which has resulted in the Utility having unexpected cash on hand in 2019 and earning unbudgeted interest revenue.

<u>Expenditures</u> — estimated an unfavorable variance of (\$1,483,106). The main area causing the majority of this variance is related to the SCDWP. There have been two major settlements made in 2019 relating to this project. The new settlement costs have been absorbed due to operating expenses budgeted for the treatment plant that will not materialize until substantial completion around June, 2019. Also the additional interest revenue being earned has been taken into consideration to offset these additional costs.

Overall, the Utility will continue to aggressively manage its expenditures, controlling cost and finding savings. A year-end projection for the Finance Committee in early fall will be much more accurate and meaningful for the committee members due to reduced amount of assumptions.

SERVICE AND FINANCIAL OUTCOMES

The additional revenue being earned from interest and the delay in substantial completion of the SCDWP has given the ability to pay for additional costs and settlement associated with the project. These additional costs do not have to be borrowed for and therefore will have very little impact on rate payers.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

N/A

ATTACHMENTS

Water and Sewer Budget Analysis April 2019

Water and Sewer Budget to Projected Variance Report

City of Saint John 2019 Budget	2018 Approved Budget	2019 Year-to-date Budget	2019 Year-to-date Actual	2019 Annual Budget	2019 Year-end Projection	Variance
REVENUES						
Flat Rate	21,742,000	11,336,500	11,243,740	22,673,000	22,561,500	(111,500)
Meter Revenue	15,518,000	2,624,002	2,558,101	15,744,000	15,585,500	(158,500)
Industrial Meter Revenue	4,050,000	765,000	1,074,007	4,600,000	5,210,000	610,000
Surplus 2nd previous year	1,217,000	327,000	327,000	981,000	981,000	-
Fire Protection	2,300,000	866,664	866,664	2,600,000	2,600,000	-
Storm Sewer	1,000,000	313,332	311,664	940,000	940,000	-
Other Revenues	1,977,000	205,660	943,393	748,000	1,755,835	1,007,835
TOTAL REVENUES	47,804,000	16,438,158	17,324,569	48,286,000	49,633,835	1,347,835
EXPENDITURES						
Drinking Water						
Watershed Management	211,000	-	79	-	2,084	(2,084)
Water Treatment	3,122,000	3,627,452	1,559,115	10,035,000	11,242,109	(1,207,109)
Water Pumping & Storage	1,166,000	388,057	368,370	1,222,000	1,353,825	(131,825)
Transmission & Distribution	5,281,000	1,244,714	1,456,759	4,976,000	5,019,007	(43,007)
Customer Metering	703,000	210,112	231,798	714,000	724,403	(10,403)
East Watershed Management	-	29,152	29,239	119,460	120,686	(1,226)
West Wellfield Mgmt.	-	15,758	6,792	82,540	81,560	980
	10,483,000	5,515,245	3,580,090	17,149,000	18,543,674	(1,394,674)
Industrial Water						
Watershed Management	524,000	-	326	-	4,789	(4,789)
Water Pumping & Transmission	1,051,000	-	-	-	4,463	(4,463)
Customer Metering	121,000	-	-	-	4,464	(4,464)
West Watershed Mgmt.	-	86,148	54,729	523,530	485,914	37,616
West Water Transmission	-	249,593	141,538	1,147,833	1,129,762	18,071
West Customer Metering	-	18,190	12,167	66,556	62,181	4,375
East Customer Metering	-	13,398	11,410	66,444	61,722	4,722
East Watershed Mgmt.	-	22,325	21,112	91,470	93,387	(1,917)
East Water Transmission	-	214,417	145,298	687,167	695,247	(8,080)
	(1,696,000)	604,071	(385,928)	2,583,000	2,541,929	41,071
Wastewater	2.050.000	4 044 005	4.070.400	0.000.000	0.400.000	(02.000)
Wastewater Pumping	2,859,000	1,011,965	1,072,430	3,086,000	3,169,996	(83,996)
Wastewater Collection	3,440,000	819,110	701,999	3,158,000	3,206,629	(48,629)
WasteWater Treatment	4,969,000	1,523,224	1,496,325	4,810,000	4,764,742	45,258
	11,268,000	3,354,299	3,270,754	11,054,000	11,141,367	(87,367)
Infrastructure Management Municipal Engineering	1,201,000	269,187	297,618	820,000	876,236	(56,236)
	1,201,000	269,187	297,618	820,000	876,236	(56,236)

Water and Sewer Budget to Projected Variance Report

City of Saint John	2018 Approved	2019 Year-to-date	2019 Year-to-date	2019 Annual	2019 Year-end	
2019 Budget	Budget	Budget	Actual	Budget	Projection	Variance
Other Charges						
Other Internal Charges	895,000	260,000	260,588	905,000	905,000	-
Debt Servicing	10,102,000	42,132	42,131	9,753,000	9,738,900	14,100
Capital from Operating	10,775,000	1,566,664	1,190,000	4,700,000	4,700,000	-
Post Employment Benefits	1,384,000	430,194	291,180	1,288,000	1,288,000	-
Other Miscellaneous Charges	-	11,328	-	34,000	34,000	-
	23,156,000	2,310,318	1,783,899	16,680,000	16,665,900	14,100
TOTAL EXPENDITURES	47,804,000	12,053,120	8,546,433	48,286,000	49,769,106	(1,483,106)
SURPLUS / (DEFICIT)	-	4,385,038	8,778,136	-	(135,271)	(135,271)





FINANCE COMMITTEE REPORT

Report Date	May 27, 2019
Meeting Date	May 29, 2019

Chairman Councillor Merrithew and Members of Finance Committee

SUBJECT: Safe Clean Drinking Water Project (SCDWP) Reserve Fund

OPEN OR CLOSED SESSION

This matter is to be discussed in open session of Finance Committee.

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager	
Cathy Graham	Brent McGovern	John Collin	

RECOMMENDATION

It is recommended that the Finance Committee submit the following report to the June 3, 2019 meeting of Common Council with a recommendation to withdraw the Safe Clean Drinking Water Project (SCDWP) Reserve funding in preparation for the upcoming substantial completion payment to Port City Water Partners which is planned to occur in the approximately the next few weeks.

EXECUTIVE SUMMARY

Saint John Water has been budgeting for and transferring funds into a SCDWP Reserve Fund since 2015. This was a conscious decision to reduce borrowing which in turn would lower the operating costs over the next 30 years with lower principal and interest payments.

In approximately the next few weeks a payment will be made for substantial completion of the SCDWP to Port City Water Partners. In preparation for this payment the time has come to withdraw the funds of just over \$20.1 million from the SCDWP Reserve Fund that was set-up for this purpose. The withdrawing of these funds requires Council approval as per the policy on reserve funds.

PREVIOUS RESOLUTION

N/A

STRATEGIC ALIGNMENT

The recommendation aligns with Council's priority of fiscal responsibility.

REPORT

Saint John Water has included in the operating budget, funds to be transferred to the SCDWP Reserve Fund. There have also been additional transfers of surplus funds in the last few years. These funds plus the interest earned now totals just over \$20.1 million. These funds were set aside to reduce the borrowing required for the substantial completion payment of the SCDWP.

Substantial completion is nearing and the final reviews are occurring by the Independent Certifier, Saint John Water and Port City Water Partners. Upon completion of these reviews and identification of the deficiency holback amount the substantial completion amount will be finalized. Payment will then follow in the coming weeks therefore it is time to withdraw the funds from the SCDWP Reserve Fund.

SERVICE AND FINANCIAL OUTCOMES

The capital reserve fund for the SCDWP will save rate payers approximately \$10M and forgo the burden of additional debt payments.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

Finance and Saint John Water collaborated and provided input for this report.

ATTACHMENTS

N/A



City of Saint John 2018 Consolidated Financial Statements



Financial Reporting requirements

- The City is required to follow Public Sector Accounting Standards ("PSAS")pursuant to the Municipal Financial Reporting Manual prescribed by the Commissioner of Municipal Affairs
- PSAS: Canadian Generally accepted accounting principles for local governments, as recommended by the Chartered Professional Accountants of Canada Public Sector Accounting Board ("PSAB")



Differences between Budget and Audit

BUDGET

- Fund basis:
 - General & Utility Operating Fund
 - General & Utility Capital Fund
- Modified accrual accounting (combined accrual basis with cash basis)
 - Assets are expensed when purchased in the Operating Fund
 - Amortization expense is not recorded
 - Debt repayment is expensed in the Operating Fund
- Annual Operating Fund surplus or deficit is to be included in revenue or expenses in the second ensuing year.

AUDIT

- Consolidated Basis: All entities owned and controlled by the City
- Canadian Generally Accepted Accounting Principles, as recommended by the Chartered Professional Accountants of Canada Public Sector Accounting Board ("PSAB")
 - Capital assets are required to be capitalized and amortized over their useful lives
 - Amortization expense is recorded
 - Debt repayment is excluded from expenses when preparing PSAB statements
- Annual Operating Fund surplus or deficit is closed out to Accumulated Surplus at the end of the year

15 Controlled Entities

- 1. City of Saint John General Operating fund
- 2. City of Saint John Capital and Loan fund
- 3. City of Saint John Water & Sewerage Utility Operating fund
- 4. City of Saint John Water & Sewerage Utility Capital and Loan fund
- 5. Saint John Parking Commission
- 6. Saint John Transit Commission
- 7. Develop Saint John
- 8. Harbour Station Commission
- Saint John Aquatic Centre Commission
- 10. Saint John Trade & Convention Centre
- 11. Saint John Energy
- 12. Lord Beaverbrook Rink
- 13. Saint John Police Commission
- 14. Saint John Free Public Library
- 15. Saint John Jeux Canada Games Foundation, Inc.



Consolidated Financial Statements

- Deloitte has expressed an unqualified (clean) audit opinion
- Municipal reporting requirements include:
 - Consolidated Statement of Financial Position
 - Consolidated Statement of Operations and Accumulated Surplus
 - Consolidated Statement of Changes in Net Debt
 - Consolidated Statement of Cash Flow
 - Notes to the Consolidated Financial Statements





2018 General and Utility Fund Operating Results

 General Operating Fund Results: Small deficit of \$119,915 or 0.07% of budget (See Note 22) due to a negative adjustment of Provincial Financial Assistance of \$161,186.

 Utility Operating Fund Results: Small Surplus of \$51,791 or 0.11% of budget (See Note 22)



2018 Achievements

- Reduced General Fund Debt by \$5.5 Mil: \$106.5 Mil as of Dec 31, 2018 (2017: \$112 Mil)
- End 2018 with small variances in both General and Utility Operating Funds (considered on budget)
- Increased investments in Tangible Capital Assets: \$152.5 Mil in 2018 vs. \$49.8 Mil in 2017 mostly due to investment in SCDW project
- Increased contributions to Operating and Capital Reserves (see note 19-Consolidated Financial Statements)



Consolidated Statement of Financial Position

 The Consolidated Statement of Financial Position is a snap-shot of where the City stands financially in terms of resources it holds and debts it owes at a particular point in time (December 31, 2018):

		2018	2017
+	Financial Assets:	\$218.44 Mil	\$177.4Mil
-	Financial Liabilities:	\$549.20 Mil	\$419.2Mil
=	Net Debt:	\$330.76 Mil	\$241.8 Mil

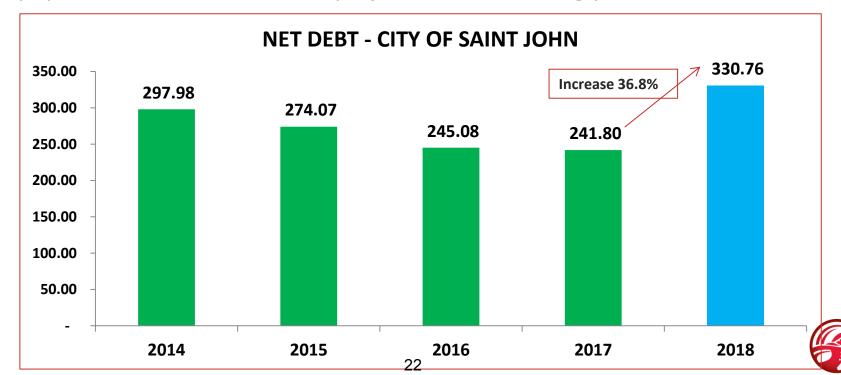
+ Non Financial Assets: \$1,028.99 Mil \$917.8Mil

+ Accumulated Surplus: \$698.23 Mil \$676 Mil



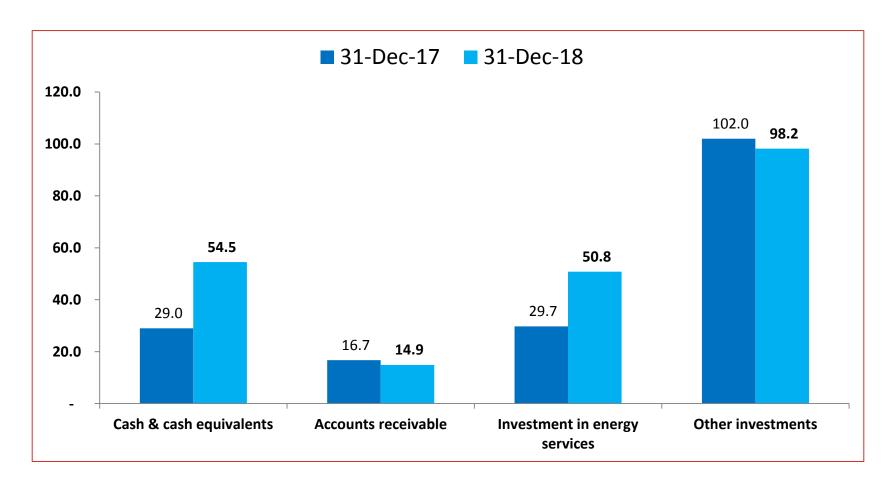
Consolidated Statement of changes in Net Debt

- Net Debt: Key indicator of Municipality's overall financial health. Net Debt means more future revenues will be needed to fund past transactions and events.
- Significant increase in 2018 Net Debt mostly due to a significant amount payable related to the SCDW project in the following year.



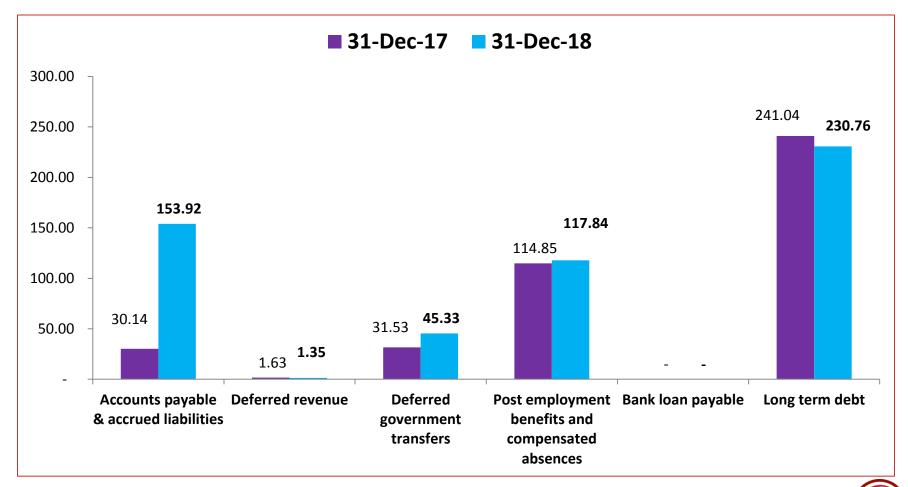
SAINT JOHN

Financial Assets





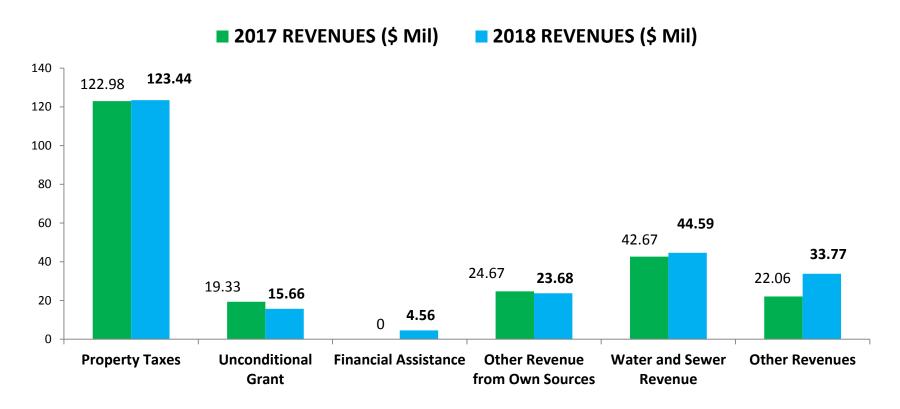
Financial Liabilities





2018 Revenues \$245.70 Mil

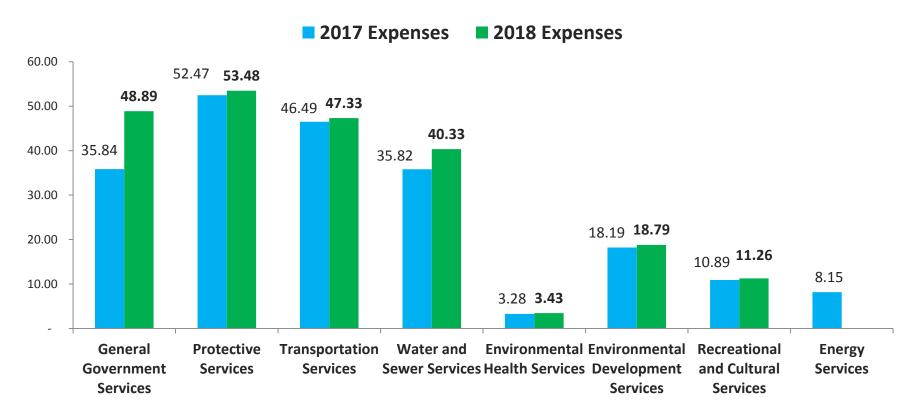
• 2018 Revenues: \$245.70 (2017: \$231.71 Mil)





2018 Expenses \$223.51 Mil

• 2018 Expenses: \$223.51 Mil (2017: \$211.13 Mil)





2018 Consolidated Financial Statements Results

- The City has received a clean audit opinion;
- The City continues its effort to control debt:
 - The General Fund debt balance has reduced by \$5.5 Mil;
 - Increased investment in Capital Reserves to reduce borrowing;
 - To fund the infrastructure deficit, other funding options such as Pay As You Go or Capital Reserve must be considered other than Debt.
- The City continues to invest strategically in its assets in alignment with the Asset Management Program;
- To mitigate future financial risks, the City is actively working on a 10-year Financial Plan which will be completed in 2019.







The City of Saint John

The City of Saint John

Consolidated Financial Statements

December 31, 2018

The City of Saint John December 31, 2018

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Independent Auditor's Report

To His Worship the Mayor and Members of Common Council of The City of Saint John

Report on the Audit of the Financial Statements Opinion

We have audited the financial statements of The City of Saint John (the "City"), which comprise the statement of financial position as at December 31, 2018, and the statements of operations, and accumulated surplus, change in net debt and cash flow for the year then ended, and notes to the financial statements, including a summary of significant accounting policies (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the City as at December 31, 2018, and the results of its operations, its accumulated surplus, changes in its net debt, and its cash flows for the year then ended in accordance with Canadian public sector accounting standards ("PSAS").

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards ("Canadian GAAS"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities* for the Audit of the Financial Statements section of our report. We are independent of the City in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with PSAS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Organization's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Organization or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Organization's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian GAAS will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian GAAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to
 fraud or error, design and perform audit procedures responsive to those risks, and obtain audit
 evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting
 a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may
 involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal
 control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures
 that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the
 effectiveness of the City's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the City's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the City to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the City to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Chartered Professional Accountants

Saint John, NB

XXXX, 2019

The City of Saint John Consolidated Statement of Financial Position As at December 31, 2018

	2018 \$	2017 \$
Financial assets		
Cash and cash equivalents (Note 4)	54,488,474	28,972,730
Accounts receivable (Note 5), (Note 6) and (Note 7)	14,928,030	16,754,191
Investment in energy services (Note 8)	50,801,000	29,687,000
Other investments (Note 9)	98,227,006	101,975,857
	218,444,510	177,389,778
Financial liabilities		
Accounts payable and accrued liabilities (Note 10)	153,921,931	30,134,834
Deferred revenue	1,350,102	1,631,334
Deferred government transfers (Note 11)	45,327,274	31,534,608
Post employment benefits and compensated absences (Note 13)	117,842,785	114,846,827
Long-term debt (Note 12)	230,759,530	241,041,285
Man y	549,201,622	419,188,888
Net debt	(330,757,112)	(241,799,110
Non-financial assets		
Inventory	4,971,338	1,463,962
Prepaids	588,601	643,058
Tangible capital assets (Note 20)	1,023,433,031	915,734,659
	1,028,992,970	917,841,679
Accumulated surplus	698,235,858	676,042,569
Contingencies (Note 14)		
Commitments (Note 15)		
Approved by:		
Don Darling, Mayor David Merrithew, Chair of Fin	 ance Committee	

The City of Saint John
Consolidated Statement of Operations and Accumulated Surplus
For the year ended December 31, 2018

	2018 Budget (Unaudited) (Note 2)	2018	2017
	\$	\$	\$
Revenues			
Property taxes	121,319,088	123,443,042	122,979,450
Unconditional grant	16,603,206	15,659,510	19,328,372
Financial assistance	4,717,196	4,556,010	-
Other revenue from own sources (Note 25)	25,086,270	23,679,812	24,679,313
Water and sewer revenue (Note 16)	44,504,000	44,590,627	42,667,479
Miscellaneous revenue	311,000	421,081	865,927
Contributions from others (Note 25)	1,371,876	12,239,375	21,193,684
Income from energy services		21,114,000	-
	213,912,636	245,703,457	231,714,225
Expenses			
General government services (Note 25)	42,310,658	48,894,496	35,844,645
Protective services (Note 25)	54,285,593	53,478,337	52,470,573
Protective services (Note 25) Transportation services (Note 25) Water and server services (Note 25)	39,249,909	47,324,451	46,488,052
Water and sewer services (Note 25)	47,804,000	40,332,566	35,819,969
Environmental health services (Note 25)	3,764,178	3,429,828	3,281,736
Environmental development services (Note 25)	17,954,811	18,792,023	18,184,695
Recreational and cultural services (Note 25)	10,245,838	11,258,467	10,889,117
Loss from energy services	<u> </u>		8,152,000
	215,614,987	223,510,168	211,130,787
Annual surplus (deficit)	(1,702,351)	22,193,289	20,583,438
Accumulated surplus, beginning of year	<u>-</u>	676,042,569	655,459,131
Accumulated surplus, end of year	-	698,235,858	676,042,569

The City of Saint John Consolidated Statement of Changes in Net Debt For the year ended December 31, 2018

	2018	2017 \$
Annual surplus	22,193,289	20,583,438
Acquisition of tangible capital assets (Note 20)	(152,540,310)	(49,799,937)
Loss on disposal of tangible capital assets (Note 20)	1,148,028	980,829
Proceeds on sale of tangible capital assets	1,428,448	349,239
Amortization of tangible capital assets (Note 20)	38,825,114	36,358,075
(Increase) decrease in inventory	(3,507,376)	(15,447)
(Increase) decrease in prepaids	54,457	(96,394)
Tangible capital assets adjustment related to land held for resale (Note 20)	3,440,348	•
Decrease in net assets	(111,151,291)	(12,223,635)
Net debt, beginning of year	(241,799,110)	(250,158,913)
Net debt, end of the year	(330,757,112)	(241,799,110)

The City of Saint John Consolidated Statement of Cash Flow For the year ended December 31, 2018

	2018	2017
	\$	\$
Operating transactions		
Annual surplus	22,193,289	20,583,438
Items not involving cash		
Amortization of tangible capital assets (Note 20)	38,825,114	36,358,075
Loss on disposal of tangible capital assets	1,148,028	980,829
Tangible capital assets adjustment related to land held for resale	3,440,348	_
Change in investment in Energy Services	(21,114,000)	8,152,000
Change in non-cash assets and liabilities		
Accounts receivable	1,826,161	(5,007,861)
Inventory	(3,507,376)	(15,447)
Prepaids	54,457	(96,394)
Accounts payable and accrued liabilities	123,787,097	5,910,785
Deferred revenue	(281,232)	(22,298)
Deferred government transfers	13,792,666	17,798,585
Other Post employment liabilities	2,995,958	(3,236,441)
200	183,160,510	81,405,271
Capital transactions		
Acquisitions of tangible capital assets (Note 20)	(152,540,310)	(49,799,937)
Proceeds on sale of tangible capital assets	1,428,448	349,239
	(151,111,862)	(49,450,698)
Financing transactions		
Repayment of long-term debt	(24,861,755)	(18,743,985)
Proceeds from long-term debt	14,580,000	53,000,000
Repayment of bank loan	-	(56,454)
	(10,281,755)	34,19 <u>9,561</u>
Investing transaction		
Investments (Note 9)	3,748,851	(93,627,866)
Net increase (decrease) in cash and cash equivalents	25,515,744	(27,473,732)
Cash and cash equivalents, beginning of year	28,972,730	56,446,462
Cash and cash equivalents, end of year	54,488,474	28,972,730

The City of Saint John

Notes to the Consolidated Financial Statements

For the year ended December 31, 2018

1. Purpose of the organization

The City of Saint John (the "City") was incorporated by royal charter in 1785. As a municipality, the City is exempt from income taxes under Section 149(1)(c) of the Canadian Income Tax Act. The City has the following vision statement, "We are energized, engaged people committed to working together to provide services that are responsive to Community needs and delivered in a sustainable, cost effective way."

2. Summary of significant accounting policies

The consolidated financial statements of the City are the representations of the City's management prepared in accordance with Public Sector Accounting Standards ("PSAS") as recommended by the Chartered Professional Accountants of Canada Public Sector Accounting Board ("PSAB").

Significant aspects of the accounting policies adopted by the City are as follows:

Reporting entity

The consolidated financial statements reflect the assets, liabilities, revenues, expenditures, and changes in net debt and cash flows of the reporting entity. The reporting entity is comprised of all organizations and enterprises accountable for the administration of their affairs and resources to the City and which are owned or controlled by the City.

Interdepartmental and organizational transactions and balances are eliminated.

The focus of PSAB financial statements is on the financial position of the City and the changes thereto. The Consolidated Statement of Financial Position includes all of the assets and liabilities of the City.

The entities included in the consolidated financial statements, having the same year end as the City, are as follows:

- 1. The City of Saint John General Operating Fund
- 2. The City of Saint John Capital and Loan Fund
- 3. The City of Saint John Water and Sewerage Utility Operating Fund
- 4. The City of Saint John Water and Sewerage Utility Capital and Loan Fund
- 5. Saint John Parking Commission
- 6. Saint John Transit Commission
- 7. Develop Saint John
- 8. Harbour Station Commission
- 9. Saint John Aquatic Centre Commission
- 10. Saint John Trade and Convention Centre
- 11. Saint John Energy
- 12. Lord Beaverbrook Rink
- 13. Saint John Police Commission
- 14. Saint John Free Public Library
- 15. Saint John Jeux Canada Games Foundation, Inc.

2. Summary of significant accounting policies (Continued)

Investment in Energy Services

The City's investment in Saint John Energy is accounted for on a modified equity basis, consistent with generally accepted accounting principles as recommended by PSAS. Under the modified equity basis of accounting, the business enterprise's accounting principles are not adjusted to conform with those of the City and inter-organizational transactions and balances are not eliminated. The City recognizes its equity interest in the annual income or loss of Saint John Energy in its consolidated statement of operations with a corresponding increase or decrease in its investment asset account.

Budget

The budget figures contained in these financial statements were approved by Council on December 11, 2017 and the revised budget was approved by Council on March 26, 2018 and the Minister of Local Government on January 28, 2018. The budget is unaudited and does not include elimination of inter-organizational revenues and expenses with controlled entities.

Revenue recognition

Unrestricted revenue and other sources of revenue are recorded on an accrual basis and is recognized when collection is reasonably assured. Restricted contributions are recognized as revenue in the year in which the related expenses are incurred. Other revenue is recorded when it is earned.

Property taxes, which are authorized by Council, are recognized as revenues in the period for which the taxes are levied.

Government transfers

Government transfers are recognized in the consolidated financial statements as revenues in the period in which events giving rise to the transfer occur, providing the transfers are authorized, any eligibility criteria have been met, except to the extent that transfer stipulations give rise to an obligation that meets the definition of a liability and reasonable estimates of the amounts can be made. Transfers are recognized as deferred revenue when amounts have been received but not all eligibility criteria have been met.

Expenses

Expenses are recorded on an accrual basis. The cost of all goods consumed and services received during the year is expensed.

Measurement uncertainty

The preparation of the consolidated financial statements in accordance with Canadian PSAS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the year. Key components of the consolidated financial statements requiring management to make estimates include: the useful life of tangible capital assets, impairment of tangible capital assets, rates for amortization, allowance for doubtful accounts in respect of receivables and estimates for pension liabilities.

The City of Saint John Notes to the Consolidated Financial Statements

For the year ended December 31, 2018

2. Summary of significant accounting policies (Continued)

Measurement uncertainty (Continued)

Estimates are based on the best information available at the time of preparation of the financial statements and are reviewed annually to reflect new information as it becomes available. Measurement uncertainty exists in these financial statements. Actual results could materially differ from those estimates.

Cash and cash equivalents

Cash and cash equivalents include cash on hand, balances with banks and short-term deposits with original maturities of three months or less.

Tangible capital assets

Tangible capital assets are non-financial assets having a physical substance that:

- Are held for use by the City in the production or supply of goods and services, for rentals to others, for administrative purposes or for the development, construction, maintenance or repair of other tangible assets:
- Have useful lives extending beyond one year and are intended to be used on a continual basis;
- Have a minimum value of \$5,000 for individual assets; or \$25,000 for pooled assets; and
- Are not intended for sale in the ordinary course of operations.

The City of Saint John

Notes to the Consolidated Financial Statements

For the year ended December 31, 2018

2. Summary of significant accounting policies (Continued)

Tangible capital assets (Continued)

Tangible capital assets are recorded at cost which includes all amounts that are directly attributable to acquisition, construction, development or betterment of the asset. Assets that fall below the threshold amounts are expensed for accounting purposes. The cost of the tangible capital asset is amortized on a straight line over the estimated useful life as follows:

Asset Type	Years
Equipment and light machinery	3-25
Furniture and office equipment	5-15
Information technology equipment and software	1-15
Land	N/A
Land improvements	5-100
Leasehold improvements	Term of Lease
Municipal buildings	10-70
Transportation	5-50
Motor vehicles and mobile equipment	5-20
Water and wastewater networks	5-100

In the year of acquisition and the year of disposal, one half of the annual amortization expense is recognized.

Assets under construction are not amortized until the asset is available for productive use.

Tangible capital assets are written down when conditions indicate that there is impairment in the value of the assets and the reduction in the value can be objectively estimated and it is expected to be permanent. The net write-downs are accounted for as expenses in the statement of operations.

Donated or contributed assets are recorded at fair market value at the date of construction or donation. In some circumstances, replacement cost may be used.

Segmented information

The City provides a wide range of services to its residents. For management reporting purposes, operations and activities are organized and reported by function. This presentation was created for the purpose of recording specific activities to attain certain objectives in accordance with special regulations, restrictions or limitations. Municipal services are provided by service areas as follows:

General government services

This segment is responsible for the overall governance and financial administration of the City. This includes Council functions, general and financial management, legal matters and compliance with legislation as well as civic relations.

The City of Saint John Notes to the Consolidated Financial Statements

For the year ended December 31, 2018

2. Summary of significant accounting policies (Continued)

Segmented information (Continued)

Protective services

This segment is responsible for the provision of policing services, fire protection, emergency measures, animal control and other protective measures.

Transportation services

This segment is responsible for common services, road and street maintenance, street lighting, traffic services, parking and other transportation related functions.

Water and sewer services

This segment is responsible for the provision of water and sewer services including the maintenance and operation of the underground networks, treatment plants, reservoirs and lagoons.

Environmental health services

This segment is responsible for the provision of waste collection and disposal.

Environmental development services

This segment is responsible for planning and zoning, community development, tourism and other municipal development and promotion services.

Recreation and cultural services

This segment is responsible for the maintenance and operation of recreational and cultural facilities, including the swimming pool, arenas, parks and playgrounds and other recreational and cultural facilities.

Energy services

This segment comprises a non-generating distribution utility that supplies electricity to municipal, residential, general service and industrial customers through 12 interconnection supply points and substations located in the City of Saint John. It also provides street lighting, area lighting and water heater rental services.

Inventory

Inventory consists mainly of parts and materials and is valued at the lower of cost and net replacement cost with cost being determined on the first in, first out basis.

2. Summary of significant accounting policies (Continued)

Post employment benefits

The City recognizes its obligations under post-employment benefit plans and the related costs, as disclosed in Note 13. Where appropriate, the City has undertaken actuarial valuations.

3. Bank loan payable

The City has credit facilities with the Bank of Nova Scotia. According to the terms and conditions of the commitment letter signed between the City and the Bank of Nova Scotia, the City can borrow up to \$6 million to fund general operations and \$25 million to assist in financing capital expenditures pending fall-in of long-term financing. The interest rate for the credit facilities is the Bank's prime lending rate less 0.5% per annum with interest payable monthly. As at December 31, 2018, the balance of the bridge financing credit facility was zero (2017 - zero) and the balance of the operating line of credit was zero (2017 - zero).

As prescribed in the Municipalities Act, borrowing to finance General Fund operations is limited to 4% of the City's operating budget. Borrowing to temporarily finance Utility Fund operations is limited to 50% of the operating budget for the year. In 2018, the City has complied with these limitations.

4. Cash and cash equivalents

Cash and cash equivalents consists of the following:

	Dec 31, 2018	Dec 31, 2017
	\$	\$
Unrestricted cash	46,604,352	24,993,221
Restricted cash		
Airspace 2049 fund	27,205	16,733
Land sub-division fund	74,243	54,455
Saint John Non-Profit Housing future development fund	52,447	51,495
Deposits on contracts	1,197,214	1,116,478
Gas Tax	6,533,013	2,740,348
	54,488,474	28,972,730

The City of Saint John Notes to the Consolidated Financial Statements

For the year ended December 31, 2018

5. Accounts receivable

Accounts receivable consist of the following:

	Dec 31, 2018	Dec 31, 2017
	\$	\$
Water and sewer charges to ratepayers	7,644,637	7,460,420
Other	4,245,858	3,698,457
Due from the Province of New Brunswick (Note 7)	3,001,876	1,655,173
Due from the Federal Government and its agencies (Note 6)	1,751,208	5,441,570
Allowance for doubtful accounts	(1,715,549)	(1,501,429)
	14,928,030	16,754,191

6. Due from the Federal Government and its agencies

Amounts due from the Federal Government and its agencies consist of the following:

The state of the s	Dec 31, 2018	Dec 31, 2017
A. S.	\$	\$
Clean Waste Water Funding	799,133	2,067,081
Canada Revenue Agency HST receivable	856,099	3,289,747
Other	95,976	84,742
	1,751,208	5,441,570

7. Due from the Province of New Brunswick

Amounts due from the Province of New Brunswick consists of the following:

	Dec 31, 2018	Dec 31, 2017
	\$	\$
Clean Waste Water Funding	395,216	1,029,341
Financial Assistance	1,566,473	-
Department of Transportation	272,255	-
Dep of Public Safety -Flood 2018	502,000	-
Other	265,932	625,832
	3,001,876	1,655,173

8. Investment in energy services

Change in equity in Saint John Energy:

	Dec 31, 2018	Dec 31, 2017
	\$	\$
Investment at the beginning of year	29,687,000	37,839,000
Net earnings (loss)	21,114,000	(8,152,000)
Investment at end of year	50,801,000	29,687,000

9. Other investments

Other investments consist of the following:

	Dec 31, 2018	Dec 31, 2017
	\$	\$
GIC	90,229,783	93,433,972
Canada Games Foundation investments	6,869,070	7,369,602
Other investments	1,128,153	1,172,283
Total other investments	98,227,006	101,975,857

Investments of the City of Saint John are held with the Bank of Nova Scotia and consist of 2 year term redeemable GICs issued by the Bank of Scotia which fall within the scope of the City's Investment Policy. It is the policy of the City to invest funds to provide the optimal blend of investment returns and principal protection while meeting the City's daily cash flow and liquidity demands.

The investments of the Canada Games Foundation (the "Foundation") are held in the custody of Scotiatrust and CIBC Melon. The Foundation's investment strategy is to hold high quality corporate or government bonds and liquid equity investments which bear no unusual credit or interest rate risk. Fair values of investments in fixed income securities and equities are determined using year end quoted market prices.

10. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities consist of the following:

	Dec 31, 2018	Dec 31, 2017
	\$	\$
Trade payables	143,148,215	20,084,554
Other	181,487	87,217
Payroll	7,242,808	6,680,326
Conferences and holdings	1,085,925	994,986
Deposits	1,318,585	1,297,889
Interest payable	685,928	714,280
Due to Pension Fund	258,983	222,865
Canada Revenue Agency	<u> </u>	52,717
	153,921,931	30,134,834

11. Deferred government transfers

Deferred government transfers consist of the following:

	Dec 31, 2018	Dec 31, 2017
	\$	\$
Gas tax funding	6,533,014	2,740,348
Contribution from Regional Development Corporation	38,794,260	28,794,260
	45,327,274	31,534,608

As per the Gas Tax Funding Agreement, funding received as part of the Gas Tax Funding program is recorded as revenue in the year during which related expenditures are incurred. Amounts that have not been spent are recorded as deferred government transfers on the Consolidated Statement of Financial Position.

Contribution from Regional Development Corporation was related to the Safe Clean Drinking Water Project. The money will be used toward the substantial completion payments in the future.

12. Long-term debt

Debentures consist of the following:

New Brunswick Municipal Finance Corporation Debentures		Interest Rate	Term	2018 Annual Payment	2018	2017
2008 3,300 to 4,850 10 3,397,000 -	Year of Issue			\$	\$	
2008 3,300 to 4,850 10 3,397,000 -	New Brunswick Municipal Finance Cornoration Dehentures					
2008 3.300 to 4.850 10		3.300 to 4.850	10	3,397,000	-	3,397,000
2008 2.100 to 5.550 15 367,000 1,830,000 2,197,2008 2.100 to 5.550 15 175,000 1,750,000 1,252,000 2.008 2.100 to 5.550 15 175,000 1,750,000 1,252,000 2009 0.950 to 5.000 10 933,000 5,603,000 6,636, 2009 0.950 to 5.000 10 75,000 825,000 900, 2009 0.950 to 5.000 10 100,000 600,000 700, 2009 1.000 to 4.500 10 567,000 3,397,000 3,964, 2009 1.000 to 4.500 10 250,000 2,750,000 3,000, 2009 1.000 to 4.500 10 250,000 2,760,000 3,000, 2010 1.500 to 4.550 10 1000,000 7,000,000 2,000, 2011 1.550 to 4.250 10 1,667,000 15,331,000 16,998, 2011 1.650 to 4.250 10 700,000 3,000,000 2,700, 2011	2008	3.300 to 4.850	10		-	1,375,000
2008 2.100 to 5.550 15 100,000 500,000 600, 2009 0.950 to 5.000 10 933,000 5,603,000 6,536, 2009 0.950 to 5.000 10 75,000 825,000 900, 2009 0.950 to 5.000 10 100,000 600,000 700, 2009 1.000 to 4.500 10 567,000 3,97,000 3,964, 2009 1.000 to 4.500 10 250,000 2,750,000 3,000, 2009 1.000 to 4.500 10 333,000 2,750,000 3,000, 2010 1.500 to 4.550 10 250,000 7,000,000 2,236, 2011 1.500 to 4.550 10 250,000 3,000,000 3,250, 2011 1.550 to 4.250 10 1.667,000 15,331,000 16,998, 2011 1.550 to 4.250 10 1.667,000 3,100,000 2,700, 2011 1.550 to 3.550 15 200,000 2,600,000 2,800, 201	2008	2.100 to 5.550	15		1,830,000	2,197,000
2009 0.950 to 5.000 10 933,000 5,603,000 6,536, 2009 0.950 to 5.000 10 75,000 825,000 900, 2009 0.950 to 5.000 10 100,000 600,000 700, 2009 1.000 to 4.500 10 567,000 3,397,000 3,000, 2009 1.000 to 4.500 10 250,000 2,750,000 3,000, 2009 1.000 to 4.500 10 333,000 2,033,000 2,336, 2010 1.500 to 4.550 10 1,000,000 7,000,000 3,250, 2011 1.650 to 4.550 10 1,667,000 3,000,000 3,250, 2011 1.650 to 4.250 10 1,667,000 15,331,000 3,250, 2011 1.550 to 3.450 10 300,000 2,400,000 2,700, 2011 1.350 to 3.450 10 350,000 4,550,000 4,550,000 2,600,000 2,200, 2012 1.350 to 3.550 15 767,000 5,898,000 <td>2008</td> <td>2.100 to 5.550</td> <td>15</td> <td>175,000</td> <td>1,750,000</td> <td>1,925,000</td>	2008	2.100 to 5.550	15	175,000	1,750,000	1,925,000
2009 0.950 to 5.000 10 933,000 5,603,000 6,536, 2009 0.950 to 5.000 10 75,000 825,000 900, 2009 0.950 to 5.000 10 100,000 600,000 700, 2009 1.000 to 4.500 10 567,000 3,397,000 3,000, 2009 1.000 to 4.500 10 250,000 2,750,000 3,000, 2009 1.000 to 4.500 10 333,000 2,033,000 2,336, 2010 1.500 to 4.550 10 1,000,000 7,000,000 3,250, 2011 1.650 to 4.550 10 1,667,000 3,000,000 3,250, 2011 1.650 to 4.250 10 1,667,000 15,331,000 3,250, 2011 1.550 to 3.450 10 300,000 2,400,000 2,700, 2011 1.350 to 3.450 10 350,000 4,550,000 4,550,000 2,600,000 2,200, 2012 1.350 to 3.550 15 767,000 5,898,000 <td>2008</td> <td>2.100 to 5.550</td> <td></td> <td>100,000</td> <td></td> <td>600,000</td>	2008	2.100 to 5.550		100,000		600,000
2009 0.950 to 5.000 10 100,000 600,000 700,000 2009 1.000 to 4.500 10 567,000 3,397,000 3,964, 2009 1.000 to 4.500 10 250,000 2,750,000 3,000, 2009 1.000 to 4.550 10 333,000 2,003,000 2,336, 2010 1.500 to 4.550 10 1,000,000 7,000,000 8,000, 2011 1.500 to 4.550 10 1,667,000 15,331,000 16,998, 2011 1.650 to 4.250 10 1,667,000 15,331,000 16,998, 2011 1.650 to 4.250 10 700,000 9,100,000 9,800, 2011 1.350 to 3.450 10 300,000 2,400,000 2,800, 2011 1.350 to 3.450 10 350,000 4,560,000 2,800, 2012 1.350 to 3.550 15 767,000 6,898,000 7,665, 2012 1.350 to 3.800 20 425,000 5,950,000 6,375, <tr< td=""><td>2009</td><td>0.950 to 5.000</td><td>10</td><td></td><td>5,603,000</td><td>6,536,000</td></tr<>	2009	0.950 to 5.000	10		5,603,000	6,536,000
1.000 to 4.500	2009	0.950 to 5.000		75,000	825,000	900,000
1,000 to 4,500	2009	0.950 to 5.000	10	100,000	600,000	700,000
1,000 to 4,500	2009	1.000 to 4.500	10	567,000	3,397,000	3,964,000
1.500 to 4.550	2009	1.000 to 4.500	10	250,000		3,000,000
1.500 to 4.550	2009	1.000 to 4.500	10	333,000	2,003,000	2,336,000
2011	2010	1.500 to 4.550	10	1,000,000	7,000,000	8,000,000
2011	2010	1.500 to 4.550	10	250,000	3,000,000	3,250,000
1.350 to 3.450	2011	1.650 to 4.250	10	1,667,000	15,331,000	16,998,000
1.350 to 3.450	2011	1.650 to 4.250	10	700,000	9,100,000	9,800,000
2011 2.060 15 200,000 2,600,000 2,800, 2012 1.350 to 3.550 15 767,000 6,898,000 7,665, 2012 1.350 to 3.800 20 425,000 5,950,000 6,375, 2012 1.350 to 3.550 15 300,000 2,700,000 3,000, 2013 1.350 to 3.700 15 687,000 6,865,000 7,552, 2013 1.350 to 4.000 20 550,000 8,250,000 8,800, 2013 1.350 to 4.000 20 360,000 7,200,000 7,660, 2014 2.000 20 500,000 8,000,000 8,500, 2014 2.000 20 500,000 8,000,000 8,479, 2014 1.200 to 3.700 15 1,055,000 3,720,000 4,775, 2014 1.200 to 3.700 20 668,000 6,008,000 6,676, 2014 1.200 to 3.700 20 668,000 6,008,000 6,676, 2014 <t< td=""><td>2011</td><td>1.350 to 3.450</td><td>10</td><td></td><td>2,400,000</td><td>2,700,000</td></t<>	2011	1.350 to 3.450	10		2,400,000	2,700,000
2012 1.350 to 3.550 15 767,000 6,898,000 7,665,201 2012 1.350 to 3.800 20 425,000 5,950,000 6,375,201 2012 1.350 to 3.550 15 300,000 2,700,000 3,000,201 2013 1.350 to 4.000 20 550,000 8,250,000 8,800,201 2013 1.350 to 4.000 20 360,000 7,200,000 7,560,201 2014 2.000 20 500,000 8,000,000 8,500,201 2014 2.000 20 500,000 8,772,000 8,479,201 2014 1.150 to 3.900 15 707,000 7,772,000 8,479,201 2014 1.200 to 3.700 15 1,055,000 3,720,000 4,775,201 2014 1.200 to 3.700 15 1,055,000 3,720,000 4,775,201 2014 1.200 to 3.700 15 1,055,000 56,000,000 6,676,201 2014 1.200 to 3.500 15 27,000 292,000 319,201 2015 0.950 to 3.250 15 500,000 6,000,000	2011	1.350 to 3.450	10	350,000	4,550,000	4,900,000
2012 1.350 to 3.800 20 425,000 5,950,000 6,375, 2012 1.350 to 3.550 15 300,000 2,700,000 3,000, 2013 1.350 to 4.000 20 550,000 8,250,000 8,800, 2013 1.350 to 4.000 20 360,000 7,200,000 7,560, 2014 2.000 20 500,000 8,000,000 8,500, 2014 1.150 to 3.900 15 707,000 7,772,000 8,479, 2014 1.200 to 3.700 15 1,055,000 3,720,000 4,775, 2014 1.200 to 3.700 20 668,000 6,008,000 6,676, 2014 1.200 to 3.700 20 668,000 6,008,000 6,676, 2014 1.200 to 3.700 20 668,000 6,008,000 6,676, 2014 1.200 to 3.500 15 27,000 292,000 319, 2015 0.950 to 3.250 15 56,000 56,000 112, 2015 0.950 to 3.650 15 607,000 2,549,000 3,150,	2011	2.060	15	200,000	2,600,000	2,800,000
2012 1.350 to 3.550 15 300,000 2,700,000 3,000, 2013 1.350 to 3.700 15 687,000 6,865,000 7,552, 2013 1.350 to 4.000 20 550,000 8,250,000 8,800, 2013 1.350 to 4.000 20 360,000 7,200,000 7,560, 2014 2.000 20 500,000 8,000,000 8,500, 2014 1.150 to 3.900 15 707,000 7,772,000 8,479, 2014 1.200 to 3.700 15 1,055,000 3,720,000 4,775, 2014 1.200 to 3.700 20 668,000 6,008,000 6,676, 2014 1.150 to 3.900 15 27,000 292,000 319, 2014 1.200 to 2.150 5 56,000 56,000, 0,000,000 6,576, 2014 1.200 to 3.500 15 500,000 6,000,000 6,500, 2015 0.950 to 3.250 15 500,000 6,000,000 6,500, 2015 0.950 to 3.500 20 175,000 2,975,000 3,150,	2012	1.350 to 3.550	15	767,000	6,898,000	7,665,000
2013 1.350 to 3.700 15 687,000 6,865,000 7,552, 2013 1.350 to 4.000 20 550,000 8,250,000 8,800, 2013 1.350 to 4.000 20 360,000 7,200,000 7,560, 2014 2.000 20 500,000 8,000,000 8,500, 2014 1.150 to 3.900 15 707,000 7,772,000 8,479, 2014 1.200 to 3.700 15 1,055,000 3,720,000 4,775, 2014 1.200 to 3.700 20 668,000 6,008,000 6,676, 2014 1.150 to 3.900 15 27,000 292,000 319, 2014 1.200 to 2.150 5 56,000 56,000 112, 2015 0.950 to 3.250 15 500,000 6,000,000 6,500, 2015 0.950 to 3.650 15 607,000 2,549,000 3,150, 2015 0.950 to 3.500 20 175,000 2,975,000 3,150, 2015 1.050 to 3.650 15 107,000 879,000 986, <	2012	1.350 to 3.800	20	425,000	5,950,000	6,375,000
2013 1.350 to 4.000 20 550,000 8,250,000 8,800, 2013 1.350 to 4.000 20 360,000 7,200,000 7,560, 2014 2.000 20 500,000 8,000,000 8,500, 2014 1.150 to 3.900 15 707,000 7,772,000 8,479, 2014 1.200 to 3.700 15 1,055,000 3,720,000 4,775, 2014 1.200 to 3.700 20 668,000 6,008,000 6,676, 2014 1.150 to 3.900 15 27,000 292,000 319, 2014 1.200 to 2.150 5 56,000 56,000 112, 2015 0.950 to 3.250 15 500,000 6,000,000 6,500, 2015 0.950 to 3.650 15 607,000 2,549,000 3,150, 2015 0.950 to 3.500 20 175,000 2,975,000 3,150, 2015 1.050 to 3.650 15 107,000 879,000 986, 2015 1.050 to 3.650 15 107,000 879,000 986, 2	2012	1.350 to 3.550	15	300,000	2,700,000	3,000,000
2013 1.350 to 4.000 20 360,000 7,200,000 7,560, 2014 2.000 20 500,000 8,000,000 8,500, 2014 1.150 to 3.900 15 707,000 7,772,000 8,479, 2014 1.200 to 3.700 15 1,055,000 3,720,000 4,775, 2014 1.200 to 3.700 20 668,000 6,008,000 6,676, 2014 1.150 to 3.900 15 27,000 292,000 319, 2014 1.200 to 2.150 5 56,000 56,000 112, 2015 0.950 to 3.250 15 500,000 6,000,000 6,500, 2015 1.050 to 3.650 15 607,000 2,549,000 3,150, 2015 0.950 to 3.500 20 175,000 2,975,000 3,150, 2015 1.050 to 3.650 15 107,000 879,000 986, 2015 1.050 to 3.650 15 107,000 879,000 986, 2015 1.050 to 3.650 15 10,34,000 6,102,000 7,136, <td>2013</td> <td>1.350 to 3.700</td> <td>15</td> <td>687,000</td> <td>6,865,000</td> <td>7,552,000</td>	2013	1.350 to 3.700	15	687,000	6,865,000	7,552,000
2014 2.000 20 500,000 8,000,000 8,500, 2014 1.150 to 3.900 15 707,000 7,772,000 8,479, 2014 1.200 to 3.700 15 1,055,000 3,720,000 4,775, 2014 1.200 to 3.700 20 668,000 6,008,000 6,676, 2014 1.150 to 3.900 15 27,000 292,000 319, 2014 1.200 to 2.150 5 56,000 56,000 112, 2015 0.950 to 3.250 15 500,000 6,000,000 6,500, 2015 1.050 to 3.650 15 607,000 2,549,000 3,150, 2015 0.950 to 3.500 20 175,000 2,975,000 3,150, 2015 1.050 to 3.650 15 107,000 2,975,000 1,400, 2015 1.050 to 3.650 15 107,000 879,000 986, 2016 1.200 to 3.550 15 1,034,000 6,102,000 7,136,	2013	1.350 to 4.000	20	550,000	8,250,000	8,800,000
2014 1.150 to 3.900 15 707,000 7,772,000 8,479, 2014 1.200 to 3.700 15 1,055,000 3,720,000 4,775, 2014 1.200 to 3.700 20 668,000 6,008,000 6,676, 2014 1.150 to 3.900 15 27,000 292,000 319, 2014 1.200 to 2.150 5 56,000 56,000 112, 2015 0.950 to 3.250 15 500,000 6,000,000 6,500, 2015 1.050 to 3.650 15 607,000 2,549,000 3,156, 2015 0.950 to 3.500 20 175,000 2,975,000 3,150, 2015 1.050 to 3.650 15 107,000 879,000 986, 2015 1.050 to 3.650 15 107,000 879,000 986, 2016 1.200 to 3.550 15 1,034,000 6,102,000 7,136,	2013	1.350 to 4.000	20	360,000	7,200,000	7,560,000
2014 1.200 to 3.700 15 1,055,000 3,720,000 4,775, 2014 1.200 to 3.700 20 668,000 6,008,000 6,676, 2014 1.150 to 3.900 15 27,000 292,000 319, 2014 1.200 to 2.150 5 56,000 56,000 112, 2015 0.950 to 3.250 15 500,000 6,000,000 6,500, 2015 1.050 to 3.650 15 607,000 2,549,000 3,150, 2015 0.950 to 3.500 20 175,000 2,975,000 3,150, 2015 1.050 to 3.150 20 175,000 1,225,000 1,400, 2015 1.050 to 3.650 15 107,000 879,000 986, 2016 1.200 to 3.550 15 1,034,000 6,102,000 7,136,	2014	2.000	20	500,000	8,000,000	8,500,000
2014 1.200 to 3.700 20 668,000 6,008,000 6,676, 2014 1.150 to 3.900 15 27,000 292,000 319, 2014 1.200 to 2.150 5 56,000 56,000 112, 2015 0.950 to 3.250 15 500,000 6,000,000 6,500, 2015 1.050 to 3.650 15 607,000 2,549,000 3,156, 2015 0.950 to 3.500 20 175,000 2,975,000 3,150, 2015 1.050 to 3.150 20 175,000 1,225,000 1,400, 2015 1.050 to 3.650 15 107,000 879,000 986, 2015 1.050 to 3.650 15 1,034,000 6,102,000 7,136,	2014	1,150 to 3,900	15	707,000	7,772,000	8,479,000
2014 1.150 to 3.900 15 27,000 292,000 319, 2014 1.200 to 2.150 5 56,000 56,000 112, 2015 0.950 to 3.250 15 500,000 6,000,000 6,500, 2015 1.050 to 3.650 15 607,000 2,549,000 3,156, 2015 0.950 to 3.500 20 175,000 2,975,000 3,150, 2015 1.050 to 3.150 20 175,000 1,225,000 1,400, 2015 1.050 to 3.650 15 107,000 879,000 986, 2016 1.200 to 3.550 15 1,034,000 6,102,000 7,136,	2014	1.200 to 3.700	15	1,055,000	3,720,000	4,775,000
2014 1.200 to 2.150 5 56,000 56,000 112, 2015 0.950 to 3.250 15 500,000 6,000,000 6,500, 2015 1.050 to 3.650 15 607,000 2,549,000 3,156, 2015 0.950 to 3.500 20 175,000 2,975,000 3,150, 2015 1.050 to 3.150 20 175,000 1,225,000 1,400, 2015 1.050 to 3.650 15 107,000 879,000 986, 2016 1.200 to 3.550 15 1,034,000 6,102,000 7,136,	2014	1.200 to 3.700	20	668,000	6,008,000	6,676,000
2015 0.950 to 3.250 15 500,000 6,000,000 6,500, 2015 1.050 to 3.650 15 607,000 2,549,000 3,156, 2015 0.950 to 3.500 20 175,000 2,975,000 3,150, 2015 1.050 to 3.150 20 175,000 1,225,000 1,400, 2015 1.050 to 3.650 15 107,000 879,000 986, 2016 1.200 to 3.550 15 1,034,000 6,102,000 7,136,	2014	1.150 to 3.900	15	27,000	292,000	319,000
2015 0.950 to 3.250 15 500,000 6,000,000 6,500, 2015 1.050 to 3.650 15 607,000 2,549,000 3,156, 2015 0.950 to 3.500 20 175,000 2,975,000 3,150, 2015 1.050 to 3.150 20 175,000 1,225,000 1,400, 2015 1.050 to 3.650 15 107,000 879,000 986, 2016 1.200 to 3.550 15 1,034,000 6,102,000 7,136,	2014	1.200 to 2.150	5	56,000	56,000	112,000
2015 1.050 to 3.650 15 607,000 2,549,000 3,156, 2015 0.950 to 3.500 20 175,000 2,975,000 3,150, 2015 1.050 to 3.150 20 175,000 1,225,000 1,400, 2015 1.050 to 3.650 15 107,000 879,000 986, 2016 1.200 to 3.550 15 1,034,000 6,102,000 7,136,		0.950 to 3.250	15	500,000	6,000,000	6,500,000
2015 0.950 to 3.500 20 175,000 2,975,000 3,150, 2015 1.050 to 3.150 20 175,000 1,225,000 1,400, 2015 1.050 to 3.650 15 107,000 879,000 986, 2016 1.200 to 3.550 15 1,034,000 6,102,000 7,136,		1.050 to 3.650	15		2,549,000	3,156,000
2015 1.050 to 3.150 20 175,000 1,225,000 1,400, 2015 1.050 to 3.650 15 107,000 879,000 986, 2016 1.200 to 3.550 15 1,034,000 6,102,000 7,136,		0.950 to 3.500		175,000		3,150,000
2015 1.050 to 3.650 15 107,000 879,000 986, 2016 1.200 to 3.550 15 1,034,000 6,102,000 7,136,	2015	1.050 to 3.150		175,000		1,400,000
2016 1.200 to 3.550 15 1,034,000 6,102,000 7,136,	2015				879,000	986,000
	2016	1.200 to 3.550		1,034,000		7,136,000
	2016	1.450 to 3,500	15	400,000	5,200,000	5,600,000

12. Long-term debt (Continued)

	Interest Rate	Term	2018 Annual Payment	2018	2017
Year of Issue	"Merest Nate	(Years)	\$	\$	\$
2016	1.450 to 3.750	20	200,000	3,600,000	3,800,000
2016	1.200 to 2.950	10	400,000	3,200,000	3,600,000
2016	1.200 to 3.550	15	127,000	1,046,000	1,173,000
2017	1.200 to 3.300	15	333,000	4,667,000	5,000,000
2017	1.650 to 3.200	15	513,000	3,387,000	3,900,000
2017	1,650 to 3,400	30	1,500,000	43,500,000	45,000,000
2017	1.650 to 2.900	10	350,000	3,150,000	3,500,000
2017	1.650 to 3.200	15	101,000	1,069,000	1,170,000
2018	2.550 to 3.550	15	-	10,500,000	-
2018	2.100 to 3.000	5	-	2,830,000	-
2018	2.100 to 3.450	10	-	1,250,000	-
			24,763,000	230,079,000	240,262,000
OTHER DEBENTURES					
Canada Mortgage and Housing Debentures 2009	3.97	15	98,755	680,530	779,285
Total debentures	43		24,861,755	230,759,530	241,041,285

The aggregate amount of principal repayments required in each of the next five years and thereafter to meet provisions of long-term debt, assuming maturity debt is renewed at terms comparable to those currently in effect, is as follows:

	\$
2019	33,864,675
2020	25,886,752
2021	38,956,990
2022	12,753,396
2023	13,161,000
Thereafter	106,136,717
Total	230,759,530

13. Post employment benefits and compensated absences

City of Saint John Shared Risk Plan

The City of Saint John Pension Plan (Former CSJ Plan) was converted to the City of Saint John Shared Risk Plan ("CSJ SRP") effective January 1, 2013 (the conversion date). The purpose of the CSJ SRP is to provide secure benefits to members of the plan without an absolute guarantee but with a risk focused management approach delivering a high degree of certainty that base benefits can be met in the vast majority of potential future economic scenarios. These objectives are achieved through the development of a risk management framework that adheres to the legislated criteria, results in a low probability that base benefits will be reduced, and sets out the specific steps to be taken should the Plan's funded ratio fall below, or exceed, specified thresholds. These steps, when the Plan is underfunded, include the cessation of indexation of benefits, increasing contribution rates (to a predetermined maximum), reducing certain ancillary benefits, and ultimately reducing base benefits. When the Plan has excess funding, previous benefit reductions can be reversed, indexing is fully implemented, and various other potential increases can be implemented, including a decrease in contribution rates (to a predetermined maximum).

Shared risk plans are legislated under the provincial Pension Benefits Act (PBA) which contains a number of requirements that must be met in order to qualify for registration by the Office of the Superintendent of Pensions. The Plan is also subject to the Income Tax Act. The Plan is administered by a Board of Trustees which includes 4 individuals nominated by the City and 4 individuals nominated by each of the four unions.

The assets of the Plan are held by RBC Investor and Treasury Services which acts as custodian of the Plan. The assets of the Plan are managed by various investment managers who have discretionary investment authority within the investment mandates given to them by the Plan's Board of Trustees. The performance of the Plan relative to its benchmarks is measured on a regular basis.

For service prior to the conversion date, the Plan provides for pensions at the rate of 2% per year of service times the average of the three consecutive years of service having the highest salary at the time of conversion. For service after the conversion date, the pension accrual for each year of service is 1.8% times the salary (excluding overtime pay) earned during the relevant year to a certain maximum salary that is indexed every year (\$133,892 in 2018).

Pension benefits accrued before the conversion date are payable without reduction when the member's age and service equal at least 85 (or at age 65, if earlier). Pension benefits accrued after the conversion date are payable without reduction at age 60 for employees in the International Association of Fire Fighters and Saint John Police Association and at age 65 for all other employees. Pension benefits can be paid as early as age 55 with a reduction.

Shared risk plans extinguish all accrued rights to automatic future indexing. These automatic adjustments have been replaced by indexing as permitted by the Plan's funding policy, which is contingent on the SRP performance.

13. Post employment benefits and compensated absences (Continued)

City of Saint John Shared Risk Plan (Continued)

The initial required employee contributions are equal to 12% of earnings for employees in the International Association of Fire Fighters and Saint John Police Association and employee contributions of 9% of earnings for other employees. Members in public safety occupations who accept a non-union position will have a one-time opportunity to elect to continue to contribute at the higher rate. The City makes initial required employer contributions of 15.2% and 11.4% of earnings (representing about 126.7% of employee contribution rates) for each of these groups. The initial contribution rates for both the employees and the City is subject to change as a result of the triggering mechanism and limitations imposed by the Plan's funding policy. Also, since April 1, 2013, the City is required to make contributions of 17% of earnings for a period of 15 years, or when the Plan achieves a minimum funded ratio of 150% (as calculated under the legislation) using a 15-year open group method (no less than 10 years of payment must be made). The City has no other financial obligation other than to make contributions at the above rates, and within the limits found under the Plan's funding policy.

In the event of a wind-up of the Plan in the five years following the conversion date, the Plan would be wound up under the provisions of the Former CSJ Plan. All assumptions relating to the CSJ SRP have been made on the basis of an on-going Plan and the City does not foresee a wind-up of the Plan.

Actuarial valuations

Actuarial valuations for the Plan are conducted annually by the Board of Trustees for regulatory purposes. In turn, the actuarial valuations for accounting purposes are based on these figures (with adjustments). The most recent actuarial valuation was prepared as at January 1, 2018. The actuarial valuations for accounting purposes are based on a number of assumptions about future events, such as inflation rates, interest rates, salary increases, employee turnover and mortality. The accrued benefit obligation as at December 31, 2017 and current period benefit cost for the following year are based on an actuarial valuation conducted as at December 31, 2017. The accrued benefit obligation as at December 31, 2018 and current period benefit cost for the following year are based on an actuarial valuation conducted as at December 31, 2018 and extrapolated to December 31, 2018, using assumptions effective for December 31, 2018. The assumptions used reflect management's best estimates. The following summarizes the major assumptions in the accounting valuations and extrapolations at the various effective dates:

	Dec 31, 2018	Dec 31, 2017
Discount rate	6.05%	6.05%
Inflation rate	2.25%	2.25%
Salary increase	3%	3%
Mortality: CPM-2014 mortality table with adjustments factors	0	0

The Expected Average Remaining Service Life (EARSL) is 12 years. During the year, the City made pension contributions of \$20,562,689 (2017 - \$18,853,033).

The City of Saint John Notes to the Consolidated Financial Statements

For the year ended December 31, 2018

13. Post employment benefits and compensated absences (Continued)

City of Saint John Shared Risk Plan (Continued)

The following table reflects the City's share of the accrued benefit liability, which equals to the full portion of the Accumulated Benefit Obligation ("ABO") related to the temporary contributions and 55.9% of the remaining portion of the ABO net of Plan assets because funding contributions are shared at 55.9% by the City and 44.1% by employees, before taking into account the additional temporary contribution of 17% of earnings.

	Dec 31, 2018	Dec 31, 2017
	\$	\$
City share of accrued benefit liability, beginning of year	89,300,000	114,600,000
City share of current period benefit cost	6,300,000	5,800,000
City share of past service cost	13,000,000	2,700,000
Interest cost	5,700,000	6,600,000
Less City contributions	(20,600,000)	(18,800,000)
Actuarial (gain)/loss	20,400,000	(21,600,000)
City share of accrued benefit liability, end of year	114,100,000	89,300,000
Unamortized actuarial gain/(loss)	(15,700,000)	5,400,000
Pension liability, end of year	98,400,000	94,700,000

The following table reflects the City share of pension related expenses:

	Dec 31,	Dec 31,
	2018	2017
	\$	\$
Current period benefit cost	6,300,000	5,800,000
Past service cost	13,000,000	2,700,000
Interest cost	5,700,000	6,600,000
Amortization of City share of actuarial (gain) loss	(700,000)	1,200,000
Total expense related to Pension	24,300,000	16,300,000

13. Post employment benefits and compensated absences (Continued)

Other employee future benefits

The City provides for the payment of retirement allowances to retiring employees in accordance with the terms of the various collective agreements and Municipal policy. The retirement allowance is based on the member's final annual salary and years of service at retirement. Employees upon retirement from the City are entitled to a retirement allowance equal to one month's pay, to a maximum of six months, for every five years of service. The program has been amended to provide certain employees with a payout option prior to retirement. Accepting the early payout option eliminates further accumulation of retirement allowance entitlement for those employees.

The City also provides for employee sick leave. Unused sick leave accumulates to a maximum number of hours which varies by employment agreement. Under this program, employees are not entitled to a cash payment in lieu of sick leave when they leave the City's employment except as described below with respect to the retirement both outside workers (local 18) and firefighters (local 771).

Upon retirement, members of Local 18 and 771 will be eligible to receive 10% of their regular rate of pay for accumulated sick leave credits in excess of 1,760 hours or 2,280 hours respectively.

For employees of the City of Saint John Fire department, who are unable to work due to heart disease or permanent injury to the lungs, the City pays certain amounts to disabled firefighters or their survivor spouse as a result of the provisions of an Act of the Legislature, known as the Act respecting the Saint John Firefighters's Association.

As at January 1, 2013, the City's pension plan was converted to a shared risk model. As part of the conversion, the City assumed the obligation for paying existing disability pensions, that had been granted under the old plan, until disabled members reach the age of 65. On a go forward basis, disability coverage is now provided for employees through a long term disability program administered by an insurance carrier.

Finally there are specific agreements that obligate the City to pay top up pensions to certain individuals. During the year, the City made payments of \$65,375 (2017 - \$64,128) related thereto.

Valuation techniques and assumptions

Actuarial valuations of the above benefits are completed for accounting purposes using the projected benefit method prorated on services. The last actuarial valuation of the post-employment benefit plans was conducted as at December 31, 2018. Previous to that, an actuarial valuation was performed as at December 31, 2017.

The above benefit plans are unfunded and as such, there are no applicable assets. Benefits are paid out of general revenue as they become due.

13. Post employment benefits and compensated absences (Continued)

A reconciliation of the accrued benefit obligation for these plans, along with the main assumptions used for disclosure and expense calculations are as follows:

	Dec 31,	Dec 31,
	2018	2017
	\$	\$
Accrued benefit obligation, beginning of year	26,522,427	26,436,668
Current period benefit cost	1,081,400	988,300
Benefit payments	(3,042,243)	(3,062,043)
Interest cost	808,601	902,602
Actuarial loss	279,000	1,256,900
Other employee future benefits, end of year	25,649,185	26,522,427

· partired	Dec 31,	Dec 31,
hypother and the second	2018	2017
e de la companya della companya dell	\$	\$
Main assumptions used for these plans:		
Discount rate	3.46%	3.17%
Salary increase	3%	3%
EARSL	Range from 8 to 23	Range from 10 to 22

The City of Saint John

Notes to the Consolidated Financial Statements

For the year ended December 31, 2018

13. Post employment benefits and compensated absences (Continued)

These benefit plans require no contributions from employees. The benefit liability as at December 31, 2018 includes the following components:

	Dec 31, 2018	Dec 31, 2017
	\$	\$
Accrued benefit obligation (carrying value)		
Retirement allowances	4,517,400	4,048,400
Sick leave	8,330,000	8,407,000
Heart and lung pension	5,133,600	5,270,900
Disability benefits	5,637,600	6,634,800
Contractual top up agreements	1,076,185	1,138,827
Sick leave - Saint John Transit Commission	954,400	1,022,500
	25,649,185	26,522,427
Unamortized actuarial losses	(6,206,400)	(6,375,600)
(Market Comment)	19,442,785	20,146,827

The unamortized actuarial losses will be amortized over the expected average remaining service life ("EARSL") of the related employee groups starting in the next fiscal year. EARSL is determined separately for each benefit program.

The total expense related to other employee benefits described above includes the following components:

	Dec 31,	Dec 31,
	2018	2017
	\$	\$
Current period benefit cost	1,081,400	988,300
Amortization of actuarial loss	448,200	434,700
	1,529,600	1,423,000
Other employee benefit interest expense	808,601	902,602
Total expense related to other employee future benefits	2,338,201	2,325,602

14. Contingencies

In accordance with the Regional Service Delivery Act and the General Regulation thereunder, the City is also liable for a pro rata share of the debentures and other long-term debt issued on behalf of the Fundy Region Solid Waste Commission ("Commission"). The portion attributable to the City is determined on the basis of its percentage of total population within all participating municipalities and unincorporated areas. The total of such debt outstanding at December 31, 2018 amounted to \$108,000 (2017 – \$214,000). Based on 2003 population figures, the City is liable for approximately 55% of the Commission's debt.

The City is, from time to time, subject to various investigations, claims, and legal proceedings covering matters that arise in the ordinary course of its business activities. Management believes that any liability that may ultimately result from the resolution of these matters will not have a material adverse effect on the consolidated financial position or operating results of the City. Legal proceedings filed in December 2013 remain outstanding against the city of Saint John with respect to the alleged activity of a former employee/police officer. The relief sought has not been quantified in the documents filed with the court and therefore the city is not in a position to estimate the amount of potential liability if any, in this matter. Legal proceedings were filed against the City of Saint John in early 2018 relating to the water supplied by the municipal water system to some of its customers. The relief sought has not been quantified in the documents filed with the court and therefore the City is not in a position to estimate the amount of the potential liability, if any, in this matter.

15. Commitments

Greater Saint John Regional Facilities Commission

During 1998, the Greater Saint John Regional Facilities Commission ("Regional Facilities Commission") was created by an Act of the Legislative Assembly of New Brunswick. Under the provisions of the Act, the Regional Facilities Commission has the authority to determine the annual amount of total municipal contribution to be made towards the operation of five regional facilities: the Saint John Aquatic Centre Commission, Harbour Station Commission, the Saint John Trade and Convention Centre, the Imperial Theatre and the Saint John Arts Centre. Under the provisions of the Act, the City's contribution is its pro rata share of the Regional Facilities Commission's operating budget based on the tax bases of the participating municipalities of the Town of Quispamsis, the Town of Rothesay, the Town of Grand Bay-Westfield and the City of Saint John. The City's contribution is 67.151% in 2018 (2017 - 67.39%).

The City of Saint John

Notes to the Consolidated Financial Statements

For the year ended December 31, 2018

16. Water and Sewer fund surplus/deficit

The Municipalities Act requires Water and Sewer Fund surplus/deficit amounts to be absorbed into one or more of four Operating Budgets commencing with the second ensuing year; the balance of the surplus/deficit at the end of the year consists of:

	Dec 31,	Dec 31,
	2018	2017
	\$	\$
2018 surplus	51,791	-
2017 surplus	532,037	532,037
2016 surplus	179,141	716,564
2015 surplus	322,225	483,337
2014 surplus	507,658	1,015,317
2013 surplus		368,782
	1,592,852	3,116,037

17. Water cost transfer

The City's water cost transfer for fire protection is within the maximum allowable by Regulation 81-195 under the Municipalities Act, based upon the applicable percentage of water system expenditures for the population.

18. Funds held in trust

Funds administered by the City for the benefit of external parties are not included in the consolidated financial statements. The amount administered as at December 31, 2018 was \$484,113 (2017 - \$476,690).

19. Funds and reserves

	Water & Sewer Capital Reserve	General Operating Reserve	General Capital Reserve	Transit Capital Reserve	2018 Total	2017 Total
	\$	\$	\$	\$	\$	\$
Assets						
Cash	21,672,723	4,646,089	5,381,167	354,399	32,054,378	17,327,914
Accumulated surplus	21,672,723	4,646,089	5,381,167	354,399	32,054,378	17,327,914
Revenue						
Transfers from Water and Sewerage Utility Operating Fund	7,796,255	•	-	-	7,796,255	6,850,000
Transfers from General Operating Fund	-	1,350,000	3,620,702	-	4,970,702	2,383,000
Transfers from Transit Operating Budget	-	-	-	100,000	100,000	250,000
Interest	300,688	57,732	20,330	4,399	383,149	128,621
	8,096,943	1,407,732	3,641,032	104,399	13,250,106	9,611,621
Expenditures	•	68,420	1,777,342	-	1,845,762	
Annual surplus	8,096,943 🛦	1,339,312	1,863,690	104,399	11,404,344	9,611,621
Balance, beginning of Year	13,575,780	3,306,777	3,517,477	250,000	20,650,034	7,716,293
Balance, end of Year	21,672,723	4,646,089	5,381,167	354,399	32,054,378	17,327,914

The City received funding from the Canada – New Brunswick Municipal Rural Infrastructure Program between 2001 and 2006 to assist with the cost of construction of water and sewerage assets. The agreements require the City to maintain replacement reserve funds, which can only be used to pay for the cost of replacement of specified capital items, unless otherwise approved by the Minister of Environment and Local Government.

The City of Saint John Notes to the Consolidated Financial Statements For the year ended December 31, 2018

20. Tangible capital assets

	Land \$	Land Leasehold Improvements Improvements \$	Leasehold Improvements \$	Buildings \$	Vehicles \$	Machinery & Equipment \$	Transportation \$	Water and Wastewater Networks	Assets under Construction \$	2018 Total \$
COST Ralance beginning of year	152 755 713 38 272 814	38 272 814	2 052 203	209 073 293	48 141 218	14 670 174	454 789 084	590 693 838	22 RRO 112	22 880 112 1 533 328 440
Additions and transfers	2 1 2 1	1,116,839	36,027	3,698,630	8,235,124	3,997,669	7,864,034	144,076,661	(16,484,674)	152,540,310
Disposals	759,781	7,261		1,235,493	2,371,730	1,639,793	5,185,002	3,272,983		14,472,043
Adjustments related to land held for resale	(3,440,348)		,	,			1			(3,440,348)
Balance, end of year	148,555,584	39,382,392	2,088,230	211,536,430	54,004,612	17,028,050	457,468,116	731,497,516	6,395,438	6,395,438 1, 667,956,368
ACCUMULATED AMORTIZATION										
Balance, beginning of year		15,655,774	1,576,430	98,540,782	26,917,216	9,895,052	213,674,128	251,334,408	1	617,593,790
Amortization during the year	1	1,241,348	51,807	5,368,397	3,834,163	1,431,278	12,227,648	14,670,473	ı	38,825,114
Accumulated amortization on disposals		7,261	,	932,336	2,251,207	1,462,339	4,479,793	2,762,631		11,895,567
Balance, end of year	·	16,889,861	1,628,237	102,976,843	28,500,172	9,863,991	221,421,983	263,242,250	•	644,523,337
NET BOOK VALUE OF TANGIBLE CAPITAL ASSETS	148,555,584	22,492,531	459,993	108,559,587	25,504,440	7,164,059	236,046,133	468,255,266	6,395,438	6,395,438 1,023,433,031
Consists of:	1	9		3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	() () () () () () () () () ()	6				
General Fund assets	148,555,584	22,492,531	459,993	108,559,587	25,504,440	7,164,059	236,046,133	•	586,834	549,369,161
Water and wastewater assets					1	,	,	468,255,266	5,808,604	474,063,870
	148,555,584	22,492,531	459,993	108,559,587	25,504,440	7,164,059	236,046,133	468,255,266	6,395,438	6,395,438 1,023,433,031

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The City of Saint John Notes to the Consolidated Financial Statements For the year ended December 31, 2018

20. Tangible capital assets (Continued)

	Land \$	Land Leasehold Improvements \$	Leasehold Improvements \$	Buildings \$	Vehicles \$	Machinery & Equipment \$	Transportation \$	Water and Wastewater Networks	Assets under Construction	2017 Total
COST Balance, beginning of year Additions and transfers Disposals	152,832,139 411,099 487,525	38,081,108 268,251 76,545	2,052,203	198,814,693 10,911,285 652,685	48,488,813 2,345,569 2,693,164	14,258,802 1,103,509 692,137	448,948,717 9,528,546 3,688,179	561,025,735 30,251,356 583,253	27,899,790 (5,019,678)	27,899,790 1,492,402,000 (5,019,678) 49,799,937 - 8,873,488
Balance, end of year	152,755,713	38,272,814	2,052,203	209,073,293	48,141,218	14,670,174	454,789,084	590,693,838	22,880,112	22,880,112 1,533,328,449
ACCUMULATED AMORTIZATION Balance, beginning of year Amortization during the year Accumulated amortization on disposals	, , ,	14,517,148 1,215,171 76,545	1,527,361 49,069 -	94,009,211 5,147,036 615,465	26,006,875 3,521,954 2,611,613	9,064,842 1,522,347 692,137	204,602,990 12,205,600 3,134,462	239,050,708 12,696,898 413,198		588,779,135 36,358,075 7,543,420
Balance, end of year	1	15,655,774	1,576,430	98,540,782	26,917,216	9,895,052	213,674,128	251,334,408	•	617,593,790
NET BOOK VALUE OF TANGIBLE CAPITAL ASSETS	152,755,713 22,617	22,617,040	475,773	110,532,511	21,224,002	4,775,122	241,114,956	339,359,430	22,880,112	915,734,659
Consists of: General Fund assets Water and Wastewater assets	152,755,713 22,617	22,617,040	475,773	110,532,511 -	21,224,002	4,775,122	241,114,956	- 339,359,430	3,366,621	556,861,738 358,872,921
	152,755,713 22,617	22,617,040	475,773	110,532,511	21,224,002	4,775,122	241,114,956	339,359,430	22,880,112	915,734,659

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The City of Saint John Notes to the Consolidated Financial Statements For the year ended December 31, 2018

21. Segment disclosure

	General Government Services	Protective services	Transportation services	Water and sewer services	Environmental heafth services	Environmental development services	Recreational and cultural services	Energy services	2018 Consolidated	2017 Consolidated
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Revenues										
Property taxes	123,443,042					,	1	1	123,443,042	122,979,450
Unconditional grant	15,659,510	•	•	•	,	,	ı	1	15,659,510	19,328,372
Financial assistance	4,556,010	•	•	•		,	,	,	4,556,010	
Other revenue from own sources	1,272,095	2,906,894	12,142,519			5,497,334	1,860,970		23,679,812	24,679,313
Miscellaneous revenue	244,520	ı	50,253	•	,	126,308	•	ť	421,081	865,927
Water and sewer revenue	ı		•	44,590,627	,	,	,	,	44,590,627	42,667,479
Income from energy services		•	•	•	•		•	21,114,000	21,114,000	,
Contributions from others	1,372,310	480,000	4,890,146	3,124,120	,	743,278	1,629,521	1	12,239,375	21,193,684
	146,547,487	3,386,894	17,082,918	47,714,747	,	6,366,920	3,490,491	21,114,000	245,703,457	231,714,225
Expenses					,					
Salaries and benefits	21,280,193	47,469,349	20,426,612	11,026,814	1,315,765	8,678,628	4,960,741		115,158,102	107,066,287
Goods and services	15,880,862	6,008,988	11,378,072	11,185,097	2,114,063	9,833,844	5,069,337	•	61,470,263	51,758,016
Amortization of tangible assets	7,939,481		14,776,318	14,670,473	•	210,591	1,228,251	•	38,825,114	36,357,963
Interest and bank charges	3,793,960	3	327,892	3,450,182	,	68,960	138	,	7,641,132	7,370,880
Debt repayment	1	r	415,557	•	,	ı	1	ı	415,557	425,641
Loss from energy services	•					'		•	1	8,152,000
	48,894,496	53,478,337	47,324,451	40,332,566	3,429,828	18,792,023	11,258,467	1.	223,510,168	211,130,787
Surplus (deficit) for the year	97,652,991	(50,091,443)	(30,241,533)	7,382,181	(3,429,828)	(12,425,103)	(7,767,976)	21,114,000	22,193,289	20,583,438

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The City of Saint John Notes to the Consolidated Financial Statements For the year ended December 31, 2018

22. Reconciliation of annual surplus

	General Operating Fund	General Capital Fund	Water & Sewer Operating Fund	Water & Sewer Capital Fund		Controlled Entities	Total
	*	\$	\$	*	Trust Funds	\$	\$
2018 annual surplus (deficit)	19,979,020	(20,043,619)	19,683,866	(11,546,357)	21,472	14,098,907	22,193,289
Adjustments to annual surplus (deficit) for funding requirements							
Eliminations	(10,235,300)	20,086,070	(14,481,075)	13,638,071	8	6,699,101	15,706,867
Amortization expense		21,395,381		14,670,473			36,065,854
Revenue from donated assets		(75,201)	•	·	į		(75,201)
Second previous year's surplus (deficit)	1,338,515	•	1,217,000	•		•	2,555,515
Sick leave expense	(77,000)	•		,			(77,000)
Post employment adjustment	(313,878)	•				,	(313,878)
Pension expense	4,400,000	•		•	•		4,400,000
Amortization of actuarial gain/loss	(267,500)	•		•	3	,	(267,500)
Long-term debt principal repayment	(13,955,000)	•	(6,368,000)	•			(20,323,000)
Long-term disability Adjustment	(988,772)	•	,	- 30	Ê		(988,772)
Total adjustments to 2018 annual surplus (deficit)	(20,098,935)	41,406,250	(19,632,075)	28,308,544	3	6,699,101	36,682,885
2018 annual fund surplus (deficit)	(119,915)	21,362,631	51,791	16,762,187	21,472	20,798,008	58,876,174

The City of Saint John Notes to the Consolidated Financial Statements For the year ended December 31, 2018

23. Controlled entities operations

			Saint John Transit Commission	Saint John Parking Commission	Develop Saint John	Harbour Station Commission	Aquatic Centre Commission
			\$	\$	\$	\$	•
Total assets			31,509,185	24,320,621	81,112,269	2,147,925	105,628
Total liabilities	I		16,894,187	10,354,676	50,300	1,339,235	468,864
Accumulated surplus (deficit)			14,614,998	13,965,945	81,061,969	808,690	(363,236)
			,				
Total revenues			8,056,774	4,244,217	339,226	3,094,095	1,840,782
Total operating expenses			12,903,818	2,922,084	1,258,150	3,575,975	2,832,142
Annual surplus (deficit)			(4,847,044)	1,322,133	(918,924)	(481,880)	(991,360)
	Trade and Convention Centre	Saint John Energy	Lord Beaverbrook	Saint John Free Public Library	Canada Games Foundation	2018 Consolidated	2017 Consolidated
	\$	\$	\$	\$	s	₩.	•
Total assets	(389,921)	50,801,000	214,043	1,189,200	6,928,758	200,618,676	134,668,910
Total liabilities	103,607	•	55,297	136,718	12,732	29,415,617	27,639,856
Accumulated surplus (deficit)	(493,528)	50,801,000	158,746	1,052,482	6,916,026	171,203,059	107,029,054
Total revenues	537,708	21,114,000	220,143	512,910	1	39,959,855	14,003,587
Total operating expenses	895,266	•	432,771	582,071	458,671	25,860,948	32,396,558
Annual surplus (deficit)	(357,558)	21,114,000	(212,628)	(69,161)	(458,671)	14,098,907	(18,392,971)

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The above noted entities are included in the consolidated financial statements. The results of Saint John Energy are included in the consolidated financial statements using modified equity method,

24. Reconciliation of funding deficit upon adoption of PSAS

	Special Top- up Agreements \$	Heart and Lung \$	Retirement Allowances \$
Liabilities at December 31, 2016 as calculated on adoption of PSAS	1,078,100	5,270,900	4,048,400
Amount of December 31, 2016 liabilities funded in current year	(42,600)	(137,300)	469,000
Balance to be funded in future years	1,035,500	5,133,600	4,517,400

25. Other revenue and expense details

	2018 Budget (Unaudited) (Note 2)	2018	2017
	\$	\$	\$
REVENUE			
Other revenues from own sources			
General Government Services	4,282,401	1,272,095	1,690,010
Protective services	2,709,222	2,906,894	4,066,614
Transportation services	12,794,186	12,142,519	11,624,053
Environmental development services	3,987,403	5,497,334	5,913,346
Recreational and cultural services	1,313,058	1,860,970	1,385,290
	25,086,270	23,679,812	24,679,313
Contributions from others			
General Government Services	-	1,372,310	139,618
Protective services	•	480,000	-
Transportation services	250,000	4,890,146	3,999,029
Water and sewer services	-	3,124,120	15,700,347
Environmental development services	1,121,876	743,278	706,064
Recreational and cultural services	<u> </u>	1,629,521	648,626
	1,371,876	12,239,375	21,193,684
EXPENDITURES			
General government services			
Legislative			
Mayor's Office	176,000	180,243	174,056
Common Council	473,203	429,253	442,482
	649,203	609,496	616,538

	2018 Budget (Unaudited) (Note 2)	2018	2017
	\$	\$	\$
City Manager			
City Manager	692,386	596,969	651,790
Corporate Planning	592,568	449,352	514,749
Corporate Communications	438,613	386,035	418,512
	1,723,567	1,432,356	1,585,051
Common services			
City Hall Building	1,892,991	1,858,526	2,028,156
Property Assessment	1,318,538	1,341,622	1,336,557
Public Liability Insurance	304,000	310,253	299,930
	3,515,529	3,510,401	3,664,643
Other			
Common Clerk	569,921	555,626	709,056
Human Resources	1,463,712	1,449,039	1,506,203
Finance	1,746,323	2,177,676	2,266,598
City Solicitor	746,406	694,459	674,167
Materials Management	1,115,837	1,117,304	1,112,053
Information Systems and Support	2,273,965	2,032,289	2,436,050
Insurance	149,458	174,396	296,076
Debt Charges	16,710,383	3,794,763	4,202,502
Amortization	-	7,939,482	7,836,803
Post Employment Expenses	10,610,300	13,132,306	6,816,700
Trust Funds	-	-	20,000
Other	1,001,785	10,240,634	2,077,978
Regional Services Commission	34,269	34,269	24,227
	36,422,359	43,342,243	29,978,413
otal general government	42,310,658	48,894,496	35,844,645
rotective services			
Police protection			
Police Operations	15,288,108	15,348,119	15,201,194
Support Services	1,783,689	1,493,241	1,360,438
Administration	1,949,785	2,060,276	2,118,552

	2018 Budget (Unaudited) (Note 2)	2018	2017
	\$	\$	\$
Stations and Buildings	1,047,368	931,292	943,298
Criminal Investigation	4,465,843	4,437,358	4,311,463
Detention Services	174,000	168,006	279,648
Automotive	980,500	649,076	600,949
	25,689,293	25,087,368	24,815,542
Fire protection			
Fire Operations	22,727,286	22,334,577	21,947,568
Fire Investigation	73,091	57,809	57,163
Fire Prevention	912,700	841,637	920,483
Fire Training	5,601	•	2,605
	23,718,678	23,234,023	22,927,819
Other protective services			
Inspection Services	941,642	856,249	995,049
Enforcement Services	359,531	369,143	239,350
Minimum Standards	261,690	244,084	257,993
Dangerous Buildings	489,955	656,210	520,663
Animal Control	89,996	88,047	87,652
Emergency Measures	307,729	511,845	278,482
Emergency Dispatch Centre	2,427,079	2,431,368	2,348,023
	4,877,622	5,156,946	4,727,212
otal protective services	54,285,593	53,478,337	52,470,573

	2018 Budget (Unaudited) (Note 2)	2018	2017
	\$	\$	\$
Transportation services			
Public works			
Roads and Sidewalks	15,089,111	12,033,043	12,787,474
Other Drainage Services	2,785,485	2,566,748	2,105,971
Street Lighting	943,000	953,702	969,891
Municipal Operations	525,393	473,443	432,816
Amortization-Transportation	-	12,227,648	12,205,433
Flood 2018		480,000	-
	19,342,989	28,734,584	28,501,585
General engineering			
Transportation	533,278	313,527	319,382
Traffic Engineering and Systems	2,348,975	1,922,772	2,256,471
<u> </u>	2,882,253	2,236,299	2,575,853
Parking administration			
Parking Administration	583,943	495,664	522,218
	583,943	495,664	522,218
External controlled entities			
Saint John Transit Commission	12,069,000	12,935,820	12,101,539
Saint John Parking Commission	4,371,724	2,922,084	2,786,857
	16,440,724	15,857,904	14,888,396
Total transportation services	39,249,909	47,324,451	46,488,052

	2018 Budget (Unaudited) (Note 2)	2018	2017
<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	\$	\$	\$
Water and sewer services			
Saint John water & wastewater			
Drinking Water	10,483,000	9,732,616	8,347,521
Industrial Water	1,696,000	1,090,946	1,108,621
Wastewater	11,268,000	9,357,067	8,893,315
Infrastructure Management	1,201,000	421,584	444,985
Internal Charges	895,000	265,541	150,619
Fiscal Charges	22,261,000	4,794,339	4,177,956
Amortization	-	14,670,473	12,696,952
Total water and sewer services	47,804,000	40,332,566	35,819,969
Environmental health services			
Sanitary Service	3,764,178	3,429,828	3,281,736
Total environmental health services	3,764,178	3,429,828	3,281,736
Environmental development services			
Research and planning			
Community Planning	1,610,540	1,645,290	1,648,155
Plan SJ	120,000	23,369	265,425
	1,730,540	1,668,659	1,913,580
Administration and geographic information systems (GIS)			
GIS	466,996	429,544	330,799
Carpenter Shop	351,431	313,536	267,888
	818,427	743,080	598,687

	2018 Budget (Unaudited) (Note 2)	2018	2017
	\$	\$	\$
Economic development			
Growth Reserve	350,000	2,607	170,984
Economic Development Agencies	•	-	-
Market Square Common Area	2,195,207	2,125,694	2,200,552
Regional Economic Development	475,000	475,000	475,000
Regional Facilities	2,027,020	792,585	718,033
Saint John Industrial Parks	-	•	-
	5,047,227	3,395,886	3,564,569
Real estate management			
Property Management	1,323,653	1,436,430	1,095,437
Property Management-Police HO	-	-	_
Real Estate	216,717	662,966	361,730
	1,540,370	2,099,396	1,457,167
Other environmental development services			
City Market	1,084,324	1,075,525	1,061,321
Tourism	1,033,495	1,033,495	1,022,005
Community Development	181,551	214,449	195,511
	2,299,370	2,323,469	2,278,837
External controlled entities			
Saint John Development Corporation	•	-	609,308
Harbour Station Commission	3,351,927	3,575,975	3,760,021
Aquatic Centre Commission	-	2,832,142	2,516,216
Trade and Convention Centre	920,072	895,266	864,678
Saint John Industrial Parks	-	-	621,632
Develop Saint John	2,246,878	1,258,150	
	6,518,877	8,561,533	8,371,855
otal environmental development services	17,954,811	18,792,023	18,184,695
		·	<u> </u>

	2018 Budget (Unaudited) (Note 2)	2018	2017
	\$	\$	\$
Recreational and cultural services		•	
Cultural grants			
Other Cultural Grants	2,168,310	1,256,224	1,328,880
	2,168,310	1,256,224	1,328,880
Parks			
Rockwood Park	598,292	461,565	459,239
Parks General Services	2,182,515	2,049,605	2,059,970
	2,780,807	2,511,170	2,519,209
Community services			
Parks and playgrounds	306,691	199,000	205,688
Recreation and parks	331,008	249,944	298,213
Pro Kids	121,183	104,437	99,482
	758,882	553,381	603,383
Other recreational and culture services			
Sports and Recreation	3,320,858	3,491,475	3,285,374
Community Centres	674,401	689,194	843,929
Cultural Affairs	117,030	55,259	111,517
Amortization - Recreation		1,228,251	1,202,075
	4,112,289	5,464,179	5,442,895
External controlled entities			
Lord Beaverbrook	425,550	432,771	378,653
Saint John Free Public Library	-	582,071	616,097
Canada Games Foundation	-	458,671	-
	425,550	1,473,513	994,750
Total recreational and cultural services	10,245,838	11,258,467	10,889,117
Saint John Energy	-	•	8,152,000
Total energy services	<u>-</u>	-	8,152,000
TOTAL EXPENDITURES	215,614,987	223,510,168	211,130,787

Financial Statements

The City of Saint John Trust Funds

December 31, 2018

Independent Auditor's Report

To His Worship the Mayor and Members of Common Council of The City of Saint John

Report on the Audit of the Financial Statements Opinion

We have audited the financial statements of The City of Saint John Trust Funds ("City"), which comprise the statement of financial position as at December 31, 2018 the statements of changes in net assets and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the City as at December 31, 2018, and the results of its operations, its accumulated surplus, changes in its net debt, and its cash flows for the year then ended in accordance with Canadian public sector accounting standards ("PSAS").

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards ("Canadian GAAS"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the City in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with PSAS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Organization's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Organization or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Organization's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian GAAS will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the

aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian GAAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to
 fraud or error, design and perform audit procedures responsive to those risks, and obtain audit
 evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting
 a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may
 involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal
 control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures
 that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the
 effectiveness of the Organization's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Organization's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Organization to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Chartered Professional Accountants

Saint John, NB

XXXX, 2019

The City of Saint John Reserve and Trust Funds As at December 31, 2018

STATEMENT OF FINANCIAL POSITION

,				Trust	Trust Funds			
•	Tucker	Stockford	O'Connell	L.R.	A. Carle	Bi-		
	Fund	Memorial	Fund	Ross	Smith	Centennial		
		Fund		Fund	Fund	Fund	Total	Total
							2018	2017
	\$	€9	9	\$	\$	69	ક્ક	69
ASSETS								
Cash	263,557	71,517	93,132	13,946	40,190	I	482,342	473,833
Term deposits, at cost	1	ŧ	1	l	I	1,770	1,770	1,757
Accrued Receivable	1	1	I	1	1		1	1,318
	263,557	71,517	93,132	13,946	40,190	1,770	484,112	476,908
LIABILITIES	:							
Accounts payable	I	1	(343)	1	l	l	(343)	(218)
NET ASSETS	263,557	71,517	92,789	13,946	40,190	1,770	483,769	476,690

The accompanying notes are an integral part of these financial statements

Signed on Behalf of the Council

Chair of Finance Committee Mayor:

The City of Saint John Reserve and Trust Funds For the year ended December 31, 2018

STATEMENT OF OPERATIONS CHANGES IN NET ASSETS

				Trust	Trust Funds			
	Tucker	Stockford	O'Connell	L.R.	A. Carle	Bi-		
	Fund	Memorial	Fund	Ross	Smith	Centennial		
		Fund		Fund	Fund	Fund	Total	Total
							2018	2017
	\$	€	89	69	€9	₩.	69	69
Increase in net assets								
Investment income	4,786	1,298	1,716	253	729	13	8,795	5,536
	4,786	1,298	1,716	253	729	13	8,795	5,536
Decrease in net assets								
Contributions to other								
entities			1,716	1		200	1,716	6,039
	1		1,716	1	1	1	1,716	6,039
Increase (decrease) in net								
assets during the year	4,786	1,298	I	253	729	13	7,079	(503)
Net Assets, beginning of								
year	258,771	70,219	92,789	13,693	39,461	1,757	476,690	477,193
Net Assets, end of year	263,557	71.517	92.789	13.946	40.190	1.770	483.769	476.690
,								

The accompanying notes are an integral part of these financial statements

STATEMENT OF CASH FLOW

	2018	2017
	\$	\$
Operating activities		
Excess of investment income over expenditure	8,795	5,536
Changes in non-cash working capital:		
Term Deposits	(13)	(14)
Accrued Receivable	1,318	(1,318)
Accounts Payable	125	61
Investment activities		
Contributions to other entities	(1,716)	(6,039)
Net increase (decrease) in cash and cash equivalents	8,509	(1,774)
Cash, beginning of year	473,833	475,607
Cash, end of year	482,342	473,833

The accompanying notes are an integral part of these financial statements

The City of Saint John - Reserve and Trust Funds

Notes to the financial statements For the year ended December 31, 2018

1. SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the City are the representations of the City's Management prepared in accordance with Canadian generally accepted accounting principles for local governments, as recommended by the Chartered Professional Accountants of Canada Public Sector Accounting Board.

Revenue

Investment income is recognized on an accrual basis as earned.

Expenses

Expenses are recorded on an accrual basis.

Cash and cash equivalents

Cash and cash equivalents include cash on hand, balances with banks and short term deposits with original maturities.

Financial Instruments

The Trust Fund's financial instruments consist of cash, term deposits, and accounts payable. Financial instruments are recorded at fair value when acquired. Financial assets with actively traded markets are reported at fair value, with any unrealized gains or losses reported in excess (deficiency) of revenue over expenditure. Financial instruments are tested for impairment at each reporting date.

The Reserve and Trust Funds are exposed to interest rate risk in that the value of the marketable securities can be adversely affected by a change in interest rates.

2. TRUST FUNDS

Tucker Fund

By an Act of the Legislature enacted on April 20, 1927, securities with a par value of \$10,000 were vested with the City of Saint John. This Act provided that the income and a portion of the principal from this Trust, with the approval of Common Council, should be used for the maintenance and improvement of Tucker Park.

The City of Saint John - Reserve and Trust Funds

Notes to the financial statements For the year ended December 31, 2018

2. TRUST FUNDS (continued)

Stockford Memorial Fund

This fund was established on December 28, 1939 as a result of a bequest of \$3,000 from Fannie M. Stockford of Boston, Massachusetts. This amount was to be invested and the annual income was to be used towards the upkeep and maintenance of King Square.

O'Connell Fund

This fund was established on March 22, 1939 with a contribution of \$2,000 from J.D. O'Connell. The contribution was to be invested and the income distributed among the orphanages of the City on the prorata basis of the children cared for by each, to be given by way of a Christmas gift to each child. In October 2004, this agreement was amended to allow the Trustees to disburse the income arising from the trust investments yearly to the Empty Stocking Fund.

L.R. Ross Fund

This fund was established in 1921 through the gift of \$1,250 and the "Ross Memorial Cup". The Cup was to be competed for annually by amateur single scullers, aged twenty-one years or under who are residents of the Maritime Provinces. The income from this Trust was to be used to provide a duplicate cup for the winner of each race held. Changes to the Trust in 1986 now allow for the funds to be used to promote the sport of rowing within the City of Saint John and its suburban communities, provided that an amount of \$4,000 remains in the fund to enable the "Ross Memorial Cup" to be duplicated when necessary.

A. Carle Smith Fund

Established in September 1976, funds were received from the estate of A. Carle Smith. These funds are to be used for the maintenance of a wildlife sanctuary in the South Bay area.

Bi-Centennial Funds

These funds are to be used for ceremonies marking the 200th anniversary of Canada in the year 2067.

Deloitte.



The City of Saint John

Report to the Finance Committee on the 2018 audit

Presented to Finance Committee on May 29, 2019



Deloitte LLP Brunswick House P.O. Box 6549 44 Chipman Hill, 7th Floor Saint John NB E2L 4R9 Canada

Tel: 506-632-1080 Fax: 506-632-1210 www.deloitte.ca

May 24, 2019

To the Finance Committee of the City of Saint John

Report on audited annual financial statements

Dear the Finance Committee Members:

We are pleased to submit this report on the status of our audit of the City of Saint John ("the City") for the 2018 fiscal year. This report summarizes the scope of our audit, our findings and reviews certain other matters that we believe to be of interest to you.

As agreed in our master service agreement dated February 22, 2019, we have performed an audit of the financial statements of The City of Saint John as of and for the year ended December 31, 2018, in accordance with Canadian generally accepted auditing standards ("Canadian GAAS") and expect to issue our audit report once all work is finalized and the statements are approved.

This report is intended solely for the information and use of the Finance Committee, management and others within the City and is not intended to be, and should not be, used by anyone other than these specified parties.

We look forward to discussing this report summarizing the outcome of our audit with you and answering any questions you may have.

Yours truly,

Deloitte LLP Chartered Professional Accountants

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Our audit explained

This report summarizes the main findings arising from our audit.

Audit scope and terms of engagement

We have been asked to perform an audit which includes the City's consolidated financial statements (the "financial statements") in accordance with Canadian public sector accounting standards ("PSAS") as at and for the year ended December 31, 2018. Our audit was conducted in accordance with Canadian Generally Accepted Auditing Standards ("Canadian GAAS").

The terms and conditions of our engagement, including our responsibilities for any additional audit-related services you have asked us to provide, are described in the master service agreement dated February 22, 2019, which was signed by management on behalf of the Finance Committee members.

Significant audit risks

Through our risk assessment process, we have identified the significant audit risks. These risks of material misstatement and related audit responses are discussed in the Significant Risks section of this report.



Materiality

We are responsible for providing reasonable assurance that your financial statements as a whole are free from material misstatement.

Materiality levels are determined on the basis of total revenues. Our materiality for the consolidated financial statements the year ended December 31, 2018 was \$6,900,000 (2017 - \$6,500,000).

We have informed the Finance Committee of all uncorrected misstatements greater than a clearly trivial amount of 5% of materiality and any misstatements that are, in our judgment, qualitatively material. In accordance with Canadian GAAS, we asked that any misstatements be corrected.

Audit fees

Our audit fees for the year ended December 31, 2018 will be \$63,150 in accordance with our agreement dated September 6, 2018.

Status and outstanding matters

We expect to be in a position to render our audit opinion dated on the financial statements of the City following approval of the financial statements by the Finance Committee, Council members, and the completion of the following outstanding procedures:

- Receipt of signed management representation letter
- Confirmation of subsequent events
- · Receipt of legal letter from City solicitor
- Finalization of quality assurance
- Minor documentation items

Uncorrected misstatements

There were no uncorrected misstatements during the engagement any misstatements detected in our audit have been corrected by management.



Going concern

Management has completed its assessment of the ability of the City to continue as a going concern and in making its assessment did not identify any material uncertainties related to events or conditions that may cast significant doubt upon the City's ability to continue as a going concern. We agree with management's assessment.

Business insights

During the course of our audit, we examined the accounting and internal controls employed by the City. We did not identify any significant deficiencies or material weaknesses in internal control.

Uncorrected disclosure misstatements

In accordance with Canadian GAAS, we request that all disclosure misstatements be corrected. We conclude that there are no material or significant disclosures omitted from the consolidated financial statements.

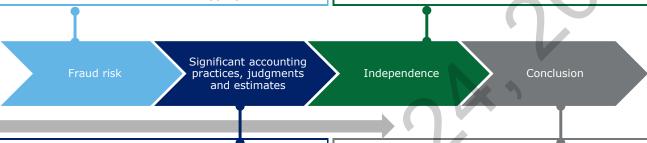
Fraud risk

A summary of the results of our audit procedures designed to address the risk of material misstatement in the financial statements relating to fraud is provided in the Significant audit risks section of this report.

Based on the audit evidence obtained, our assessment of the risks of material misstatement due to fraud remain appropriate.

Independence

We have developed appropriate safeguards and procedures to eliminate threats to our independence or to reduce them to an acceptable level.



Significant accounting practices, judgments and estimates

The significant accounting practices, judgments and estimates include:

- Allowance for doubtful accounts
- Tangible capital assets useful lives, amortization, and impairment
- Accounts payable accruals
- Assumptions relating to pension plans

Our assessment of these items is included in the Significant accounting practices, judgments and estimates section of this report.

Conclusion

In accordance with Canadian GAAS, our audit is designed to enable us to express an opinion on the fairness of the presentation of the City's annual financial statements prepared in accordance with PSAS.

No restrictions have been placed on the scope of our audit. In performing the audit, we were given full and complete access to the accounting records, supporting documentation and other information requested.

We intend to issue an unmodified audit report on the financial statements of the City for the year ended December 31, 2018 once the outstanding items referred to above are completed satisfactorily and the financial statements are approved by the Finance Committee.

A draft version of our auditor's report is included in Appendix 2.

Significant audit risks

The significant audit risks identified as part of our risk assessment, together with our planned responses and conclusions, are described below.

Significant risk dashboard

Audit risk	Fraud risk	Assessment of the design and implementation of internal controls	Results of the testing of the operating effectiveness of internal controls	Results of the substantive testing	Results of the use of experts	Overall conclusion
Management override of controls	\bigcirc					Satisfactory
Presumed risk of fraud on revenue recognition for property taxes, unconditional grants and utility revenue	\bigcirc			\bigcirc		Satisfactory
Complex and non- routine consolidation entries for controlled entities		\bigcirc		\bigcirc		Satisfactory
Addressed durin	ng the audit		An issue was identifi	ied	Not a	applicable

Management override of controls

Audit risk

Management is in a unique position to override internal controls, which could allow manipulation of the accounting records that could result in financial statements that are materially misstated.

This represents a fraud risk for the 2018 audit.

Our audit response

- · We discussed fraud with management.
- We tested a sample of journal entries made throughout the period, and adjustments made at the end of the reporting period.
- We evaluated the business rationale for any significant unusual transactions.
- We determined whether the judgements and decisions related to management estimates indicate a possible bias, which included performing retrospective analysis of significant accounting estimates.

Audit results

We obtained sufficient audit evidence to conclude that there were no material misstatements.

Presumed risk of fraud on revenue recognition for property taxes, unconditional grants and utility revenue

Audit risk

Under Canadian GAAS, we are required to evaluate the risk of fraud in revenue recognition. We have evaluated the revenue transactions, and we have concluded that the significant risk is that revenue may have been recorded in the incorrect period.

This represents a fraud risk for the 2018 audit.

Our audit response

- We evaluated the design and implementation of the internal controls that address this risk. We did not rely on controls.
- We confirmed balances with third parties when possible to ensure that the revenue recorded was appropriate. When not possible we detail tested the revenue streams and ensured that proper revenue recognition criteria were met and that the transactions were recorded in the proper period.

Audit results

We concluded that the internal controls were designed and implemented appropriately. We obtained sufficient audit evidence to conclude that there were no material misstatements.

Complex and non-routine consolidation entries for controlled entities

Risk identified

Accounting for controlled entities is a requirement of PSAS and there is a risk of inaccurate or missing consolidation journal entries and that disclosures are incomplete.

Our audit response

- We tested the design and implementation of controls specific to this risk.
- The City of Saint John is considered a
 Group Audit under Canadian Auditing
 Standards due to the existence of
 controlled entities. As the Group Auditor,
 we gained an understanding of the
 complexity and nature of the operations of
 controlled entities audited by other
 accounting firms and obtained the audited
 financial statements to ensure the City's
 disclosures are complete and accurate.
- We reviewed management's determination of controlled entities and method of consolidation under PSAS.
- Testing of the complex and non-routine consolidation entries, including elimination entries, were performed and reviewed by senior members of the engagement team who have experience auditing consolidations.

Audit results

We obtained sufficient audit evidence to conclude that there were no material misstatements.

Other reportable matters

The following summarizes the status and findings of key aspects of our audit. In the appendices to this report, we have provided additional information related to certain matters we committed to report to the Finance Committee as part of the audit plan.

	Comment				
Changes to the audit plan	The audit was conducted in accordance with our audit plan, which was communicated to the Finance Committee. We confirm that there have been no significant amendments to the audit scope and approach communicated in the audit plan.				
Use of the work of	As planned, external s	pecialists and experts assisted in the audit to the extent we considered necessary:			
specialists and experts	IT specialists:	Participated in evaluating internal controls and in using our computerized audit applications			
	Actuarial experts:	Helped assess the adequacy of the shared risk pension plan			
Significant difficulties encountered in performing the audit		any significant difficulties while performing the audit. There were no significant delays in from management required for the audit nor was there an unnecessarily brief timetable in audit.			
Related party transactions		any related party transactions that were not in the normal course of operations and that dgments by management concerning measurement or disclosure.			
Disagreements with management	In the course of our audit, we did not encounter any disagreements with management about matters that individually or in the aggregate could be significant to the financial statements.				
Consultation with other accountants	Management has informatters.	med us that the City has not consulted with other accountants about auditing or accounting			
Legal and regulatory compliance	Our limited procedures City.	did not identify any areas of material non-compliance with laws and regulations by the			

Group audit

Entity	Significance	Other auditors
The City of Saint John General Operating Fund (includes Saint John Police Commission)	Significant	Deloitte
The City of Saint John Capital and Loan Fund	Significant	Deloitte
The City of Saint John Water and Sewerage Utility Operating Fund	Significant	Deloitte
The City of Saint John Water and Sewerage Capital and Loan Fund	Significant	Deloitte
Saint John Parking Commission	Significant	Deloitte
Harbour Station Commission	Significant	Deloitte
Saint John Transit Commission	Significant	Deloitte
Develop Saint John	Significant	Deloitte
Power Commission of Saint John	Significant	KPMG
Saint John Trade and Convention Centre	Non – Significant	Deloitte
Lord Beaverbrook Rink	Non – Significant	Frank Ashe
Saint John Aquatic Centre Commission	Non – Significant	Deloitte
Saint John Free Public Library	Non – Significant	Deloitte

No restrictions have been placed on the scope of our audit. In performing the audit, we were given full and complete access to the accounting records, supporting documentation and other information requested.

Appendix 1 – Communication requirements

Re	quired communication	Reference	Refer to this report or document described below
Au	dit Service Plan		
1.	Our responsibilities under Canadian GAAS, including forming and expressing an opinion on the financial statements	CAS¹ 260.14	Engagement letter
2.	 An overview of the overall audit strategy, addressing: a. Timing of the audit b. Significant risks, including fraud risks c. Nature and extent of specialized skill or knowledge needed to perform the planned audit procedures related to significant risk d. Names, locations, and planned responsibilities of other independent public accounting firms or others that perform audit procedures in the audit 	CAS 260.15	Audit plan communicated in fall 2018.
Significant transactions outside of the normal course of business, including related party transactions		CAS 260 App. 2, CAS 550.27	The City has properly identified, accounted for, and disclosed its relationships and transactions with related parties in the consolidated financial statements.
Ye	ar end communication		
4.	Fraud or possible fraud identified through the audit process	CAS 240.4042	We are not aware of any fraudulent events.
5.	Significant accounting policies, practices, unusual transactions, and our related conclusions	CAS 260.16 a.	Significant Accounting practices, judgements and estimates.
6.	Alternative treatments for accounting policies and practices that have been discussed with management during the current audit period	CAS 260.16 a.	Significant Accounting practices, judgements and estimates.

¹ CAS: Canadian Auditing Standards – CAS are issued by the Auditing and Assurance Standards Board of CPA Canada

Red	quired communication	Reference	Refer to this report or document described below
7.	Matters related to going concern	CAS 570.23	We concluded that there was no substantial doubt about the City's ability to continue as a going concern.
8.	Management judgments and accounting estimates	CAS 260.16 a.	Significant Accounting practices, judgements and estimates
9.	Significant difficulties, if any, encountered during the audit	CAS 260.16 b.	No significant difficulties to report.
10.	Material written communications between management and us, including management representation letters	CAS 260.16 c.	Management representation letter
11.	Other matters that are significant to the oversight of the financial reporting process	CAS 260.16d.	No other matters to report.
12.	Modifications to our opinion(s)	CAS 260.A18	We will issue an unmodified opinion.
13.	Our views of significant accounting or auditing matters for which management consulted with other accountants and about which we have concerns	CAS 260.A19	Consultation with other accountants, chartered professional accountants or other experts
14.	Significant matters discussed with management	CAS 260.A.19	Consultation with other accountants, chartered professional accountants or other experts
15.	Illegal or possibly illegal acts that come to our attention	CAS 250.23	We are not aware of any illegal acts.
16.	Significant deficiencies in internal control, if any, identified by us in the conduct of the audit of the financial statements	CAS 265	No deficiencies to report.
17.	Uncorrected misstatements and disclosure items	CAS 450.12-13	In accordance with Canadian GAAS, we request that all misstatements be corrected.
		V	No uncorrected misstatements and uncorrected disclosure to report.

Appendix 2 – Draft version of our auditor's report

Our report on the financial statements is expected to be in the following form. However, the final form may need to be adjusted to reflect the final results of our audit.

Deloitte.

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Independent Auditor's Report

Independent Auditor's Report

To His Worship the Mayor and Members of Common Council of The City of Saint John

Report on the Audit of the Financial Statements Opinion

We have audited the financial statements of The City of Saint John (the "City"), which comprise the statement of financial position as at December 31, 2018, and the statements of operations, and accumulated surplus, change in net debt and cash flow for the year then ended, and notes to the financial statements, including a summary of significant accounting policies (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the City as at December 31, 2018, and the results of its operations, its accumulated surplus, changes in its net debt, and its cash flows for the year then ended in accordance with Canadian public sector accounting standards ("PSAS").

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards ("Canadian GAAS"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the City in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with PSAS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Organization's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Organization or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Organization's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian GAAS will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian GAAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the City's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are

based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the City to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the City to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Chartered Professional Accountants

Saint John, NB

XXXX, 2019

Appendix 3 – Deloitte resources a click away

At Deloitte, we are devoted to excellence in the provision of professional services and advice, always focused on client service. We have developed a series of resources, which contain relevant and timely information.

Canada's Best Managed Companies (www.bestmanagedcompanies.ca)	DirectorsCEO/CFO	The Canada's Best Managed Companies designation symbolizes Canadian corporate success: companies focused on their core vision, creating stakeholder value and excelling in the global economy.
Centre for financial reporting (www.cfr.deloitte.ca)	DirectorsCEO/CFOControllerFinancial reporting team	Web site designed by Deloitte to provide the most comprehensive information on the web about financial reporting frameworks used in Canada.
Financial Reporting Insights (www.iasplus.com/fri)	CFOControllerFinancial reporting team	Monthly electronic communications that helps you to stay on top of standard-setting initiatives impacting financial reporting in Canada.
☐ On the board's agenda	• Directors • CEO/CFO	Bi-monthly publication examining a key topic in detail, including the perspectives of a Deloitte professional with deep expertise in the subject matter as well as the views of an experienced external director.
State of change (www.iasplus.com/StateOfChange)	CFOVP FinanceControllerFinancial reporting team	Bi-monthly newsletter providing insights into key trends, developments, issues and challenges facing the not-for-profit sector in Canada, with a Deloitte point of view.
Deloitte Financial Reporting Update (www.deloitte.com/ca/update)	CFOVP FinanceControllerFinancial reporting team	Learning webcasts offered throughout the year featuring our professionals discussing critical issues that affect your business.



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Statement of revenue and expenses The City of Saint John Saint John Trade and Convention Centre

December 31, 2018

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Independent Auditor's Report

To the Mayor and Common Council of The City of Saint John:

Opinion

We have audited the accompanying statement of revenue and expenses of The City of Saint John Saint John Trade and Convention Centre (the "Centre"), for the year ended December 31, 2018 and other explanatory information (the "financial statement"). This financial statement was prepared by management in accordance with the provisions of the management agreement between The City of Saint John (the "City") and Hilton Canada Co. dated June 1, 1984 with an amendment dated September 4, 2014.

In our opinion, the financial statement presents fairly, in all material respects, the statement of revenue and expenses of the City of Saint John Trade and Convention Centre for the year ended December 31, 2018, in accordance with the provisions of the management agreement between the City and Hilton Canada Co. dated June 1, 1984 with an amendment dated September 4, 2014.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards ("Canadian GAAS"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation of the financial statements in accordance with the provisions of the management agreement between the City and Hilton Canada Co. dated June 1, 1984 with an amendment dated September 4, 2014, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Centre's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Centre or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Organization's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian GAAS will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian GAAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to
 fraud or error, design and perform audit procedures responsive to those risks, and obtain audit
 evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not
 detecting a material misstatement resulting from fraud is higher than for one resulting from error,
 as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override
 of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Centre's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Centre's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Centre to cease to continue as a going concern.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Chartered Professional Accountants [Date]

	2018	2018	2017
	Budget	Actual	Actual
Note	\$	\$	\$
	(Unaudited)		
Revenue 1			
Commissions on food and beverage			
sales and sundry revenue	262,444	205,156	201,361
Room rental	163,000	150,820	175,499
	425,444	355,976	376,860
Direct expenses	202.022	245 404	202.004
Wages and benefits	202,922	215,194	203,984
Laundry	17,018	24,064	20,148
Supplies	28,000	20,751	25,927
Operating equipment and uniforms	2,000	1,171	1,013
	249,940	261,180	251,072
	175,504	94,796	125,788
Overhead expenses			
Salaries and benefits	521,206	504,822	502,217
Outside services	44,616	38,958	37,911
Advertising and promotion	26,763	16,693	23,125
Cleaning and maintenance	15,815	15,131	16,418
Miscellaneous expense	1,496	12,129	4,296
Telecommunication	11,062	11,756	12,107
Garbage removal	10,350	9,488	10,350
Legal and audit	8,251	8,509	8,840
Equipment rental	5,358	6,739	4,935
Travel and training	6,000	5,590	6,550
Postage, printing and stationery	5,320	5,078	4,175
Entertainment	1,500	4,111	1,311
Water heating charges	5,400	3,719	5,636
Gas	4,606	3,157	3,662
Licenses	2,180	1,471	1,530
Dues and subscriptions	208	677	323
	670,131	648,028	643,386
Operating deficit for the year	(494,627)	(553,232)	(517,598)
Operating expenses not paid directly by the Centre			
Management fee	192,000	191,891	187,492
HVAC utility/maintenance	119,900	103,916	116,362
Real estate tax	85,100	82,594	82,954
Electricity	42,300	32,001	41,073
*	439,300	410,402	427,881
T. I. I			1 222 222
Total expenses	1,359,371	1,319,610	1,322,339
Total deficit for the year	(933,927)	(963,634)	(945,479)

The accompanying notes are an integral part of the financial statements.

The City of Saint John Saint John Trade and Convention Centre

Notes to the financial statement

December 31, 2018

1. Revenue

Under the terms of the management agreement dated June 1, 1984, with amendment dated September 4, 2014, Hilton Canada Co. pays to the Saint John Trade and Convention Centre ("Centre") a percentage of gross revenue for food and beverage with cost of sales, including product and labour costs, being the responsibility of Hilton Canada Co.

The Centre is responsible for all other operating costs.

2. Management agreement – Saint John Trade and Convention Centre

This financial statement has been prepared in accordance with the provisions of the management agreement between the City of Saint John (the "City") and Hilton Canada Co.

The Centre is owned by the City and managed by Hilton Canada Co. under an amended management agreement dated September 4, 2014. The original agreement dated June 1, 1984 had a 20 year term with options to renew for three consecutive 10 year periods. One 10 year renewal period remains. According to the terms of this agreement, the City is responsible for the operating loss of the Centre. In addition to the operating loss under this agreement, the City incurs common area costs and management fees which are reflected in the general operating fund of the City's consolidated financial statements.

With the establishment of the Greater Saint John Regional Facilities Commission in 1998, operating deficits, management fees and property taxes included in common area costs are shared with the municipalities making up the Greater Saint John Regional Facilities Commission. These costs are allocated in proportion to the tax bases of the municipalities.

3. Recording of assets and liabilities

The City's investment in the structure and related equipment, furnishings and fixtures is reported on the Capital and Loan Fund balance sheet of the City.

4. Greater Saint John Regional Facilities Commission Act

Under the regional Greater Saint John Regional Facilities Commission Act, pursuant to 87(2)(a) of the Municipalities Act, councils of the participating communities of Grand Bay Westfield, Quispamsis, Rothesay and Saint John are required to pay contributions towards the operation of regional facilities, which include the Centre. The amount of contribution is calculated on the net operating cost for each facility covered under the Municipalities Act, in proportion to the tax base of the contributing municipality.

5. Budget figures

The 2018 budget figures that are presented on the Statement of revenue and expenses for comparison with the actual figures were provided by the Centre's management and have not been audited.

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The City of Saint John

2018 State of the Infrastructure Report

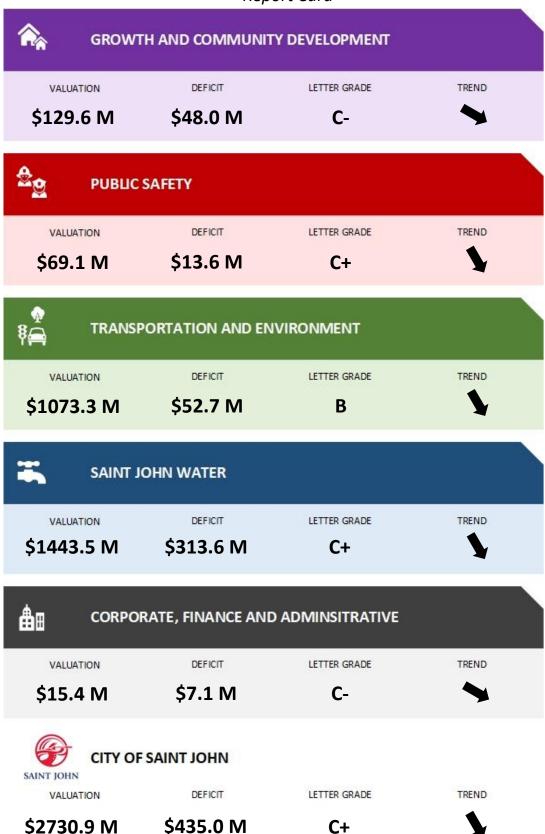
April 29, 2019



City of Saint John

2018 State of the Infrastructure

Report Card

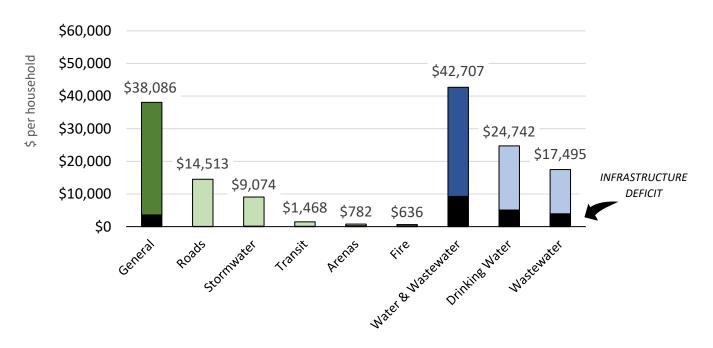


City of Saint John

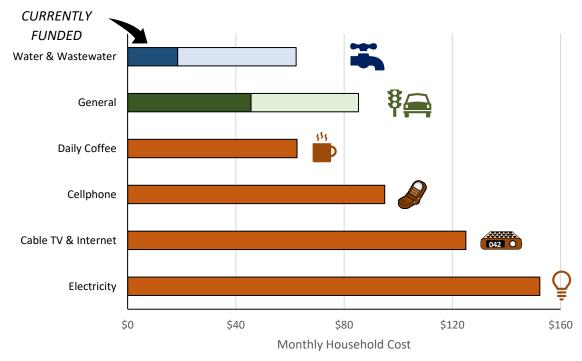
2018 State of the Infrastructure

Putting Things into Perspective

How much infrastructure do I own? What is my deficit?



How much does it cost to renew my infrastructure?



CITY OF SAINT JOHN 2018 State of the Infrastructure Report

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1. INTRODUCTION

1.1. Background

In 2016, the City of Saint John began developing and implementing an asset management (AM) program for all municipal assets to ensure the sustainable delivery of municipal services. Phase 1 of this program saw the development of an AM road map, AM Policy, and AM Strategy. Following these developments, the City published its inaugural State of the Infrastructure (SOTI) report to communicate the current state of infrastructure repair. This document is the second iteration of the SOTI report and contains significant improvements in the quality and reliability of information presented.

In addition to publishing a SOTI report, the City has been actively improving its asset management program by completing several key initiatives:

- Updating asset inventory data
- Establishing a condition rating framework
- Establishing a risk rating framework
- Reviewing asset management workflows and processes
- Reviewing organizational structures
- Reviewing data sharing processes
- Reviewing data management systems
- Establishing a Levels of Service and Key Performance Indicators program

1.2. Purpose

The purpose of the State of the Infrastructure (SOTI) Report is to communicate the state of repair of the City of Saint John's infrastructure assets essential to the delivery of public services. The report contains several indicators that will allow the comparison of the state of infrastructure repair across different service areas, within service sub-areas, and over time (when the SOTI report is produced in the future). The report also presents the sustainable funding requirement (the future investments needed to replace existing infrastructure at the end of its service life), a comparison of the sustainable funding requirement to the projected capital funding, a distribution of asset conditions, a risk "heat map" of the assets requiring replacement in the next 20 years, and an estimate of the funding required to replace these assets (and eliminate the current infrastructure deficit).

In general, the SOTI Report is intended to provide information to answer the six key asset management questions.

- 1. What do you have?
- 2. What is it worth?
- 3. What condition is it in?
- 4. What do you need to do to it?
- 5. When do you need to do it?
- 6. How much money do you need?



As the second iteration of the SOTI Report, this document provides a new benchmark which can be compared to the 2016 report. The 2018 SOTI Report represents a significant improvement in the accuracy and completeness of the underlying data, often causing dramatic changes in the results obtained. The 2016 SOTI Report relied solely on the City's Tangible Capital Asset Registry, an inventory maintained by the Finance and Accounting group. The 2018 Report goes beyond this single source of information, and compiles data and information from a variety of systems and stakeholders. As a result, the confidence in the results presented in the 2018 Report is much greater than the 2016 Report.

It is expected the City will produce SOTI Reports on an on-going basis at pre-defined intervals. As future iterations are produced, City residents will understand and see the impacts of infrastructure renewal programs, funding commitments, and advanced asset management practices. In the interpretation of this report, it should be noted the results presented are based on current, readily available asset data and information. As this asset data is likely still incomplete and not fully accurate (even with the improvements), the results are expected to be subject to change when the data quality is further refined and improved.

2. APPROACH

2.1. Asset Hierarchy

The City's assets are organized in a hierarchal format which arranges assets into various service areas (e.g. a water distribution main > water distribution network > drinking water > Saint John Water). The purpose of the hierarchy is to ensure asset data is collected and organized in a framework that will facilitate data access, information extraction and reporting, and decision making.

Asset hierarchies can be arranged to reflect organizational structure (e.g. public works, fleet maintenance, facilities management) or services provided (e.g. potable water, transportation, recreation). To ensure consistency with the existing service-based budgeting at the City and to streamline asset management decisions with the supporting budgeting process, a service-based asset hierarchy has been adopted.

The asset hierarchy is broken down into various "levels". Each level of the hierarchy demonstrates a different degree of asset complexity/detail for a service area. Most assets included in the asset inventory require 3 levels of complexity, while others, such as the Saint John Water assets, require an additional 2 levels, for a total of 5. Additional levels of detail can be added to the hierarchy to improve asset management decision making or incorporate operational requirements. The Service Areas and level 2 categories of the service-based asset hierarchy are shown in Figure 1 below, while the complete asset hierarchy is presented in Appendix A.

Note, the asset categories used in the 2018 SOTI Report have been slightly re-organized from the 2016 SOTI Report. These changes were made to accommodate an improved asset inventory with additional data resolution.



SAINT JOHN Transportation and Corporate, Finance and **Growth and Community** Saint John Water **Public Safety** Environment Administrative Development Roadways IT & Equipment **Drinking Water Tourism** Fire & Rescue **Economic Development** Corporate Fleet Police Sidewalks **Industrial Water Corporate Facilities** Arts & Culture **PSCC** Wastewater Stormwater General Machinery & Street Lighting **Solid Waste** Equipment General Furniture & Parks & Public Spaces **Fixtures** Sports & Recreation Transit

Figure 1 - Service-Based Asset Hierarchy



Parking

2.2. Replacement Costs

In the 2016 SOTI Report, **all** asset replacement costs were estimated by inflating the asset's original acquisition cost using the Canadian Consumer Price Index (CPI). For the 2018 Report, current replacement costs are estimated for all assets using one of three methods:

- 1. Historical contracts or tenders (inflated to current year dollars).
- 2. Engineering estimates.
- 3. Inflating original acquisition costs using relevant price indices.

All costs included in the SOTI Report are expressed in current year Canadian dollars. A complete summary of unit replacement costs used for each asset are listed in Appendix B.

2.3. Condition

The condition of each asset represents the current state of physical repair and is often used as an indicator for the relative time until corrective action (rehabilitation, or replacement) is required. A five-point rating scale is used to align the City of Saint John with the 2016 Canadian Infrastructure Report Card and provincial reporting recommendations. This simplified condition rating scale allows for comparative benchmarking between asset groups and is sufficiently detailed for high-level decision making. Descriptions of each condition rating (from 1 to 5) are shown in Table 1 below. In addition to the five-point rating scale, an additional condition rating category of "Unknown" has been added to account for assets with insufficient information available to properly estimate condition.

Condition Rating Expected Service Life Physical Condition Excellent working condition. No signs 1 - Very Good Like new. of deterioration. 2 - GoodMinor signs of deterioration. Approaching or at mid-stage of life. Some elements exhibiting major 3 - Fair Beyond mid-stage of life. deficiencies. Significant deterioration with localized Needs to be replaced/repaired in the 4 - Poor areas of failure. short-term. Asset is beyond repair and, generally, Needs to be replaced/repaired almost 5 - Very Poor has completed failed. immediately. 0 – Unknown Insufficient information available to estimate condition.

Table 1 - Condition Rating Descriptions

The condition of assets in the City are determined using one of three methods:

- 1. Theoretical Condition using asset age and estimated useful life as a proxy
- 2. Operator Experience relying on operator experience and knowledge of the asset
- 3. Documented Observations systematic and documented observations of the asset



The condition of most assets included in the 2018 SOTI Report are based on theoretical condition. Theoretical condition was calculated for these assets using a generalized asset deterioration curve, shown in Figure 2. This curve is intended to mimic the accelerated rate of deterioration an asset experiences towards the end of its useful life.

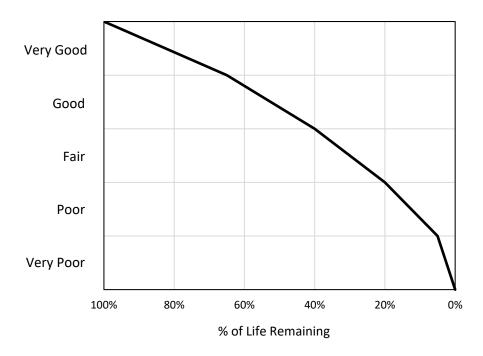


Figure 2 - Generalized Asset Deterioration Curve

Some assets' condition ratings were determined using documented observations. These condition ratings are much more reliable than those based on theoretical condition. Documented observations have been made for the following assets:

- Road Surfaces
- Retaining Walls
- Culverts
- Sanitary/Storm Sewers (approx. 15% included)

The total value of assets which have undergone actual documented observations represents approximately 10% of the City's total asset inventory.

Additional information on the methodologies and frameworks used to determine the condition of municipal assets is found in the City's "Condition Rating Manual".

2.4. Risk

2.4.1. Risk Rating

Risk ratings were used to determine which assets pose a significant threat to the delivery of services and are a priority for repair or renewal. Assets which are likely to fail and have a serious consequence of failure will score a higher risk rating than assets which are not likely to fail and/or have a minor consequence of



failure. A simple risk evaluation technique is used for all assets in the SOTI Report. This method uses both the probability and consequence of failure of an asset, and calculates the risk rating with the following equation:

 $Risk\ Rating = (Probability\ of\ Failure)\ x\ (Consequence\ of\ Failure)$

Like condition, probability and consequence of failure are scored on a 1-5 rating scale. These ratings, and their associated descriptions, are shown in Table 2 below. Multiplying the values for probability and consequence of failure together yields a risk matrix, shown in Table 3. This risk framework is consistent with the "AM Risk Management Framework" adopted by the City.

Rating Probability Consequence

1 Improbable Insignificant
2 Unlikely Minor

Moderate

Major

Catastrophic

Possible

Likely

Highly Probable

3

4

5

Table 2 - Probability and Consequence Descriptions

1	ahla	2	_	Rick	Pating	Frameworl	L
ı	able	3	-	KISK	Rating	Framework	κ

	-			Consequence of Failure					
			Insignificant	Minor	Moderate	Major	Catastrophic		Risk Category
			1	2	3	4	5		_
	Improbable	1	1	2	3	4	5	1	Insignificant
Failure	Unlikely	2	2	4	6	8	10	2	Low
Probability of Failure	Possible	3	3	6	9	12	15	3	Moderate
Probal	Likely	4	4	8	12	16	20	4	High
	Highly Probable	5	5	10	15	20	25	5	Extreme

As an example, an asset could have a high probability of failure of 5 but only have a small consequence of failure of 2. As a result, the asset would only score a risk rating of 10 and fall in the moderate risk category despite its high probability of failure (a section of sidewalk would fit this risk profile). This asset can be compared to a second asset with a lower probability of failure of 3, but a much higher consequence of failure of 5. This asset would score a higher risk rating of 15, fall in the substantial risk category, and would



be recognized as a more critical asset (a piece of disinfection equipment at the water treatment plant would fit this risk profile).

For the SOTI Report, the only risk event included is the risk of asset failure due to deterioration. To evaluate this risk, it is assumed the condition of an asset directly relates to its probability of failure. Additionally, the consequence of failure of all assets has been pre-determined by subjective input from City staff (see Appendix B for details) using the consequence of failure guide shown in Table 4. For future iterations of the SOTI Report, additional risk events such as extreme weather events influenced by climate change will be included.

Consequence Recovery Health and **Loss of Service Environment** Rating Cost Safety Small number of Negligible or no Negligible or no customers Insignificant < \$2,000 environmental injury. experiencing minor impact. disruption. Small number of customers \$2,000 -Minor personal Impact reversible 2 Minor experiencing \$20,000 within 3 months. injury. significant disruption. Significant localized Serious injury \$20,000 -Impact reversible 3 Severe with service loss over an \$100,000 within 1 year. hospitalization. extended period.

Major localized

disruption over an

extended period.

Major long-term

city-wide

disruption.

Impact reversible

within 5 years.

Impact not fully

reversible.

Table 4 - Consequence Rating Guide

Additional details of the methodologies and frameworks used to determine the condition of municipal assets is found in the City's "Risk Rating Manual".

Loss of life.

Multiple loss of

life or city-wide

epidemic.

2.4.2. Risk Heatmap

Major

Catastrophic

4

5

\$100,000 -

\$1M

> \$1M

The risk heatmap figure illustrates the magnitude and severity of expected infrastructure investments. The heatmap is intended to provide an 'at-a-glance' perspective of the infrastructure priorities. The heatmap is a bubble chart with the asset risk rating (1-25) plotted against the current replacement year of an asset. Additionally, the size of each bubble indicates the total replacement cost of all assets in the respective risk rating and replacement year. An example heatmap is shown in Figure 3 below.



25 \$25 million High Risk High Risk Short-Term Failure Long-Term Failure Risk Rating 2721 \$12.5 million L'ow Risk \$2.5 million Long-Term Failure Short-Term Failure 0 \$0.5 million 0 2018 2028 2038 Replacement Year

Figure 3 - Risk Heatmap Example Plot

2.5. Letter Grade

Each asset category and service area is assigned a letter grade to communicate the current state of infrastructure repair. These letter grades combine both condition and risk to yield a letter grade as defined in Table 5. Additionally, consideration is given for assets which score close to the threshold of another grade (see Figure 4). In this scenario, assets are given a + or – symbol to indicate if an asset is close to a better or worse grade.



Table 5 - Letter Grade State of Repair and Definitions

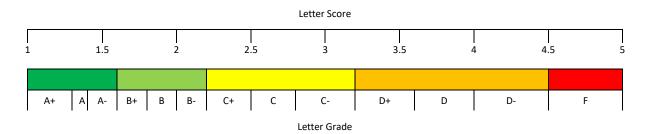
Letter Grade	State of Repair	Definition
Α	Very Good	Fit for the future. Great condition, new or recently rehabilitated, little to no concern of risk.
В	Good	Adequate for now. Acceptable, generally approaching mid-stage of expected service life, low concern of risk.
С	Fair	Requires attention. Signs of deterioration, some elements exhibit deficiencies and moderate concern of risk which should be addressed in the short-term. Asset category is approaching the "cliff" and requires corrective action.
D	Poor	Increasing potential of affecting service. Approaching end of service life, condition below standard, large portion of system exhibits significant deterioration and high concern of risk – could be catastrophic.
F	Very Poor	Unfit for sustained service delivery. Near or beyond expected service life, widespread signs of advanced deterioration, some assets may be unusable and very high concern of risk – asset should be attended to as soon as possible.

The letter grades of each service area are calculated using weighted condition rating and risk category values for each asset in the service area. Each asset is assigned a condition rating using a scale of 1-5 (as shown in Table 1), and a risk category value of 1-5 by normalizing the risk ratings of 1-25 (as shown in Table 3). The condition ratings and risk category values are used to calculate letter scores ranging from 1 to 5 using the following approach:

- a weighting of 75% condition and 25% risk was used to reflect the relative importance of risk in determining asset replacement priorities, and
- the condition ratings and risk category values for individual assets were weighted using replacement value to reflect the relative importance of more expensive assets on the delivery of services.

The letter score thresholds and associated letter grades are shown in Figure 4 below.

Figure 4 - Letter Grade Scoring





In the interpretation of the letter grades presented in this SOTI Report it should be noted the Canadian Infrastructure Report Card and similar reports prepared for other municipalities do not include risk in the calculation/assignment of letter grades. Although the increasing importance of external (i.e. non-age or deterioration driven) asset risks, such as the effects of climate change, in our opinion justifies the inclusion of risk in the calculation of letter grades, it does not allow the direct comparison of the City of Saint John's letter grades to letter grades of external sources.

2.6. Long-Term Financial Forecast

In addition to demonstrating the current state of infrastructure repair, the SOTI Report provides the reader with a high-level understanding of the long-term financial requirements to replace assets at the end of their useful lives. All forecasted cash flows presented in the long-term financial forecast are expressed in current year (2018) dollars and inflation is not accounted for in future cash flows.

The forecasts have been generated to demonstrate the annual investment requirements over a 100-year period and compare this value to current funding levels. A 100-year evaluation period was selected to ensure the replacement cycle of the longest lasting assets are captured. From there, the average annual investment requirement is determined. This average is recognized as the "Sustainable Funding Requirement" and is the annual average investment requirement to replace all assets at the end of their useful lives and eliminate the current infrastructure deficit over a 100-year period. This metric is compared to planned funding levels, with the difference between the two recognized as the "Investment Gap (or Surplus)". This measures what increase (or decrease) in average annual funding is required to sustainably replace assets at the end of their useful lives.

Additionally, the long-term financial forecast highlights the <u>current infrastructure deficit</u> – the total value of assets which are at or beyond their useful life. The infrastructure deficit is presented throughout the report as a high-level proxy for the "catch-up" requirements of each asset type. However, it is important to recognize an asset is only in a deficit position if it has *exceeded its estimated useful life*. Some assets, such as road surfaces, will never reach the end of their useful life if properly maintained. For these assets, timely preventative maintenance and rehabilitation practices will minimize the total life cycle-cost and will ensure the asset never reaches a deficit position. For this reason, we caution the reader not to interpret the infrastructure deficit as an indication of the overall condition of an asset type nor as an investment requirement to restore the entire asset type to like-new condition.

An example long-term financial forecast is shown in Figure 5.



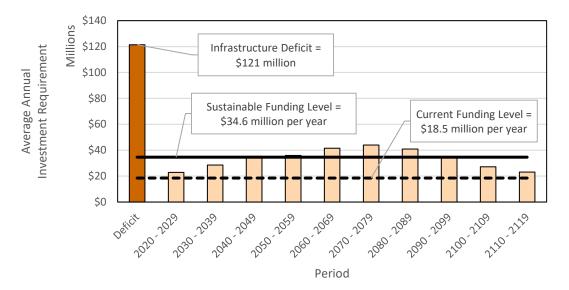


Figure 5 - Long-Term Financial Forecast Example

Note, the long-term financial forecasts presented assume an asset is replaced at the end of its useful life with a similar asset (size and quality). However, it is likely that some assets will not undergo full replacement, but instead will be rehabilitated and/or repaired to extend their useful life, likely reducing the average annual investment required. Additionally, some assets may be replaced with an asset which is not identical in order to meet current service objectives. A full list of assumptions used for asset useful lives and replacement costs are found in Appendix B.

2.7. Trend Arrow

The long-term financial forecasts are then used to produce a simplified "Trend Arrow". This arrow indicates the expected trend in infrastructure state of repair given planned funding commitments and is determined using the current investment gap (or surplus). Combining these two criteria produces the funding ratio, defined below.

$$Funding\ Ratio = \frac{Planned\ Funding\ Level}{Sustainable\ Funding\ Requirement}$$

This ratio will determine the slope of the trend arrow, as described in Table 6. Please note the slope of the trend arrow is continuously variable (using a linear scale) between a slope of +60° and -60° from horizontal.



Table 6 - Trend Arrow Descriptions

Trend Arrow	Funding Ratio	Description
+60*	> 150%	Asset state of repair rapidly improving. Historical and current funding is well above the sustainable funding requirement.
	100%	No change expected in asset state of repair. Historical and expected funding meets the sustainable funding requirement.
_ -60*	< 50%	Asset state of repair rapidly deteriorating. Historical and current funding is well below the sustainable funding requirement.

The slope of the trend arrow indicates the degree to which historical funding is above/below the sustainable funding requirement, up to the limits defined above. As an example, if the funding ratio is determined as 125% the slope of the arrow will be +30°.

2.8. Confidence Band

The information presented in the SOTI Report is based on the best readily available data and information for individual assets. As the summary information presented in the SOTI Report is sensitive to the accuracy and completeness of the asset data, confidence bands have been produced for all service areas in the SOTI Report.

The confidence bands illustrate two things. Firstly, as more data is included and more sophisticated methods are used to determine the infrastructure's state of repair, the results obtained are expected to change. This change will not be due to an increased deterioration or betterment of infrastructure, it will simply be due to an increase in data accuracy and completeness. The confidence bands provide context for these sudden increases or decreases in infrastructure state of repair and results. Secondly, the confidence bands identify areas for data improvement. The City can use confidence bands to identify which asset groups require improvements in data quality to produce more certain results. An example confidence band is shown in Figure 6 below. To assist in the interpretation of confidence bands, Table 7 and Table 8 have been developed.

Figure 6 - Example Confidence Band





Table 7 - Data Accuracy Descriptions

Accuracy	Figure	Criteria
Very Low	V	Assets have limited data available. Replacement cost and useful life are based off generalized unit costs. There are no in-service years available to estimate condition.
Low	*	Asset data is available for some assets. Where possible, replacement cost and useful life are estimated based on asset properties. Condition is only determined by using age as a proxy
Moderate		Asset data is available for most assets. Where possible, replacement cost and useful life are estimated based on asset properties. Condition is estimated using a combination of age as a proxy and documented observations.
High	V	Asset data is available for all assets. Replacement cost and useful life are estimated based on asset properties. Most asset condition ratings are estimated using documented observations.
Very High		Asset data is available for all assets. Replacement cost and useful life are estimated based on asset properties. All asset condition ratings are based on documented observations.

Table 8 - Data Completeness Descriptions

Completeness	Figure	Criteria
Very Low	<u>*</u>	0 - 20% of assets are included
Low		20 – 40% of assets are included
Moderate	A	40 – 60% of assets are included
High	<u> </u>	60 – 80% of assets are included
Very High		80 – 100% of assets are included



3. RESULTS

State of the Infrastructure reports have been generated for the following areas:

- 1. City of Saint John (overall)
- 2. Saint John Water
- 3. General Fund
 - a. Growth & Community Development
 - b. Public Safety
 - c. Transportation & Environment
 - d. Corporate, Finance & Administrative

Each area report contains key information such as total replacement value, infrastructure deficit, letter grade, long-term financial forecast, risk heatmap, trend arrow and confidence band. This information will communicate the current state of infrastructure repair and the necessary funding to maintain or improve it.



City of Saint John

Replacement Value	Infrastructure Deficit	Letter Grade	Trend
\$2730.9 M	\$435.0 M	C+	•

Overview

As Canada's oldest incorporated city and New Brunswick's largest municipality, the City of Saint John has been providing municipal services to local citizens for more than two centuries. Key service areas for the City include Growth & Community Development, Public Safety, Transportation & Environment, Saint John Water, and Corporate, Finance & Administrative.

The City of Saint John relies on a variety of facility, water, wastewater, roadway, structures, stormwater, parks, recreation, and fleet assets to support the delivery of municipal services. Valuation results of the five (5) major service areas in the City of Saint John are shown in Table 9.

Table 9 - City of Saint John Asset Valuations

Asset	Replacement Value	Infrastructure Deficit	Letter Grade
Growth & Community Development	\$129,646,291	\$47,962,628	C-
Public Safety	\$69,077,926	\$13,641,277	C+
Transportation and Environment	\$1,073,263,922	\$52,650,571	В
Saint John Water	\$1,443,539,753	\$313,581,339	C+
Corporate, Finance & Administrative	\$15,357,854	\$7,137,891	C-
Total	\$2,730,885,747	\$434,973,706	C+

Condition

Condition ratings represent the current state of physical repair and are often used as an indicator for the relative time until corrective action is required. Condition ratings for the City of Saint John's assets are rate on a 1-5 scale with 1 indicating an asset in Very Good condition, and 5 indicating an asset in Very Poor condition.

The replacement value-weighted average condition for the City of Saint is 2.22 out of 5.00 with assets generally being recognized as being in Good to Fair condition. However, 19% of the City's assets are in a Poor or worse condition and there is insufficient information to estimate the condition of 7% of the City's assets, as shown in Figure 7.



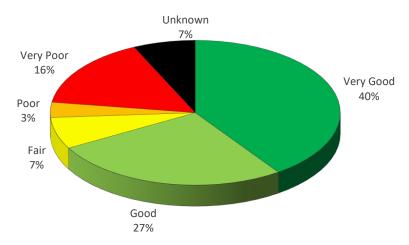


Figure 7 - City of Saint John Condition Distribution

Risk

Results of the initial risk assessment suggest the City of Saint John assets exhibit a "Medium" risk profile. There are a large amount of assets (4% of the total asset valuation) in the "Extreme" risk category which should be investigated immediately. These high-risk assets are primarily composed of water transmission mains. A distribution of the total value of assets in each of the risk categories is shown in Figure 8.

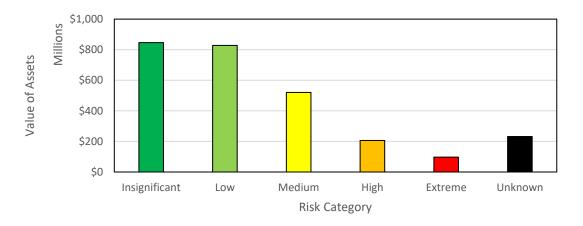


Figure 8 - Distribution of City of Saint John Asset Risks

A risk heatmap has been generated for the City of Saint John to demonstrate the relative timing and investment requirement for the City's assets. Assets on the left side of the x-axis are to be replaced in the short-term, while assets in the upper half of the y-axis are relatively higher risk assets.

In summary, the City has a significant amount of both higher and lower risk assets requiring investments in the immediate future. Future investments are relatively consistent, with no major grouping or "waves" of investments anticipated. Most investment requirements are in the short-term, and there are assets in an Extreme risk category which should be investigated immediately.



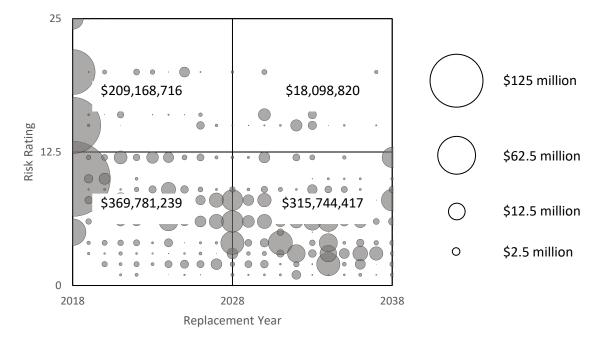


Figure 9 - City of Saint John Risk Heatmap

Long-Term Financial Forecast

Results of the City of Saint John's long-term financial forecast are shown in Figure 10. The City has a current infrastructure deficit of \$435.0 million and a sustainable funding requirement of \$59.9 million per year. Projected capital funding levels (2020 - 2023) for the City are \$26.0 million per year. In total, this represents a funding gap of \$33.9 million per year. Projected funding levels would need to be increased by 130% to achieve the sustainable funding requirement.



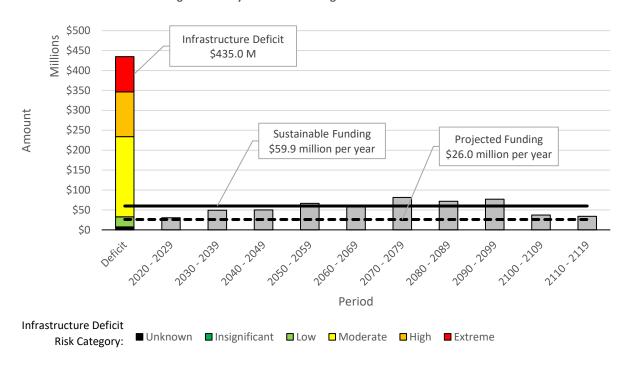


Figure 10 - City of Saint John Long-Term Financial Forecast

Confidence Band

The confidence of results presented for the City of Saint John assets are recognized to be complete and moderately accurate. This represents a significant improvement from the 2016 Report, where both the completeness and accuracy of results were recognized as low. In summary, 80 - 100% of the assets are estimated to be included and asset parameter data is available for most assets. Replacement cost and useful life are estimated based on asset parameters (where available) and condition is estimated using a combination of age as a proxy and documented observations.

Improvements in the accuracy and completeness of asset data and information resulted in an increase in the total asset valuation from the 2016 SOTI Report for the City of Saint John. This increase is primarily attributed to improved completeness of water and sewer main data and improved accuracy of unit replacement costs. The data used to generate the 2016 SOTI Report is only sourced from the City's Financial Tangible Capital Asset (TCA) Registry, whereas the 2018 Report relies on a combination of higher quality data sourced from the various information management systems used to manage the City's assets (e.g. GIS, MicroPaver, ...).

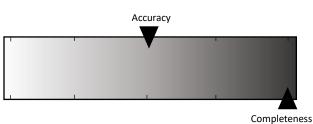


Figure 11 - City of Saint John Confidence Band



Saint John (General Fund)

Replacement Value Infrastructure Deficit Letter Grade Trend

\$1287.3 M \$121.4 M B

Overview

The City of Saint John General Fund includes all services except those provided by Saint John Water. Service areas include Transportation and Environment, Growth & Community Development, Public Safety, and Corporate, Finance & Administrative.

The City of Saint John relies on a variety of facility, roadway, structures, stormwater, parks, recreation, and fleet assets to support the delivery of municipal services. Valuation results of the major service areas in the City of Saint John General Fund are shown in Table 10.

Table 10 - General Fund Asset Valuations

Asset	Replacement Value	Infrastructure Deficit	Letter Grade
Growth & Community Development	\$129,646,291	\$47,962,628	C-
Public Safety	\$69,077,926	\$13,641,277	C+
Transportation and Environment	\$1,073,263,922	\$52,650,571	В
Corporate, Finance & Administrative	\$15,357,854	\$7,137,891	C-
Total	\$1,287,345,993	\$121,392,368	В

Condition

Condition ratings represent the current state of physical repair and are often used as an indicator for the relative time until corrective action is required. Condition ratings for the City of Saint John's assets are rate on a 1-5 scale with 1 indicating an asset in Very Good condition, and 5 indicating an asset in Very Poor condition.

The replacement value-weighted average condition for the General Fund is 2.00 out of 5.00 with assets generally being recognized as being in a Good condition. However, 13% of the City's General Fund assets are in a Poor or worse condition and there is insufficient information to estimate the condition of 10% of the assets, as shown in Figure 12.



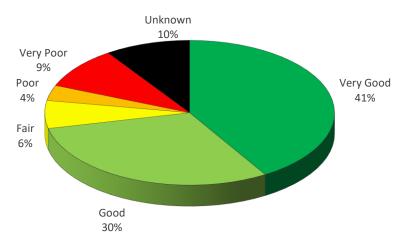


Figure 12 – General Fund Condition Distribution

Risk

Results of the initial risk assessment suggest the General Fund assets exhibit a "Low" risk profile. There are a small amount of assets (1% of the total asset valuation) in the "Extreme" risk category which should be investigated immediately. These high-risk assets are primarily composed of recreational facilities. A distribution of the total value of assets in each of the risk categories is shown in Figure 13.

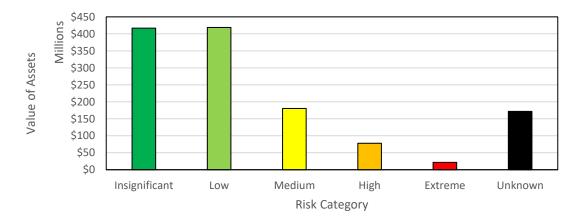


Figure 13 - Distribution of General Fund Asset Risks

A risk heatmap has been generated for the General Fund to demonstrate the relative timing and investment requirement for the category's assets. Assets on the left side of the x-axis are to be replaced in the short-term, while assets in the upper half of the y-axis are relatively higher risk assets.

In summary, the General Fund has a significant amount of both medium and lower risk assets requiring investments in the immediate future. Future investments are not uniform, with a significant quantity of investments anticipated from 2026 - 2032. However, most investment requirements are in the short-term, and there are some assets in an Extreme risk category which should be investigated immediately.



25 \$25 million \$59,009,075 \$12,783,332 Risk Rating 9.71 \$12.5 million \$155,905,236 \$177,548,124 \$2.5 million \$0.5 million 0 0 2018 2028 2038 Replacement Year

Figure 14 – General Fund Risk Heatmap

Long-Term Financial Forecast

Results of the General Fund's long-term financial forecast are shown in Figure 15. The General Fund has a current infrastructure deficit of \$121.4 million and a sustainable funding requirement of \$34.6 million per year. Projected capital funding levels (2020 - 2023) for the General Fund average \$18.5 million per year. In total, this represents a funding gap of \$16.1 million per year. Projected funding levels would need to be increased by 87% to achieve the sustainable funding requirement.



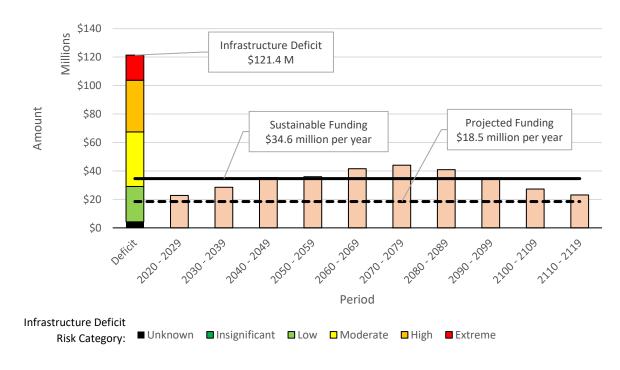


Figure 15 - General Fund Long-Term Financial Forecast

Confidence Band

The confidence of the results presented for the General Fund assets are recognized to be complete and moderately accurate. In summary, 80 - 100% of assets are estimated to be included and up to date asset parameter data is available for most assets. Replacement cost and useful life are estimated based on asset parameters (where available) and condition is estimated using a combination of age as a proxy and documented observations.

Improvements in the accuracy and completeness of asset data resulted in an increase in total valuation (increase in roadway, sidewalk, and storm line unit replacement costs), a decrease in total valuation for Growth and Community Services (Market Square component completeness), an improvement in the overall condition (use of Pavement Condition Index rating to determine the condition of roadways), and a reduction in the sustainable funding requirement (extension of useful life of roadway bases and storm lines from 40 to 80 years).

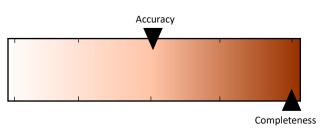


Figure 16 – General Fund Confidence Band



Saint John Water

Replacement Value Infrastructure Deficit Letter Grade Trend

\$1443.5 M \$313.6 M C+

Overview

Saint John Water supports the community in achieving its long-term vision and goal for safe, clean drinking water. Services are delivered to enhance the quality of drinking water and protect the natural environment with the treatment of wastewater. Major asset types include watermains, sanitary and combined sewer mains, water and wastewater treatment facilities, sanitary lift stations, storage reservoirs and water pumping stations. Total asset quantities and valuation for major asset types are highlighted in Table 11.

Table 11 - Saint John Water Asset Quantities and Valuations

Asset	Quantity	Replacement Value	Infrastructure Deficit	Letter Grade
Industrial Water		\$10,110,454	<u>\$6,286,339</u>	<u>D</u>
Industrial Water Pumping Stations	1	\$5,285,331	\$4,629,076	D-
Industrial Water Dam & Spillways	2	\$3,167,860	\$0	B+
Industrial Water Treatment Facilities	2	\$1,657,263	\$1,657,263	F
Drinking Water		\$836,311,060	\$171,933,917	<u>C+</u>
Drinking Watermains	517.5 km	\$766,892,743	\$162,477,585	С
Drinking Water Pumping Stations	13	\$21,152,664	\$3,186,196	B-
Drinking Water Storage Reservoirs	8	\$22,490,736	\$4,314,491	C-
Other Drinking Water Assets		\$25,774,916	\$1,955,646	NA
<u>Wastewater</u>		<u>\$591,339,323</u>	\$133,227,697	<u>B-</u>
Sanitary Sewer Lines	315.6 km	\$310,899,794	\$17,928,937	B+
Combined Sewer Lines	78.7 km	\$95,582,766	\$95,582,766	F
Sanitary Forcemains	49.9 km	\$48,291,747	\$0	Α
Wastewater Treatment Facilities	6	\$75,938,930	\$9,669,434	В
Sanitary Lift Stations	68	\$60,029,961	\$9,820,429	B-
Other Wastewater Assets		\$596,125	\$226,131	NA
Shared Assets		<u>\$5,778,916</u>	<u>\$2,133,386</u>	<u>C-</u>
Fleet		\$4,195,782	\$1,459,302	C-
Machinery and Equipment		\$833,152	\$514,441	D+
SCADA		\$749,983	\$159,643	B-
Total		\$1,443,539,753	\$313,581,339	C+



Note: The Saint John Water asset inventory does *not* include the newly constructed water treatment facility as part of the Safe, Clean Drinking Water program. The City is not responsible the replacement and/or repair of the assets located on this site until the facility is handed back over to the City at the end of the contract term. However, the associated linear infrastructure renewal projects completed in parallel with the construction of the water treatment facility have been included and the asset inventory is mostly complete.

Condition

Condition ratings represent the current state of physical repair and are often used as an indicator for the relative time until corrective action is required. Condition ratings for the City of Saint John's assets are rate on a 1-5 scale with 1 indicating an asset in Very Good condition, and 5 indicating an asset in Very Poor condition.

The replacement value-weighted average condition for Saint John Water is 2.41 out of 5.00 with assets generally being recognized as being in Good to Fair condition. However, 25% of Saint John Water assets are in a Poor or worse condition and there is insufficient information to estimate the condition of 5% of the assets, as shown in Figure 17.

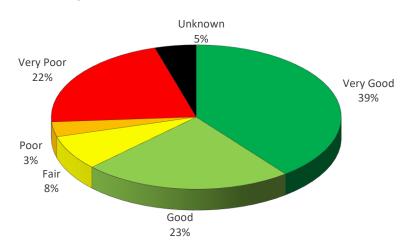


Figure 17 - Saint John Water Condition Distribution

Risk

Results of the initial risk assessment suggest Saint John Water assets exhibit a "Medium to High" risk profile. There are a large amount of assets (5% of the total asset valuation) in the "Extreme" risk category which should be investigated immediately. These high-risk assets are primarily composed of watermains. A distribution of the total value of assets in each of the risk categories is shown in Figure 18.



\$500 Millions \$450 \$400 \$350 \$300 \$250 \$200 \$150 \$100 \$50 \$0 Insignificant Medium High Low Extreme Unknown

Figure 18 - Distribution of Saint John Water Asset Risks

A risk heatmap has been generated for Saint John Water to demonstrate the relative timing and investment requirement for the category's assets. Assets on the left side of the x-axis are to be replaced in the short-term, while assets in the upper half of the y-axis are relatively higher risk assets.

In summary, the General Fund has a significant amount of both high and medium risk assets requiring investments in the immediate future. Future investments are relatively minor but not uniform, with a significant quantity of investments anticipated in 2030 - 2035. However, most investment requirements are in the short-term, and there are some assets in an Extreme risk category which should be investigated immediately.

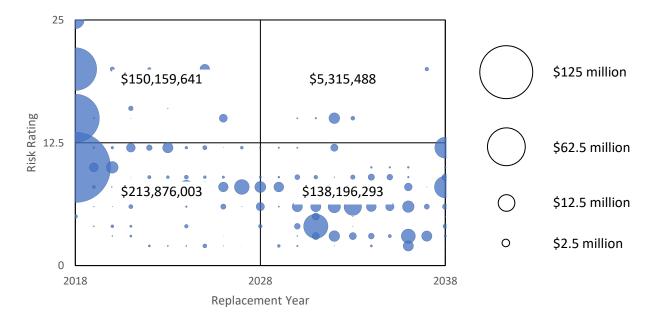


Figure 19 – Saint John Water Risk Heatmap



Long-Term Financial Forecast

Results of Saint John Water's long-term financial forecast are shown in Figure 20. Saint John Water has a current infrastructure deficit of \$313.6 million and a sustainable funding requirement of \$25.3 million per year. Projected capital funding levels (2020 – 2023) for Saint John Water are \$7.5 million per year. In total, this represents a funding gap of \$17.8 million per year. Projected funding levels would need to be increased by 237% to achieve the sustainable funding requirement.

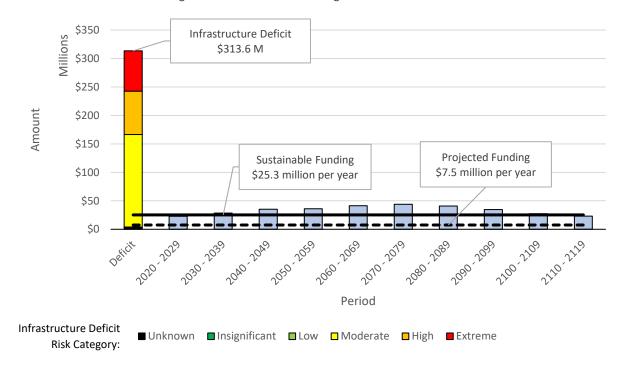


Figure 20 - Saint John Water Long-Term Financial Forecast

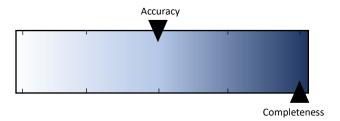
Confidence Band

The confidence of the results presented for Saint John Water assets are recognized to be complete with low accuracy. In summary, 80 - 100% of assets are estimated to be included, and up to date asset parameter data is available for most assets. Replacement cost and useful life are estimated based on asset parameters (where available) and condition is estimated using a combination of age as a proxy and documented observations. Most data for the water and wastewater facilities is likely outdated and inaccurate, and there are some outstanding watermain capital projects which have not been updated in the asset inventory. It is anticipated the overall condition of the Saint John Water assets will improve as the asset inventory data is updated.

Improvements in the accuracy and completeness of asset data resulted in a significant increase in the total valuation of Saint John Water assets when compared to the 2016 SOTI Report. The primary driver for this change is an increase in the completeness of water and sewer mains and improved accuracy in the unit replacement costs of pipe. While the infrastructure deficit is still significant, it is anticipated this will decrease as additional improvements in the accuracy of watermains and sewermains in-service year are made.



Figure 21 – Saint John Water Confidence Band





Growth and Community Development

Replacement Value Infrastructure Deficit Letter Grade Trend
\$129.6 M \$48.0 M C-

Overview

The Growth and Community Development program supports the long-term vision and goal of a diverse, vibrant, resilient, environmentally sound economy. The service provides guidance, direction and support for development that enhances quality of life for residents by working to create places where people want to live, work and invest. Significant assets include Market Square, Harbour Station, Harbour Passage and the City Market. Results for the major assets are shown in Table 12.

Note, a significant portion of the current infrastructure deficit is attributed to Market Square. Results are expected to change dramatically as additional improvements in the quality and reliability of this facility's information is made. Additionally, the total replacement cost of both Market Square and Harbour Station is undervalued. It is anticipated the total replacement cost of these facilities will increase as data quality improvements are made.

Table 12 - Growth and Community Development Asset Valuations

Asset	Replacement Value	Infrastructure Deficit	Letter Grade
Market Square	\$83,406,016	\$36,937,012	D+
Harbour Station	\$24,957,544	\$5,232,917	C-
Harbour Passage	\$9,016,568	\$400,220	В
City Market	\$7,966,408	\$3,705,469	D+
Arts & Culture Facilities	\$2,539,761	\$1,030,382	D+
Visitor Information Centers	\$794,064	\$456,770	D
Tourism Facilities	\$553,800	\$163,940	C+
Industrial Parks	\$412,130	\$35,919	В
Total	\$129,646,291	\$47,962,628	C-



Condition

Condition ratings represent the current state of physical repair and are often used as an indicator for the relative time until corrective action is required. Condition ratings for the City of Saint John's assets are rate on a 1-5 scale with 1 indicating an asset in Very Good condition, and 5 indicating an asset in Very Poor condition.

The replacement value-weighted average condition for Growth and Community Development is 3.15 out of 5.00 with assets generally being recognized as being in a Fair condition. However, 39% of the City's Growth and Community Development assets are in a Poor or worse condition as shown in Figure 22.

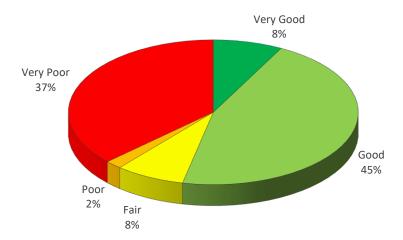


Figure 22 - Growth and Community Development Condition Distribution

Risk

Results of the initial risk assessment suggest the Growth and Community Development assets exhibit a "Medium" risk profile. There are a large amount of assets (6% of the total asset valuation) in the "Extreme" risk category which should be investigated immediately. These high-risk assets are primarily composed of Market Square and Harbour Station facility components. A distribution of the total value of assets in each of the risk categories is shown in Figure 23. The Growth and Community Development risk profile is atypical and is primarily attributed to a significant portion of assets with a moderate consequence of failure are at the end of their useful lives.



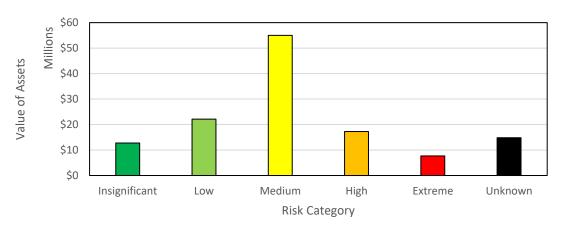


Figure 23 - Distribution of Growth and Community Development Asset Risks

A risk heatmap has been generated for Growth and Community Development to demonstrate the relative timing and investment requirement for the category's assets. Assets on the left side of the x-axis are to be replaced in the short-term, while assets in the upper half of the y-axis are relatively higher risk assets.

In summary, Growth and Community Development has a significant amount of both high and medium risk assets requiring investments in the immediate future. There are very few investments required in the next 10 years, with a substantial wave of investments anticipated from 2028 – 2030. However, most investment requirements are in the short-term, and there are some assets in an Extreme risk category which should be investigated immediately.

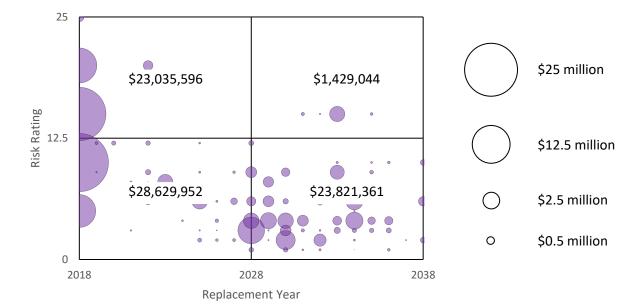


Figure 24 - Growth and Community Development Risk Heatmap



Long-Term Financial Forecast

Results of Growth and Community Development's long-term financial forecast are shown in Figure 25. Growth and Community Development has a current infrastructure deficit of \$48.0 million and a sustainable funding requirement of \$4.5 million per year. Projected capital funding levels (2020 – 2023) are \$3 million per year. In total, this represents a funding gap of \$1.4 million per year. Projected funding levels would need to be increased by 47% to achieve the sustainable funding requirement.

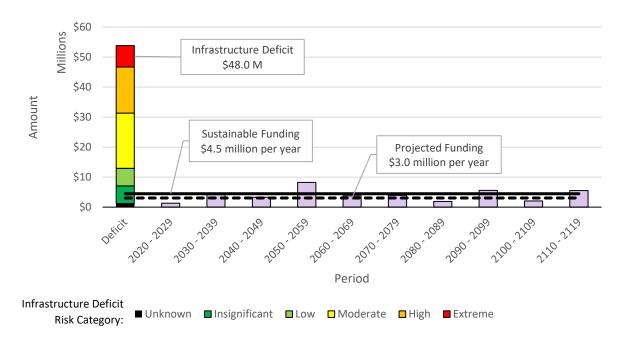


Figure 25 - Growth and Community Development Long-Term Financial Forecast

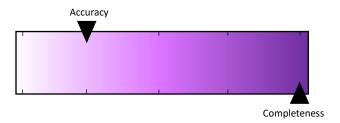
Confidence Band

The confidence of the results presented for the Growth and Community Development assets are recognized as complete but with poor accuracy. In summary, 80 - 100% of assets are estimated to be included, but up to date asset parameter data is limited. Replacement cost and useful life are estimated based on asset parameters (where available) and condition is estimated using age as a proxy.

Improvements in the accuracy and completeness of asset resulted in a decrease in the total valuation and a slight improvement in the overall condition. These changes are primarily attributed to the improved accuracy and completeness of the Market Square and City Market facility components' age, replacement cost and useful life. However, much of the data is still based on the Financial Tangible Capital Asset (TCA) Registry and significant changes are anticipated as the City improves its confidence in facility asset data.



Figure 26 – Growth and Community Development Confidence Band





Public Safety

Replacement Value Infrastructure Deficit Letter Grade Trend

\$69.1 M

\$13.6 M

C+



Overview

The Public Safety service supports the Community in achieving its long-term vision of being a safe, livable community. The program helps to improve the quality of life with a focus on creating safe neighborhoods that provide opportunities for individuals to develop and grow together through recreation, cultural and leisure activities and community involvement. Significant asset types include fire and police fleet, fire and police equipment, fire and police facilities, public safety communications center (PSCC) and street lighting. Total asset quantities and valuations for assets are shown in Table 13.

Table 13 - Public Safety Asset Quantities and Valuations

Asset	Quantity	Replacement Value	Infrastructure Deficit	Letter Grade
Fire & Rescue		<u>\$21,486,420</u>	<u>\$8,634,371</u>	<u>D+</u>
Fire Facilities	9	\$9,858,833	\$5,139,871	D
Fire Fleet	34	\$8,164,966	\$1,623,258	C-
Fire Machinery & Equipment	230	\$3,462,621	\$1,871,241	D
<u>Police</u>		\$39,819,783	\$3,149,728	<u>A-</u>
Police Facilities	1	\$35,457,985	\$0	A+
Police Fleet	68	\$2,429,269	\$1,575,762	D
Police Machinery & Equipment	79	\$1,932,529	\$1,573,967	D-
PSCC		\$692,293	\$320,593	D+
Street Lighting	1,041	\$7,079,430	\$1,536,585	C-
Total		\$69,077,926	\$13,641,277	C+



Condition

Condition ratings represent the current state of physical repair and are often used as an indicator for the relative time until corrective action is required. Condition ratings for the City of Saint John's assets are rate on a 1-5 scale with 1 indicating an asset in Very Good condition, and 5 indicating an asset in Very Poor condition.

The replacement value-weighted average condition for Public Safety is 2.33 out of 5.00 with assets generally being recognized as being in Good condition. However, 26% of the City's Public Safety assets are in a Poor or worse condition, as shown in Figure 27.

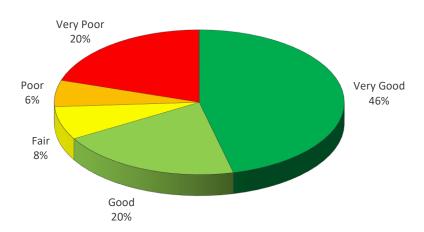


Figure 27 - Public Safety Condition Distribution

Risk

Results of the initial risk assessment suggest the Public Safety assets exhibit a "Medium-High" risk profile. There are a small amount of assets (2% of the total asset valuation) in the "Extreme" risk category which should be investigated immediately, and a larger amount of assets (16% of the total asset valuation) in the "High" risk category. These high-risk assets are primarily composed of fire facility components and fire fleet. A distribution of the total value of assets in each of the risk categories is shown in Figure 28.

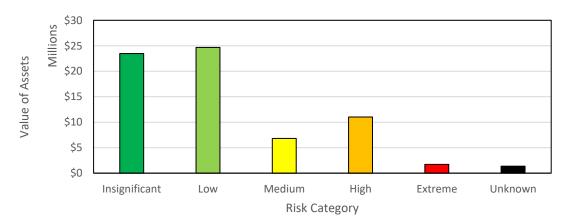


Figure 28 - Distribution of Public Safety Asset Risks



A risk heatmap has been generated for Public Safety to demonstrate the relative timing and investment requirement for the category's assets. Assets on the left side of the x-axis are to be replaced in the short-term, while assets in the upper half of the y-axis are relatively higher risk assets.

In summary, Public Safety has a uniform investment requirement over the next 20 years. Most investments are medium to low risk, with some higher risk assets interspersed. However, there are still substantial investments required in the short-term and there are some assets in an Extreme risk category which should be investigated immediately.

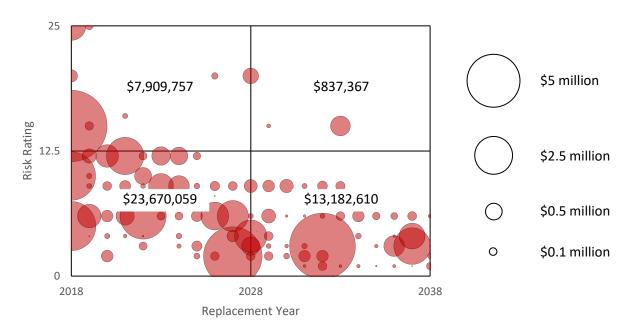


Figure 29 - Public Safety Risk Heatmap

Long-Term Financial Forecast

Results of Public Safety's long-term financial forecast are shown in Figure 30. Public Safety has a current infrastructure deficit of \$13.6 million and a sustainable funding requirement of \$3.9 million per year. Projected capital funding levels (2020 – 2023) are \$1.7 million per year. In total, this represents a funding gap of \$2.2 million per year. Projected funding levels would need to be increased by 125% to achieve the sustainable funding requirement.



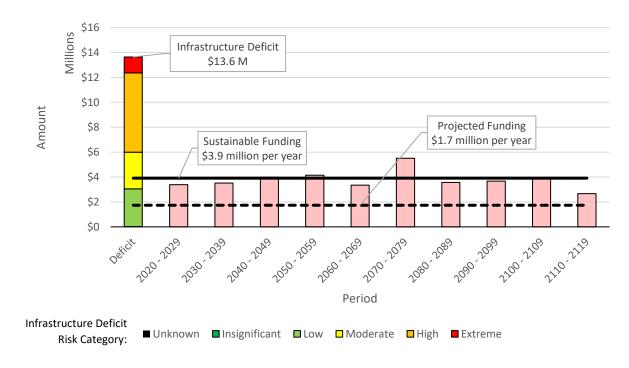


Figure 30 – Public Safety Long-Term Financial Forecast

Confidence Band

The confidence of the results presented for the Public Safety assets are recognized to mostly complete with limited accuracy. In summary, 60-80% of assets are estimated to be included and up to date asset parameter data is limited. Replacement costs are only based on an escalation of original acquisition costs and estimated useful life is assumed equal to the accounting amortization period.

There are no major data quality differences between the 2018 and 2016 SOTI Report results. This is because both reports results are based on the City's Financial Tangible Capital Asset (TCA) Registry, without any review of historical records, only the additions and disposals of known assets.

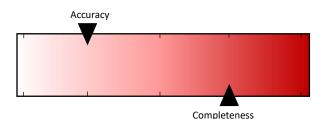


Figure 31 - Public Safety Confidence Band



Transportation and Environment

Replacement Value	Infrastructure Deficit	Letter Grade	Trend
\$1073.3 M	\$52.7 M	В	

Overview

The Transportation and Environment program supports the community in achieving its long-term vision and goal of creating a green, attractive city where people can get around safely and easily. Services provide convenient and efficient modes of transportation and protect the environment through the maintenance of parks and public spaces. Significant asset types include roadways, sidewalks, storm water, solid waste, parks & public spaces, sports & recreation, transit and parking. Total asset quantities and valuation for major asset types are highlighted in Table 14.

Table 14 - Transportation and Environment Asset Quantities and Valuations

Asset	Quantity	Replacement Value	Infrastructure Deficit	Letter Grade
Road Network	1,392 lane-km	\$490,562,239	\$2,453,649	B+
Retaining Walls	194	\$6,906,278	\$598,624	C+
Sidewalk Surfaces	372.6 km	\$50,081,586	\$2,396,392	A-
Culverts	1,113	\$7,272,166	\$21,865	В
Storm Lines	318.8 km	\$299,427,100	\$5,045,296	B+
Solid Waste	7	\$1,210,413	\$0	В
Parks & Public Spaces	39	\$39,952,085	\$3,851,853	В
Arenas	5	\$26,438,521	\$9,244,452	D+
Community Centers	4	\$6,703,505	\$2,308,046	С
Outdoor Sports Fields & Facilities	29	\$8,838,490	\$2,275,343	C+
Playgrounds	37	\$6,111,650	\$1,844,731	C+
Pool & Swimming Facilities	1	\$9,494,607	\$2,274,216	С
Transit Facilities	1	\$27,092,809	\$0	B+
Transit Fleet	53	\$19,603,446	\$1,963,774	C+
Parking Facilities	2	\$22,323,360	\$808,144	NA
Parking Lots & Spaces	28	\$2,262,850	\$2,056,335	D
Other Transportation and Environment		\$48,982,816	\$15,507,852	NA
Total		\$1,073,263,922	\$52,650,571	В



Condition

Condition ratings represent the current state of physical repair and are often used as an indicator for the relative time until corrective action is required. Condition ratings for the City of Saint John's assets are rate on a 1-5 scale with 1 indicating an asset in Very Good condition, and 5 indicating an asset in Very Poor condition.

The replacement value-weighted average condition for Transportation and Environment is 1.79 out of 5.00 with assets generally being recognized as being in Good condition. However, 8% of the City's Transportation and Environment assets are in a Poor or worse condition and there is insufficient information to estimate the condition of 11% of the assets, as shown in Figure 32.

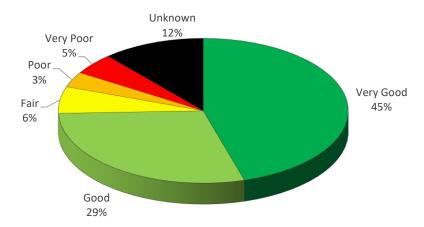


Figure 32 - Transportation and Environment Condition Distribution

Risk

Results of the initial risk assessment suggest the Transportation and Environment assets exhibit a "Low" risk profile. There is a small amount of assets (1% of the total asset valuation) in the "Extreme" risk category which should be investigated immediately. These high-risk assets are primarily composed of recreational facilities (e.g. arenas, parks, pools). A distribution of the total value of assets in each of the risk categories is shown in Figure 33.



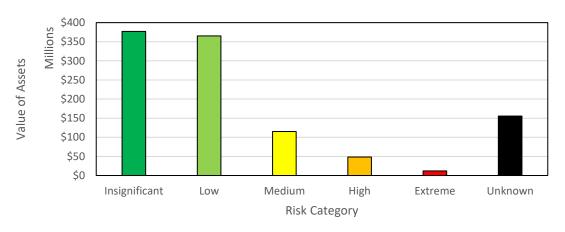


Figure 33 - Distribution of Transportation and Environment Asset Risks

A risk heatmap has been generated for the Transportation and Environment to demonstrate the relative timing and investment requirement for the category's assets. Assets on the left side of the x-axis are to be replaced in the short-term, while assets in the upper half of the y-axis are relatively higher risk assets.

In summary, Transportation and Environment has a uniform investment requirement over the next 20 years, with a concentration of investments required in the short-term and in the years 2025 - 2032. Most investments are medium to low risk, with some higher risk assets interspersed. However, there are still substantial investments required in the short-term and there are some assets in an Extreme risk category which should be investigated immediately.

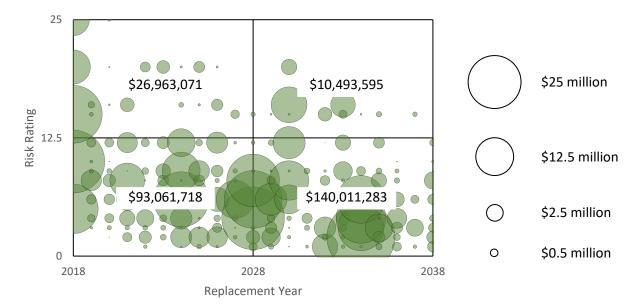


Figure 34 - Transportation and Environment Risk Heatmap



Long-Term Financial Forecast

Results of Transportation and Environment's long-term financial forecast are shown in Figure 35. Transportation and Environment has a current infrastructure deficit of \$52.7 million and a sustainable funding requirement of \$24.6 million per year. Projected capital funding levels (2020 - 2023) are \$12.5 million per year. In total, this represents a funding gap of \$12.1 million per year. Projected funding levels would need to be increased by 97% to achieve the sustainable funding requirement.

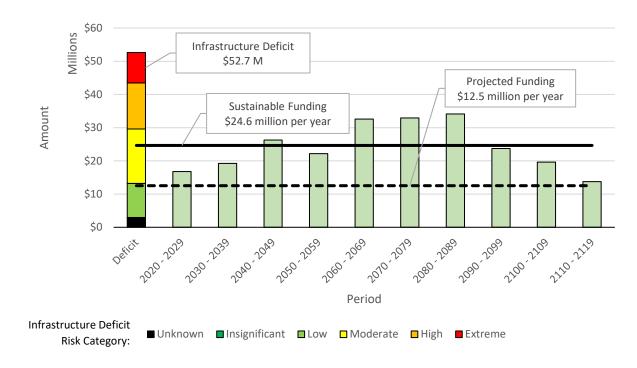


Figure 35 – Transportation and Environment Long-Term Financial Forecast

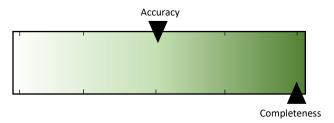
Confidence Band

The confidence of the results presented for the Transportation and Environment assets are recognized to be complete and moderately accurate. In summary, 80-100% of assets are estimated to be included and asset parameter data is available for most assets. Replacement cost and useful life are estimated based on asset parameters (where available) and condition is estimated using a combination of age as a proxy and documented observations.

Improvements in the accuracy and completeness of asset data (compared to the 2016 SOTI Report) resulted in an overall increase in the total valuation of assets. This increase in valuation is primarily attributed to an increase in roadway, sidewalk, and storm line unit replacement costs. Secondly, there is an improvement in the overall condition. This is primarily attributed to the use of Pavement Condition Index ratings to determine the condition of road surfaces, and an extension of useful life of roadway bases and storm lines from 40 to 80 years. Lastly, the sustainable funding requirement has reduced, again attributed to an increase in the useful life of roadway bases and storm lines.



Figure 36 - Transportation and Environment Confidence Band





Corporate, Finance and Administrative

Replacement Value	Infrastructure Deficit	Letter Grade	Trend
\$15.4 M	\$7.1 M	C-	

Overview

The Corporate, Finance & Administrative service area combines both Corporate and Finance & Administrative services hard assets into a single service area. Corporate services provide administrative support and policy and procedural advice to the elected Common Council. The service maintains, protects and responds to staff and public inquiries regarding the official and permanent records of the City. The Finance and Administrative Service focuses on responsible financial management and sustainable lifecycle management of the City's physical assets, including fleet, real estate, purchasing and materials management. Significant assets include IT & Equipment, Corporate Fleet, Corporate Facilities, General Machinery & Equipment and General Furniture & Fixtures. Results for each asset type is shown in Table 15.

Table 15 - Corporate, Finance and Administrative Asset Quantities and Valuations

Asset	Quantity	Replacement Value	Infrastructure Deficit	Letter Grade
Corporate Facilities	7	\$9,256,273	\$4,457,507	D+
Corporate Fleet	34	\$1,330,078	\$574,787	C-
IT & Equipment	296	\$4,029,910	\$1,689,683	C-
General Furniture & Fixtures	4	\$465,086	\$298,450	D+
General Machinery & Equipment	20	\$276,508	\$117,463	С
Total		\$15,357,854	\$7,137,891	C-



Condition

Condition ratings represent the current state of physical repair and are often used as an indicator for the relative time until corrective action is required. Condition ratings for the City of Saint John's assets are rate on a 1-5 scale with 1 indicating an asset in Very Good condition, and 5 indicating an asset in Very Poor condition.

The replacement value-weighted average condition for Corporate, Finance and Administrative is 3.46 out of 5.00 with assets generally being recognized as being in Fair to Poor condition. 53% of the City's Corporate, Finance and Administrative assets are in a Poor or worse condition, as shown in Figure 37.

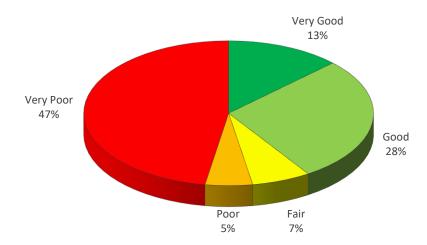


Figure 37 - Corporate, Finance & Administrative Condition Distribution

Risk

Results of the initial risk assessment suggest the Corporate, Finance and Administrative assets exhibit a "Low-Medium" risk profile. There are a small amount of assets (2% of the total asset valuation) in the "Extreme" risk category which should be investigated immediately. These high-risk assets are primarily composed of corporate facility components. A distribution of the total value of assets in each of the risk categories is shown in Figure 38.

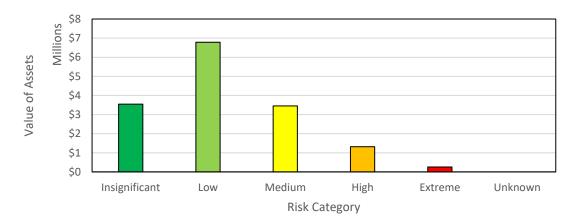


Figure 38 - Distribution of Corporate, Finance and Administrative Asset Risks



A risk heatmap has been generated for Corporate, Finance and Administrative to demonstrate the relative timing and investment requirement for the category's assets. Assets on the left side of the x-axis are to be replaced in the short-term, while assets in the upper half of the y-axis are relatively higher risk assets.

In summary, most investment requirements for Corporate, Finance and Administration are in the short-term, with relatively minor investments anticipated over the next 20 years. Most investments are low risk, with some higher risk assets interspersed. However, there are some assets in an Extreme risk category which should be investigated immediately.

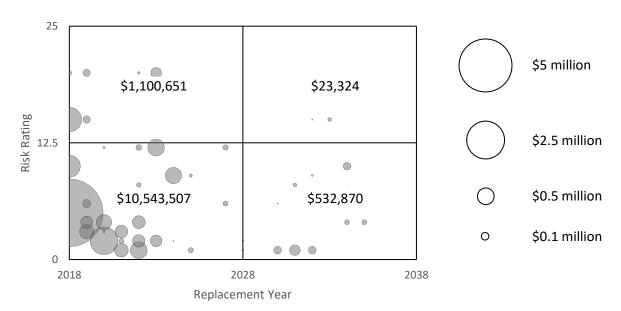


Figure 39 - Corporate, Finance and Administrative Risk Heatmap

Long-Term Financial Forecast

Results of Corporate, Finance and Administrative long-term financial forecast are shown in Figure 40. Corporate, Finance and Administrative has a current infrastructure deficit of \$7.1 million and a sustainable funding requirement of \$1.6 million per year. Projected capital funding levels (2020 - 2023) are \$1.2 million per year. In total, this represents a funding gap of \$0.4 million per year. Current funding levels would need to be increased by 33% to achieve sustainable funding.



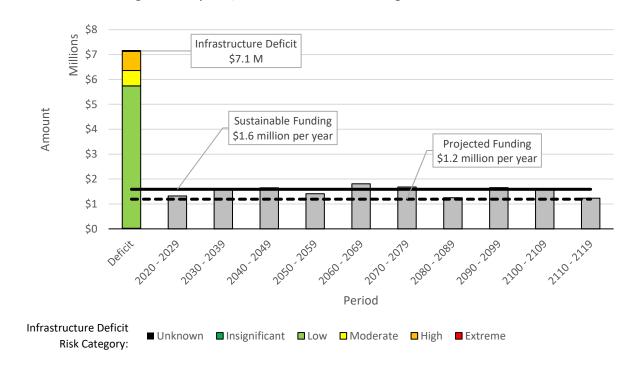


Figure 40 - Corporate, Finance and Administrative Long-Term Financial Forecast

Confidence Band

The confidence of the results presented for the Corporate, Finance and Administrative assets are recognized to mostly complete with limited accuracy. In summary, 60-80% of assets are estimated to be included and up to date asset parameter data is limited. Replacement costs are only based on an escalation of original acquisition costs and estimated useful life is assumed equal to the accounting amortization period.

There are no major data quality differences between the 2018 and 2016 SOTI Report results. This is because both reports results are based on the City's Financial Tangible Capital Asset (TCA) Registry, without any review of historical records, only the additions and disposals of known assets.

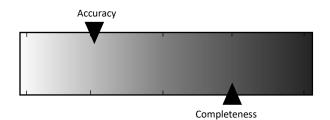


Figure 41 - Corporate, Finance and Administrative Confidence Band



4. Conclusions

4.1. Summary of Results

The 2018 State of Infrastructure (SOTI) Report provides City staff, Council, and residents with a better understanding of the current state of infrastructure repair essential to the delivery of public services, as well a high-level understanding of the financial requirements to sustainably replace assets at the end of their useful lives. The 2018 version is the second iteration of the SOTI Report, building on the foundation established in the 2016 version. The following general conclusions are drawn from the results presented above:

- 1. The current replacement value of all City assets is \$2.73 billion, while the infrastructure deficit (assets at or beyond its useful life) is \$435 million (approximately 16% of the total asset valuation).
- 2. The City's assets are generally in a Good to Fair condition. However, roughly 19% (replacement-value weighted) of the City's assets are in a Poor or worse condition.
- 3. Overall, the City's assets are recognized as having a Medium degree of risk. However, there are over \$97.3 million of assets (by replacement value) in the Extreme risk category. This total is primarily composed of water transmission mains.
- 4. The City is currently underfunding its infrastructure renewal requirements. Projected capital funding for 2020 2023 indicates an average annual funding of \$26.0 million per year, while the sustainable funding requirement (funding needed to replace assets as they reach the end of their useful life and eliminate the current infrastructure deficit over a 100-year period) is \$59.9 million per year. This represents a funding gap of \$33.9 million per year and the City would need to increase its annual funding contribution by 130% to achieve the sustainable funding level.
- 5. The City has earned a "C+" grade for the current state of infrastructure (considering both condition and risk). This letter grade indicates the City's infrastructure is in a Good to Fair state of repair. In general, most assets are expected to show signs of deterioration, with some elements exhibiting deficiencies which need to be addressed in the short term. Some assets are beyond repair and need to be replaced immediately.

In summary, the City's assets are generally in a Good to Fair condition, while a significant number of the assets are in a Poor or Very Poor condition. The City is currently under-funding in its infrastructure renewal requirements and its ability to sustainably provide municipal services is expected to diminish as assets continue to further deteriorate.

In the interpretation of the SOTI Report results, it is important to note the presented information is based on current, readily available data of the City's assets. The 2018 Report shows significant improvements in the confidence of information presented from the 2016 Report. However, many data gaps still exist, and it is expected results will continue to change as additional improvements in the completeness and accuracy of asset data are made. Generally, the City's asset data and information is relatively complete but many improvements in the accuracy of asset data can be made. Although the accuracy of information can still be improved, the general conclusions are suitable to provide guidance for strategic decision making related to the management of the City's assets.



4.2. Comparing the 2016 and 2018 SOTI Reports

Results from the 2016 and 2018 SOTI Reports do vary significantly due to an improved asset inventory. A summary of differences from the 2016 and 2018 reports for Saint John Water and the General Fund are presented in Table 16.

Table 16 - 2016 to 2018 SOTI Report Changes

Indicator	2016 Result	2018 Result	Difference
Total Replacement Value			
General Fund	\$1,110 million	\$1,287 million	+\$177 million
Saint John Water	\$1,088 million	\$1,444 million	+\$355 million
Infrastructure Deficit			
General Fund	\$219 million	\$121 million	-\$98 million
Saint John Water	\$214 million	\$314 million	+\$99 million
Extreme Risk Assets			
General Fund	\$51 million	\$22 million	-\$29 million
Saint John Water	\$106 million	\$76 million	-\$30 million
Letter Grade			
General Fund	С	В	Improved
Saint John Water	C-	C+	Improved
Sustainable Funding Requirement			
General Fund	\$42 million/yr	\$35 million/yr	-\$8 million/yr
Saint John Water	\$27 million/yr	\$25 million/yr	-\$1 million/yr
Projected Funding			
General Fund	\$19.1 million/yr	\$18.5 million/yr	-\$0.6 million/yr
Saint John Water	\$12.5 million/yr	\$7.5 million/yr	-\$5.0 million/yr
Investment Gap			
General Fund	\$23.0 million/yr	\$16.1 million/yr	-\$6.9 million/yr
Saint John Water	\$14.1 million/yr	\$17.8 million/yr	+\$3.6 million/yr
Data Completeness			
General Fund	Moderate	Very High	Improved
Saint John Water	Low	Very High	Improved
Data Accuracy			
General Fund	Low	Moderate	Improved
Saint John Water	Low	Moderate	Improved

As previously mentioned, the 2018 SOTI Report has made significant improvements in the quality and reliability of results presented. A summary of significant changes is presented below:

• The 2016 SOTI Report relied solely on the data and information contained in the City's financial Tangible Capital Asset (TCA) Registry. The 2018 Report relies on a variety of information management systems found throughout the City (e.g. GIS, MicroPaver, ...). The data and information from these sources more accurately reflects the asset inventory.

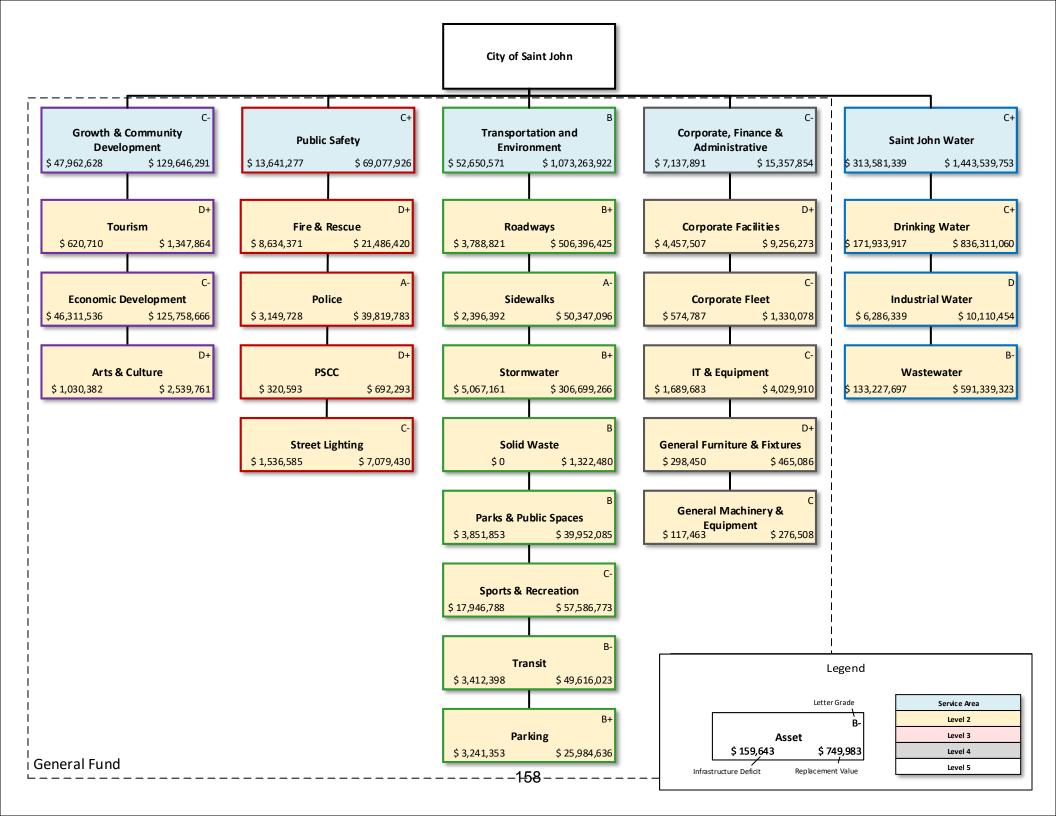


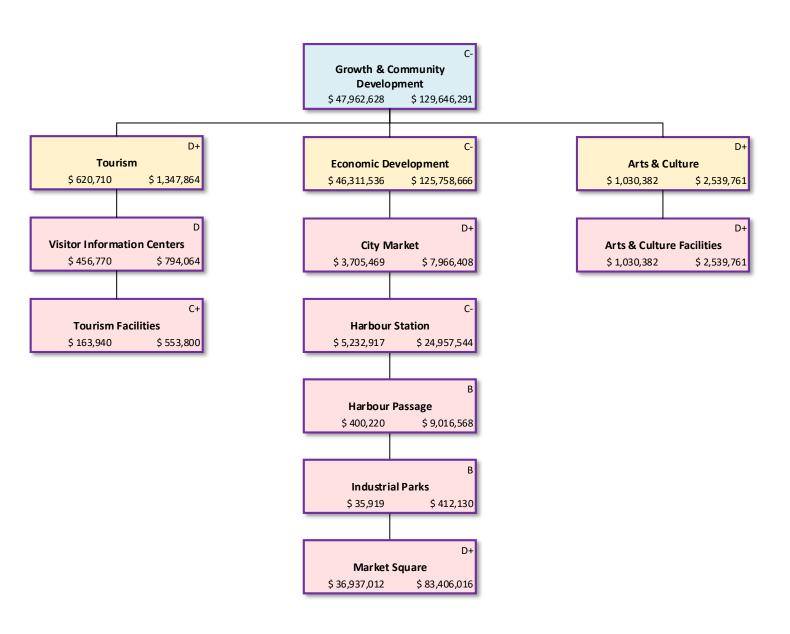
- Replacement costs for the 2016 SOTI Report were estimated for each asset solely by escalating
 the original acquisition cost of an asset using the Canadian Consumer Price Index (CPI) to account
 for inflation. Assets in the 2018 SOTI Report rely on a combination of engineering experience,
 historical tenders and contracts, as well as escalating original acquisition costs. This combination
 of methods to estimate cost is much more accurate.
- Estimated useful lives for the 2016 SOTI Report were assumed equal to an asset's amortization period. These often conservation (shortened) amortization-based estimated useful live estimates are to ensure an asset is fully amortized upon disposal. The estimated useful lives used for the 2018 Report rely on a combination of engineering and operator experience, industry references, as well as amortization periods. This combination of methods to estimate useful life is more accurate and better reflects the true service life of each asset.

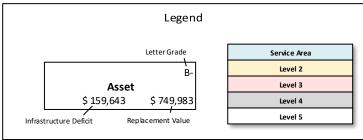


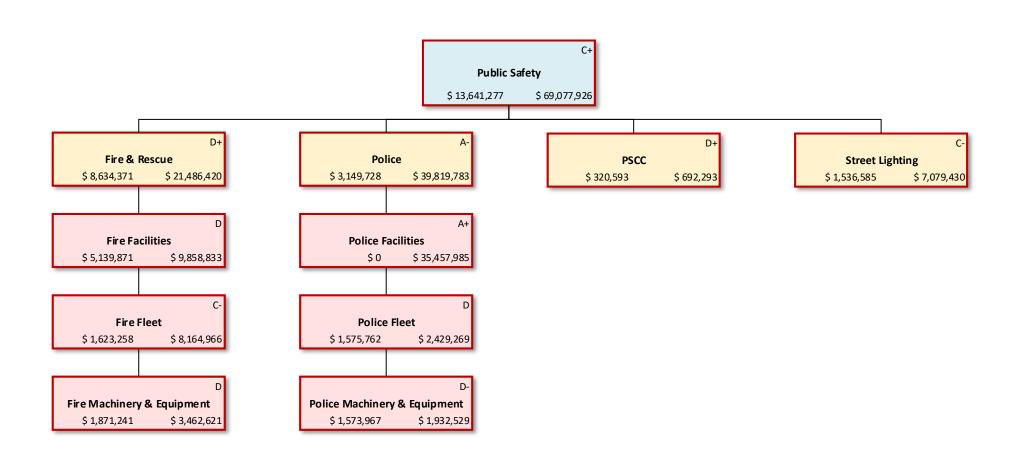
APPENDIX A

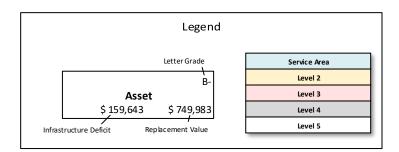
Asset Hierarchy

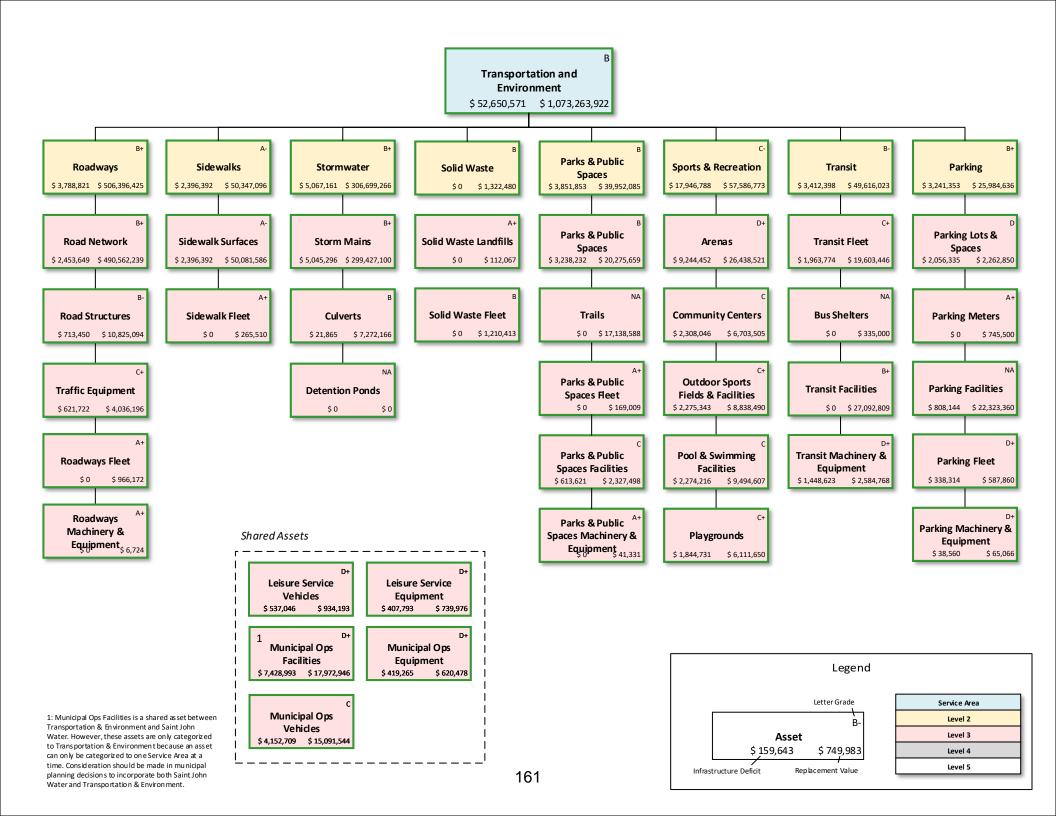


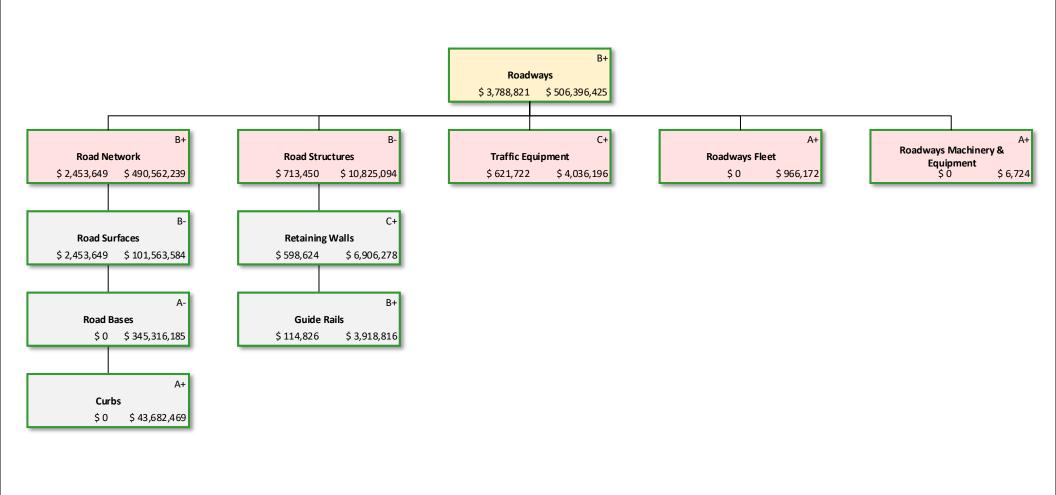


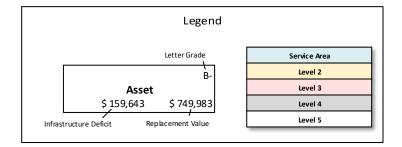


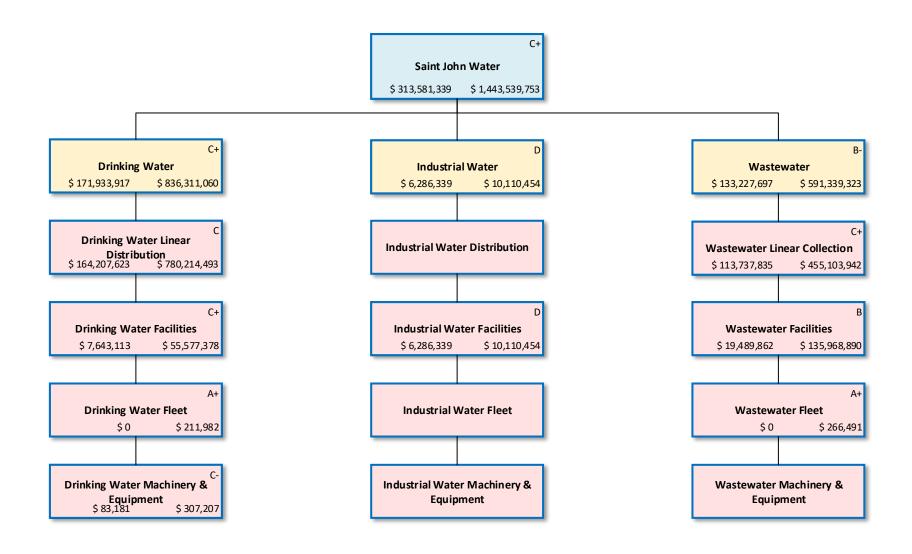




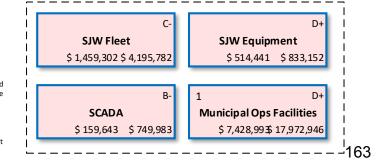


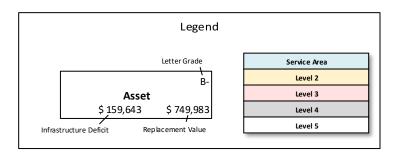




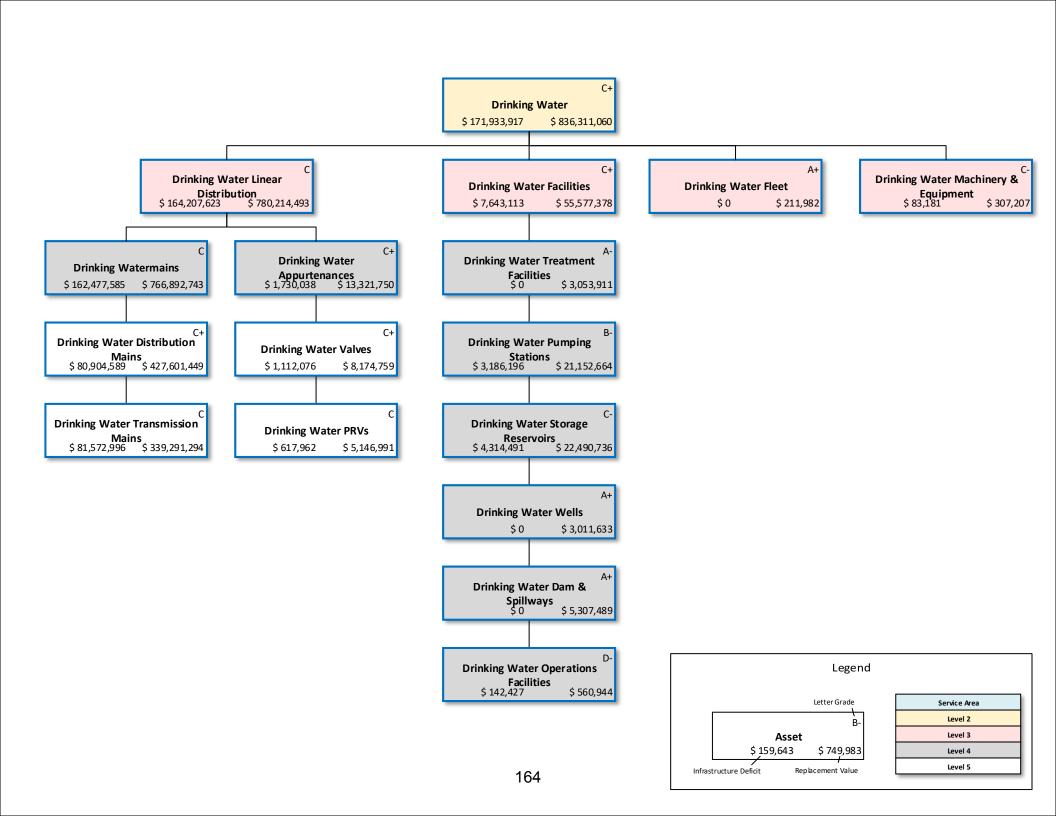


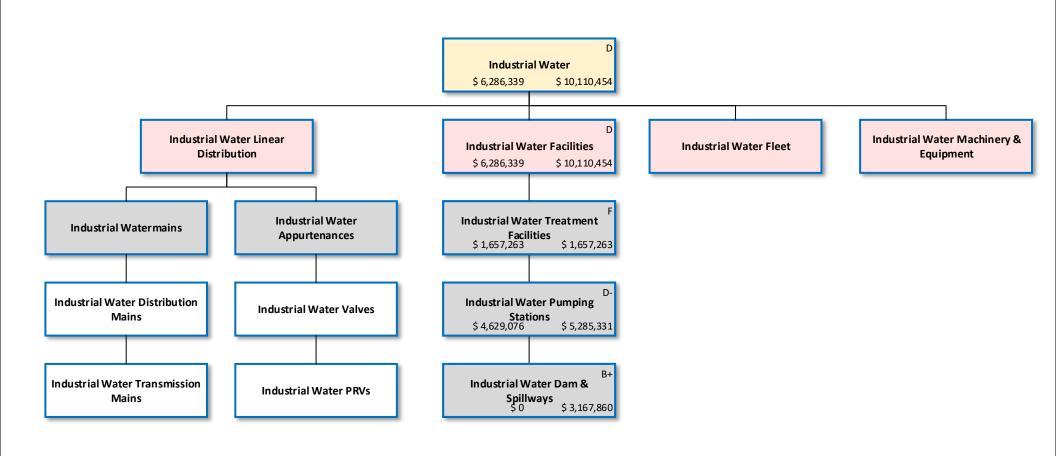
Shared Assets

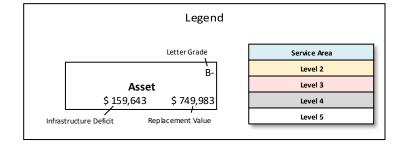


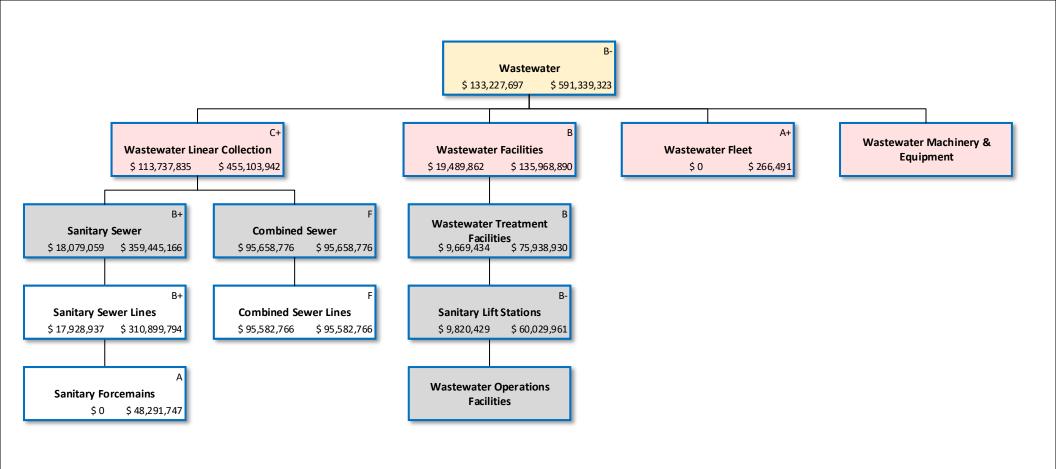


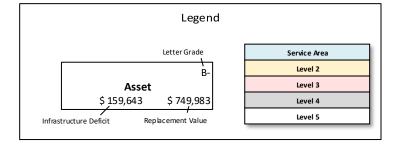
1: Municipal Ops Facilities is a shared as set between Transportation & Environment and Saint John Water. However, these assets are only categorized to Transportation & Environment because an asset can only be categorized to one Service Area at a time. Consideration should be made in municipal planning decisions to incorporate both Saint John Water and Transportation & Environment.











APPENDIX B

Asset Assumptions

Asset	Replacement Costs	Useful Lives		Consequence of Failure	
City Facilities	Escalate original acquisition costs using CPI	Component Type		Component Type	
		Conveying	30 - 40	Substructure, all components	5
		Electrical	5 - 50	Shell	
		Equipment	5 - 40	Superstructure	5
		Exterior Enclose	5 - 100	Exterior Structural Wall	5
		Fire Protection	10 - 40	Exterior Windows	3
		Foundations	30 - 100	Exterior Façade	3
		Furnishings	10 - 60	Exterior Doors	3
		HVAC	10 - 65	Roofing	4
		Interior Construction	10 - 60	Interiors	
		Interior Finishes	15 - 30	Interior Construction	1
		Plumbing	10 - 40	Stairs	3
		Process Instrumentation and Control	10 - 15	Interior Finishes	1
		Roofing	15 - 40	Services, all components	3
		Site Electrical Utilities	10 - 20	Equipment and Furnishings	
		Site Improvements	10 - 50	Equipment	3
		Site Mechanical Utilities	10 - 65	Furnishings	1
		Site Preparation	65	Special Construction	0
		Special Construction	25 - 40	Building Sitework, all components	2
		Superstructure	65 - 70	Dam, all components	5
		Unknown	10 - 70	Intakes, all components	5
SJW Facilities	Escalate original acquisition costs using CPI	Component Type		Component Type	
		Building and Process Structural	40 - 60	Substructure, all components	5
		Building Architectural	20	Shell	
		Building Electrical and Mechanical	25	Superstructure	5
		Controls	40	Exterior Structural Wall	5
		Cranes, hoists, monorail	20	Exterior Windows	3
		Electrical (including SCADA)	20 - 40	Exterior Façade	3
		Mechanical	20 - 40	Exterior Doors	3
		Process Electrical	30	Roofing	4
		Process Instrumentation	10	Interiors	
		Process Piping and Equipment	20 - 40	Interior Construction	1
		Production Well	50	Stairs	3
		Roof	20	Interior Finishes	1
		Site Works	25 - 40	Services, all components	3
		Structure	20 - 100	Equipment and Furnishings	
				Equipment	3
				Furnishings	1
				Special Construction	0
				Building Sitework, all components	2
				Process	4

Asset	Replacement Costs		Useful Lives		Consequence of Failure	
PRVs	Escalate original acquisition costs using	g CPI	Component Type		Component Type	
			Electrical	20	Electrical	3
			Mechanical	30	Mechanical	3
			Structure	40	Structure	4
Watermains	Diameter (mm)	per m	Material		Function and Diameter (mm)	
	< 100	<i>\$0</i>	Asbestos Cement	60	<u>Distribution</u>	
	100	\$931	Brass	60	<= 300 mm	2
	150	\$931	Cast Iron	60 - 80	> 300 mm	3
	200	\$931	Concrete	40	<u>Transmission</u>	
	250	\$1,166	Concrete Pressure Pipe	60 - 80	<= 600 mm	3
	300	\$1,348	Copper	30	> 600mm	4
	350	\$1,519	Cross-Linked Polyethylene (PEXa)	80		
	375	\$1,691	Ductile Iron	60 - 80		
	400	\$1,734	High Density Polyethylene	80		
	450	\$1,820	Polyvinyl Chloride	60 - 80		
	500	\$1,906	Stainless Steel	40 - 80		
	600	\$1,998	Steel	40		
	750	\$2,350	Unknown	60		
	900	\$3,102				
	975	\$3,514				
	1050	\$3,900				
	1200	\$5,077				
	1350	\$5,850				
	1500	\$6,694				
	1800	\$7,895				
	Unknown	\$931				
Valves (>= 500mm only)	Type and Diameter (mm)	each	All	40	All	4
	<u>Butterfly Valve</u>					
	500	\$13,253				
	600	\$18,291				
	750	\$32,840				
	900	\$37,884				
	1050	\$56,889				
	<u>Check Valve</u>	4				
	600	\$56,213				
	750	\$116,418				
	Gate Valve	4				
	500	\$51,109				
	600	\$77,820				
	750	\$143,406				
	900	\$179,997				

Asset	Replacement Costs		Useful Lives		Consequence of Failure	
	1050	\$262,500				
	1500	\$300,000				
Sanitary Lines	Diameter (mm)	per m	Material		Function and Diameter (mm)	
(Sanitary, Forcemain, Combined)	40	\$807	Asbestos Cement	60	<u>Gravity</u>	
	50	\$807	Brick	40	<= 600 mm	2
	65	\$807	Cast Iron	60	> 600 mm	3
	75	\$807	Concrete	80	<u>Forcemain</u>	
	100	\$807	Corrugated Steel	40	<= 200 mm	2
	150	\$807	Ductile Iron	60 - 80	> 200 mm & <= 500 mm	3
	200	\$806	High Density Polyethylene	80	> 500 mm	4
	225	\$922	Perforated Polyvinyl Chloride	80		
	250	\$921	Polyethylene	80		
	300	\$1,076	Polyvinyl Chloride	80		
	350	\$1,178	Stainless Steel	80		
	375	\$1,178	Steel	80		
	400	\$1,217	Terracotta	60		
	450	\$1,217	Unknown	60		
	500	\$1,242	Wood	80		
	525	\$1,242				
	600	\$1,268				
	700	\$1,344				
	750	\$1,344				
	900	\$2,049				
	1050	\$2,587				
	1200	\$3,194				
	1225	\$3,194				
	1350	\$3,400				
	1370	\$3,400				
	1500	\$3,606				
	1800	\$3,812				
	2100	\$4,020				
	2400	\$4,020				
	Unknown	\$807				
Storm Lines	Diameter (mm)	per m	Material		Diameter (mm)	
	30	\$794	Acrylonitrile Butadiene Styrene	60	<= 300 mm	2
	50	\$794	Aluminum	60	> 300 mm & <= 600 mm	3
	75	\$794	Asbestos Cement	60	> 600 mm	4
	100	\$794	Brick	40		
	150	\$794	Cast Iron	60		
	200	\$794	Concrete	80		
	225	\$794	Corrugated Steel	40		

Asset	Replacement Costs		Useful Lives		Consequence of Failure	
	250	\$794	Ductile Iron	80		
	300	\$794	High Density Polyethylene	80		
	350	\$834	Perforated Polyvinyl Chloride	80		
	375	\$831	Polyethylene	80		
	400	\$953	Polyvinyl Chloride	80		
	450	\$953	Stainless Steel	80		
	500	\$973	Terracotta	60		
	525	\$973	Unknown	60 - 80		
	600	\$992				
	675	\$1,013				
	750	\$1,013				
	900	\$1,509				
	1050	\$1,932				
	1200	\$2,343				
	1350	\$2,623				
	1500	\$2,902				
	1625	\$3,182				
	1800	\$3,462				
	2100	\$3,742				
	2400	\$4,020				
	Unknown	\$794				
Fleet and Equipment	Escalate original acquisition costs using CP	I	Varies	1 - 40	Туре	
					General Sedans	2
					Heavy Trucks	2
					Light Trucks	2
					Fire	
					Heavy Ladder Truck	3
					Heavy Pumper/Rescue Truck	3
					Heavy Tanker Truck	3
					Light Truck	2
					Police	
					Patrol Light Duty Trucks	2
					Patrol Sedan	2
					Transit Fleet	3
					Light Equipment	1
					Heavy Equipment	3
					Fire Equipment	3
					Police Equipment	3
					PSCC Equipment	5
Roadways	Component Type	per m2	Component Type		Road Class	
	Road Base	\$70	Road Base	80	Arterial	4

Asset	Replacement Costs		Useful Lives		Consequence of Failure	
	Road Surface	\$21	Road Surface	20	Collector	3
					Local	2
Curbs	Material	per m	Material		All	1
	Concrete	\$87	Concrete	80		
	Granite	\$87	Granite	80		
	Asphalt	\$54	Asphalt	25		
Retaining Walls	Face Size	per m2	Allan Block	80	Wall Function	
	All	\$841	Amour Rock Embankment	80	Road	4
			Concrete Block	80	Landscape	2
			Concrete Crib	80		
			Concrete Curb	80		
			Concrete Formed	80		
			Concrete Lego	80		
			Gabion	30		
			Granite Block	80		
			Granite Curb	80		
			Serrascape	40		
			Stone	40		
			Timber	40		
Traffic Signals	Component Type	each	Component Type		Component Type	
	Controller		Controller	20	Controller	3
	2 Wire CCU	\$4,000	Detector	10	Detector	2
	4 Wire APS Control Unit	\$450	Electrical	40	Electrical	3
	Flasher Controller Cabinet	\$385	Signal Head	5	Signal Head	3
	Flasher Unit	\$300	Structure	40	Structure	3
	G Style Cabinet	\$11,805				
	M Style Cabinet	\$11,805				
	Midblock Controller	\$3,125				
	RA-5 Controller	\$698				
	Detector					
	2 Wire APS Button	\$595				
	4 Wire APS Button	\$595				
	Access Point	\$1,000				
	Blue Cannon	\$5,800				
	BullDog Button	\$210				
	Iteris Camera	\$5,800				
	Motion Detector	\$865				
	Presence Detector	\$620				
	Pucks	\$1,000				
	Reno Loop	\$337				
	Electrical					
	Electrical Disconnect	\$1,188				

Asset	Replacement Costs	Useful Lives	Consequence of Failure
	Power Disconnect	\$1,500	
	Power Hook Up	\$2,500	
	Signal Head		
	1 Signal Light	\$125	
	2 Section Head	\$198	
	2 Signal Light	\$200	
	3 Section Signal Head	\$299	
	3 Signal Light	\$299	
	3 Way Signal Light	\$299	
	300mm Ped Head	\$145	
	4 Section Signal Head	\$469	
	4 Signal Light	\$469	
	4 Way Signal Light	\$469	
	APS RRFB System	\$5,500	
	ITS DFB	\$4,500	
	Novax	\$250	
	Pedestrian Combo Timer	\$362	
	RA-5 Crosswalk Sign	\$2,087	
	RRFB System	\$2,650	
	Solar Flasher Kit	\$2,500	
	Traffic Logix DFB	\$4,500	
	<u>Structure</u>		
	1 Way Span Wire Hanger	\$100	
	10 Ft Pole	\$473	
	12 Ft Pole	\$515	
	15 Ft Pole	\$1,024	
	15ft Traffic Arm	\$544	
	15Ft Truss Arm	\$613	
	17Ft Truss Arm	\$698	
	19 Ft Pole	\$1,163	
	19 Ft Pole Steel	\$2,000	
	2 Way Span Wire Hanger	\$150	
	20Ft Truss Arm	\$770	
	22ft Traffic Arm	\$636	
	22ft Truss Arm	\$815	
	25ft Truss Arm	\$862	
	3 Meter Decorative Arm	\$503	
	3 Way Span Wire Hanger	\$200	
	30ft Truss Arm	\$1,036	
	33ft Truss Arm	\$1,150	
	4 Way Span Wire Hanger	\$250	

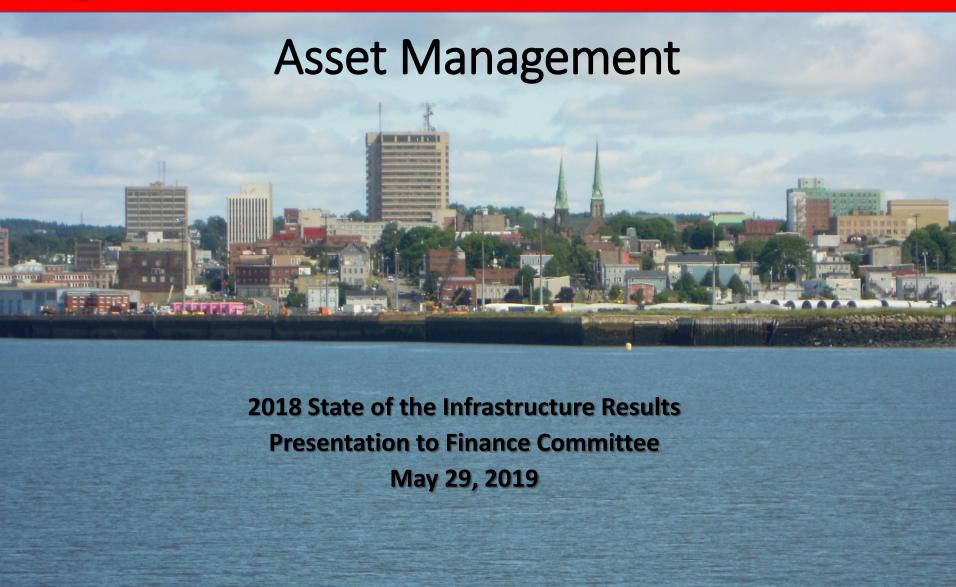
Asset	Replacement Costs		Useful Lives		Consequence of Failure	
	5 Ft Pole	\$344				
	8 Ft Pole	\$460				
	Adapter Plate	\$113				
	Astro Bracket	\$300				
	Concrete Base	\$10,000				
	Decorative Pole	\$2,688				
	Elbow Kit	\$113				
	Large Concrete Base	\$3,500				
	M Style Base	\$10,000				
	Post Top	\$95				
	Screw Base	\$500				
	Signal Cushion Hanger	\$123				
	Small Concrete Base	\$2,500				
	Span Wire	\$300				
	Steel Pole	\$2,000				
	Steel Traffic Arm	\$2,000				
	T Bracket	\$105				
	TB-1	\$336				
	TB-2	\$295				
	Telspar Pole	\$42				
Sidewalks	Length	per m	Material		All	2
	All	\$134	Concrete	80		
			Asphalt	25		
Culverts	Material and Diameter (mm)	per m	All	80	Function	
	<u>Concrete</u>				Driveway	1
	0	\$0			Other	3
	200	\$681				
	250	\$681				
	300	\$681				
	350	\$739				
	380	\$739				
	400	\$793				
	450	\$793				
	500	\$868				
	550	\$868				
	600	\$944				
	680	\$1,168				
	700	\$1,168				
	750	\$1,242				
	850	\$1,517				
	900	\$1,517				

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Asset	Replacement Costs		Useful Lives		Consequence of Failure	
	1000	\$1,701				
	1050	\$1,701				
	1250	\$1,906				
	1450	\$2,860				
	<u>Metal</u>					
	250	\$495				
	300	\$526				
	350	\$575				
	400	\$575				
	450	\$610				
	1400	\$1,679				
	1800	\$2,130				
	<u>Plastic</u>					
	0	\$0				
	250	\$503				
	300	\$519				
	350	\$569				
	380	\$569				
	400	\$569				
	450	\$608				
	500	\$608				
	550	\$695				
	600	\$695				
	<u>Unknown</u>					
	0	\$0				
	380	\$739				
	450	\$793				
Guiderail						
Street Lights	Component Type	each	Component Type		Component Type	
	Fixtures	\$2,200	Fixtures	20	Fixtures	1
	Foundations		Foundations	40	Foundations	3
	СО	\$2,500	Poles	40	Poles	3
	SI	\$1,500				
	ST	\$1,500 or				
		\$2,500				
	Poles					
	AL	\$2,500				
	СО	\$1,805				
	IR	\$4,500				
	ST	\$2,295				
	WRC	\$1,805				

Asset	Replacement Costs		Useful Lives		Consequence of Failure	Consequence of Failure	
Bus Shelters	Туре	each	All	20	All	1	
	Standard	\$5,000					
	Heritage	\$30,000					
Detention Ponds							
Parking Meters	Туре	each	All	10	All	1	
	Pay by Plate	\$9,000					
	Pay and Display	\$7,500					
	Parking Meter	\$1,500					
	Handicapped	\$1,500					
Parking Lots and Spaces	Escalate original acquisition costs using CPI		All	3 - 20	All	1	
Parks and Public Spaces	Escalate original acquisition costs using CPI		All	10 - 100	All	0 - 5	
Playgrounds	Escalate original acquisition costs using CPI		All	10 - 80	All	3	
Outdoor Sports Fields & Facilities	Escalate original acquisition costs using CPI		All	10 - 50	All	3	
Industrial Parks	Escalate original acquisition costs using CPI		All	5 - 25	All	0 - 2	
Harbour Passage	Escalate original acquisition costs using CPI		All	5 - 50	All	2	
Landfills	Escalate original acquisition costs using CPI		All	10	All	4	
Trails	Material	\$/m2	Material		All	2	
	Asphalt	\$58	Asphalt	20			
	Brick	\$192	Brick	40			
	Concrete	\$122	Concrete	40			
	Dirt	\$0	Dirt	0			
	Gravel	\$33	Gravel	10			
	Stone	\$192	Stone	40			
	Wood	\$192	Wood	20			
	Unknown	\$58	Unknown	20			







Purpose



 Communicate the state of infrastructure repair essential to the delivery of public services



 Allow the comparison of state of infrastructure repair across service areas and over-time



Outlines the future investments needed to replace existing infrastructure (funding requirements)



Identify areas for data improvement



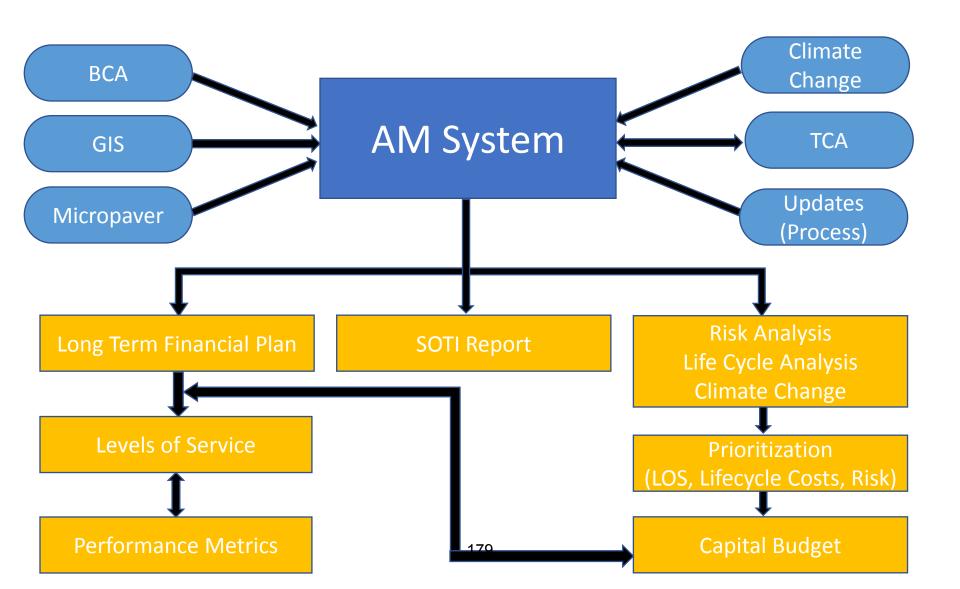
Improve decision-making related to infrastructure assets



Improve transparency and accountability of investments



Introduction





Changes 2016 - 2018

- Asset hierarchy adjusted (improved asset data resolution).
- Inventory basis:
 - 2016: Tangible Capital Asset (TCA) registry only
 - 2018: information management systems (GIS, MicroPaver, ...)
- Replacement costs:
 - 2016: CPI escalated acquisition cost
 - 2018: engineering, historical tenders and escalated acquisition costs
- Estimated useful lives:
 - 2016: equaled amortization period
 - 2018: staff experience, industry references and amortization periods



2018 Interpretation

- Infrastructure deficit ≠ condition
- Results are based on:
 - Default level of service
 - Existing asset inventory (no growth)
 - Uniform quality of construction
- Investment priority should be based on:
 - Risk
 - Level of Service
 - Lifecycle cost (not deficit)
- Data quality is still improving



City of Saint John

Replacement Value Infrastructure Deficit Letter Grade Trend

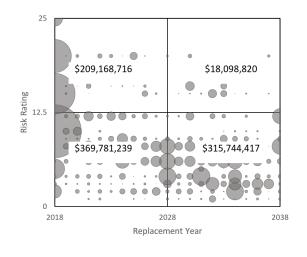
\$2730.9 M

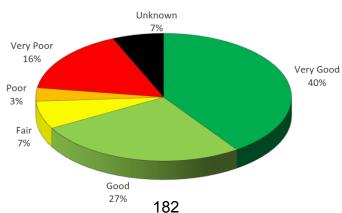
\$435 M

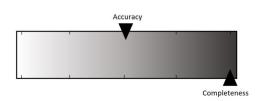
C+

1

Asset	Replacement Value	Infrastructure Deficit	Letter Grade
Growth & Community Development	\$129,646,291	\$47,962,628	C-
Public Safety	\$69,077,926	\$13,641,277	C+
Transportation and Environment	\$1,073,263,922	\$52,650,571	В
Saint John Water	\$1,443,539,753	\$313,581,339	C+
Corporate, Finance & Administrative	\$15,357,854	\$7,137,891	C-
Total	\$2,730,885,747	\$434,973,706	C+

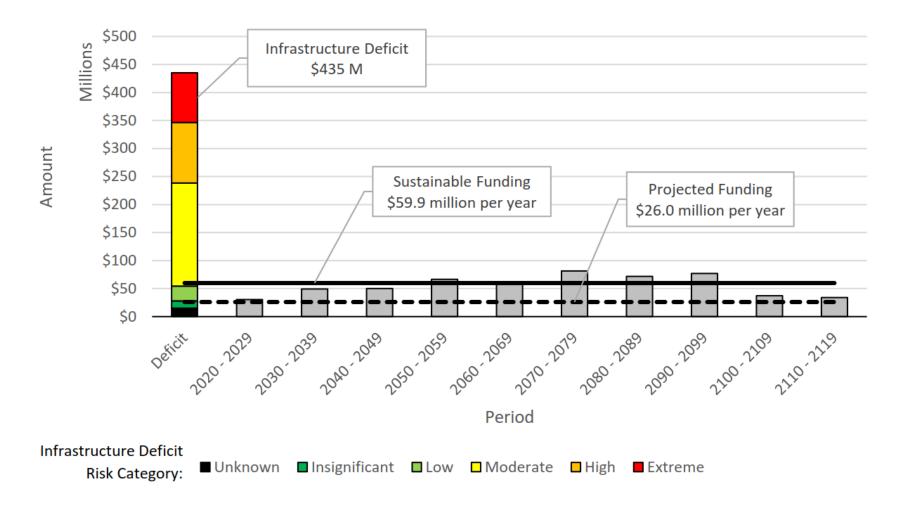








City of Saint John





Saint John (General Fund)

Replacement Value Infrastructure Deficit Letter Grade Trend

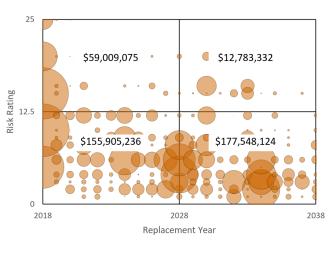
\$1287.3 M

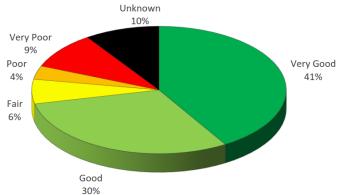
\$121.4 M

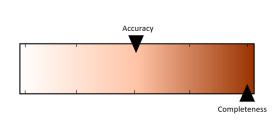
В



Asset	Replacement Value	Infrastructure Deficit	Letter Grade
Growth & Community Development	\$129,646,291	\$47,962,628	C-
Public Safety	\$69,077,926	\$13,641,277	C+
Transportation and Environment	\$1,073,263,922	\$52,650,571	В
Corporate, Finance & Administrative	\$15,357,854	\$7,137,891	C-
Total	\$1,287,345,993	\$121,392,368	В

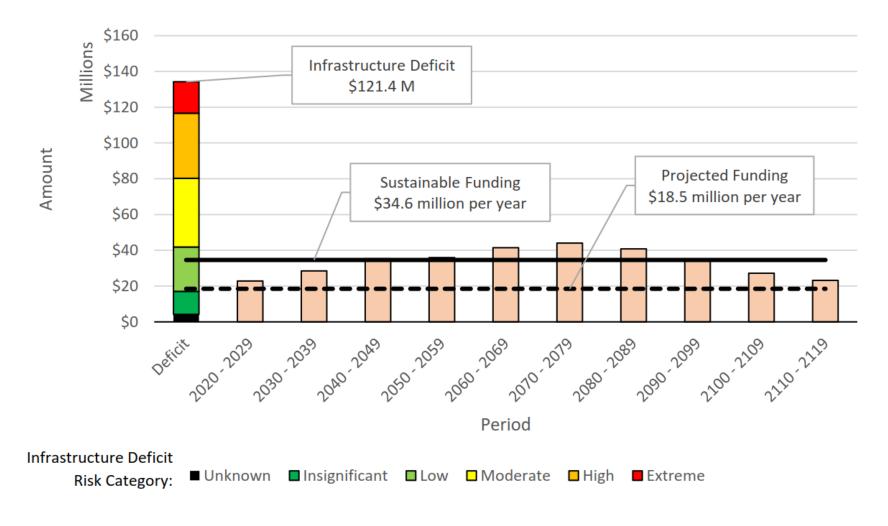








Saint John (General Fund)





Saint John Water

Replacement Value Infrastructure Deficit Letter Grade Trend

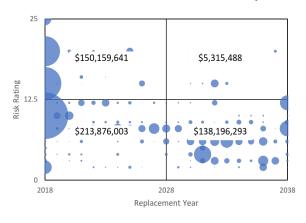
\$1443.5 M

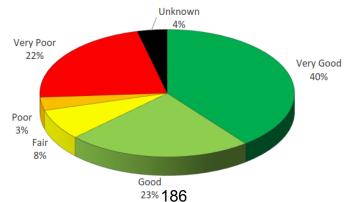
\$313.6 M

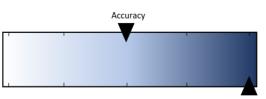
C+



Asset	Quantity	Replacement Value	Infrastructure Deficit	Letter Grade
Industrial Water		\$10,110,454	\$6,286,339	<u>D</u>
Industrial Water Pumping Stations	1	\$5,285,331	\$4,629,076	D-
Industrial Water Dam & Spillways	2	\$3,167,860	\$0	B+
Industrial Water Treatment Facilities	2	\$1,657,263	\$1,657,263	F
<u>Drinking Water</u>		\$836,311,060	\$171,933,917	<u>C+</u>
Drinking Watermains	517.5 km	\$766,892,743	\$162,477,585	С
Drinking Water Pumping Stations	13	\$21,152,664	\$3,186,196	B-
Drinking Water Storage Reservoirs	8	\$22,490,736	\$4,314,491	C-
Other Drinking Water Assets		\$25,774,916	\$1,955,646	NA
<u>Wastewater</u>		\$591,339,323	\$133,227,697	<u>C+</u>
Sanitary Sewer Lines	315.6 km	\$310,899,794	\$17,928,937	B+



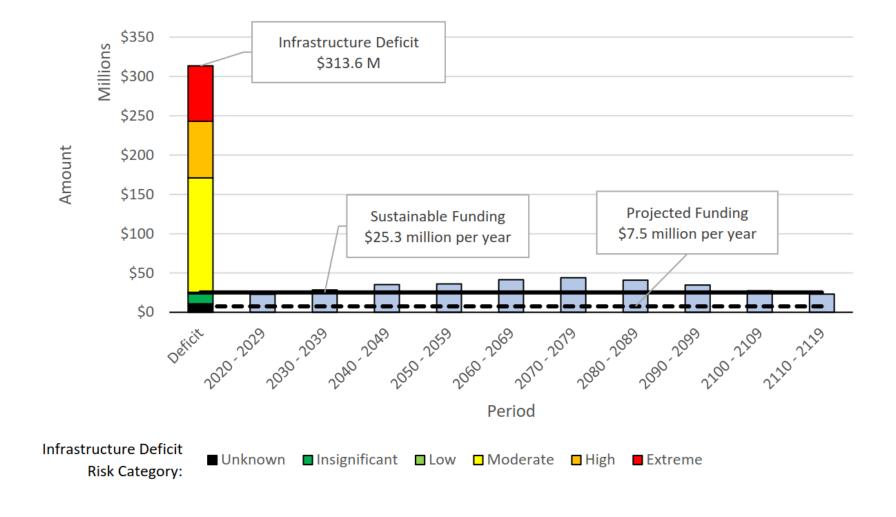




Completeness



Saint John Water





Conclusions

Results need to be interpreted cautiously, although data confidence is **High** (not very high)

- Data completeness is very high/data accuracy is moderate
- Information system (GIS, MicroPaver, TCA) data inventory
- Condition and risk assessments updated
- Replacement values and estimated useful lives updated
- Current asset inventory of \$2.7 B with a \$435 M infrastructure deficit and \$579 M of replacement costs in the next 10 years
- 2. The City is underfunding its infrastructure assets (43% funding ratio)
- 3. \$97.3 M of assets in the "Extreme" risk category
- 4. The City's infrastructure scores a B- and is in a "Good to Fair" condition
- 5. Infrastructure requires attention it is approaching the "cliff" and requires corrective action



Tipping point ahead



2016 - 2018 Comparison

Indicator	2016 Result	2018 Result	Difference
Total Replacement Value			
General Fund	\$1,110 million	\$1,287 million	+\$177 million
Saint John Water	\$1,088 million	\$1,444 million	+\$355 million
Infrastructure Deficit			
General Fund	\$219 million	\$121 million	-\$98 million
Saint John Water	\$214 million	\$314 million	+\$99 million
Extreme Risk Assets			
General Fund	\$51 million	\$22 million	-\$29 million
Saint John Water	\$106 million	\$76 million	-\$30 million
Letter Grade			
General Fund	С	В	Improved
Saint John Water	C-	C+	Improved
Sustainable Funding Requirement			
General Fund	\$42 million/yr	\$35 million/yr	-\$8 million/yr
Saint John Water	\$27 million/yr	\$25 million/yr	-\$1 million/yr
Projected Funding			
General Fund	\$19.1 million/yr	\$18.5 million/yr	-\$0.6 million/yr
Saint John Water	\$12.5 million/yr	\$7.5 million/yr	-\$5.0 million/yr
Investment Gap			
General Fund	\$23.0 million/yr	\$16.1 million/yr	-\$6.9 million/yr
Saint John Water	\$14.1 million/yr	\$17.8 million/yr	+\$3.6 million/yr
Data Completeness			
General Fund	Moderate	Very High	Improved
Saint John Water	Low	Very High	Improved
Data Accuracy			
General Fund	Low	Moderate	Improved
Saint John Water	Low 189	Moderate	Improved



Interpretation



Saint John infrastructure condition not atypical nor sustainable.



- 2016 & 2018 reports set baseline for future comparisons.
- Picture is clearer but not yet complete.



Heed the results and improve/maintain data quality.

Improve:



- Workflow (Strategy 1, Stream 2)
- Data management & software (Strategy 2&3, Stream 3)
- Define performance metrics (Strategy 5, Stream 4)



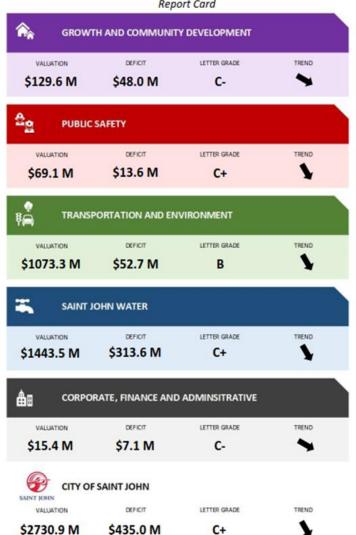
Kudos to staff for progress to-date.



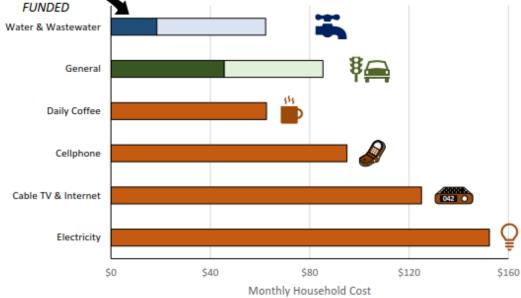
City of Saint John

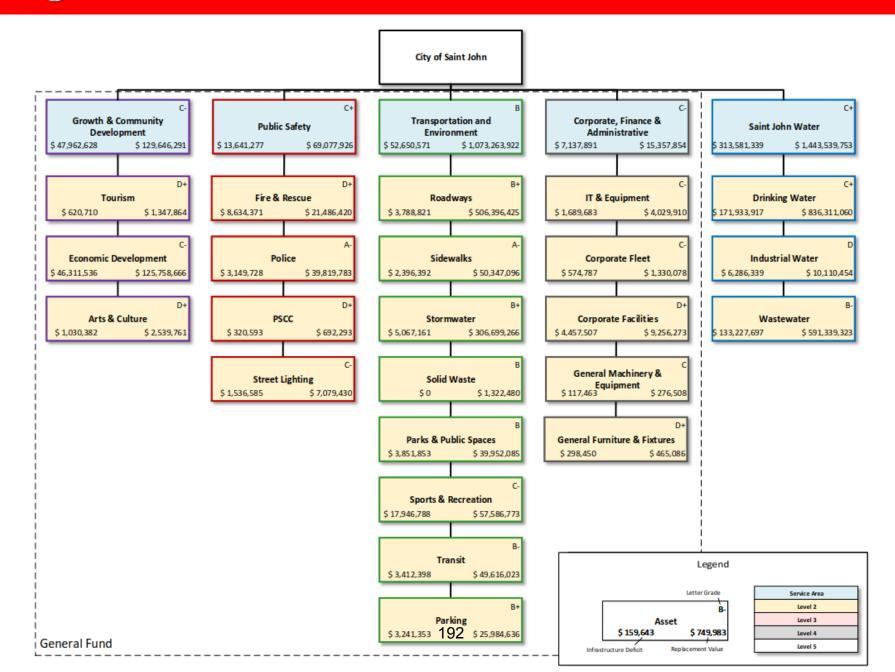
2018 State of the Infrastructure

Report Card



How much does it cost to renew my infrastructure? **CURRENTLY**







Hans Arisz, P.Eng., harisz@rvanderson.com



Growth and Community Development

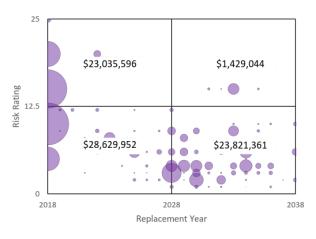
Replacement Value Infrastructure Deficit Letter Grade Trend

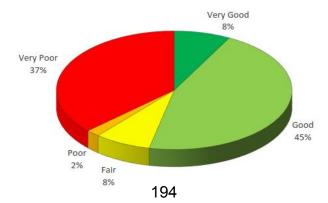
\$129.6 M \$48.0 M

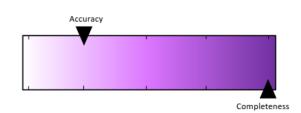
C-



Asset	Replacement Value	Infrastructure Deficit	Letter Grade
Market Square	\$83,406,016	\$36,937,012	D+
Harbour Station	\$24,957,544	\$5,232,917	C-
Harbour Passage	\$9,016,568	\$400,220	В
City Market	\$7,966,408	\$3,705,469	D+
Arts & Culture Facilities	\$2,539,761	\$1,030,382	D+
Visitor Information Centers	\$794,064	\$456,770	D
Tourism Facilities	\$553,800	\$163,940	C+
Industrial Parks	\$412,130	\$35,919	В
Total	\$129,646,291	\$47,962,628	C-

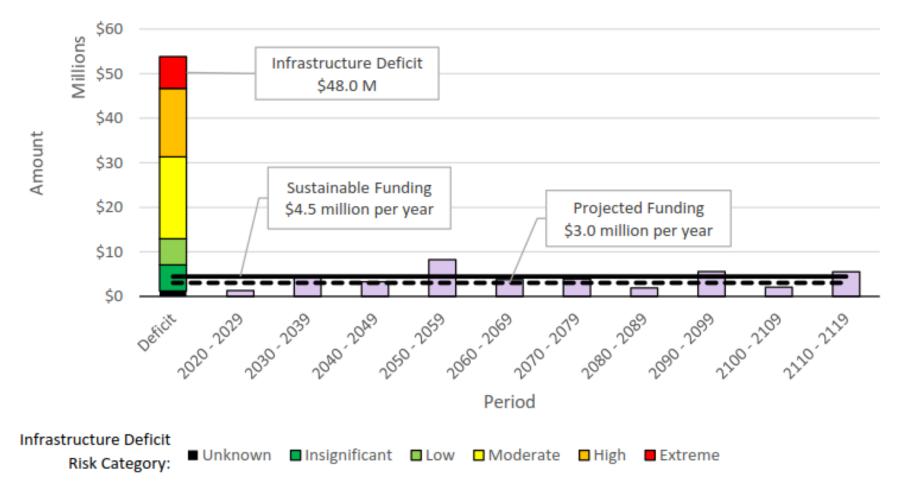








Growth and Community Development





Public Safety

Replacement Value Infrastructure Deficit Letter Grade Trend

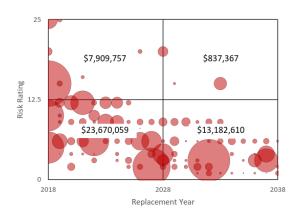
\$69.1 M

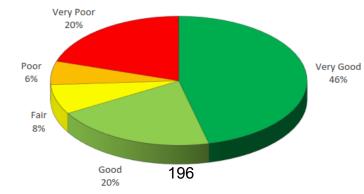
\$13.6 M

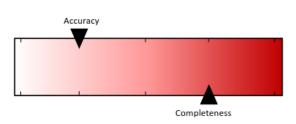
C+



Asset	Quantity	Replacement Value	Infrastructure Deficit	Letter Grade
Fire & Rescue		\$21,486,420	<u>\$8,634,371</u>	<u>D+</u>
Fire Facilities	9	\$9,858,833	\$5,139,871	D
Fire Fleet	34	\$8,164,966	\$1,623,258	C-
Fire Machinery & Equipment	230	\$3,462,621	\$1,871,241	D
<u>Police</u>		<u>\$39,819,783</u>	\$3,149,728	<u>A-</u>
Police Facilities	1	\$35,457,985	\$0	A+
Police Fleet	68	\$2,429,269	\$1,575,762	D
Police Machinery & Equipment	79	\$1,932,529	\$1,573,967	D-
PSCC		\$692,293	\$320,593	D+
Street Lighting	1,041	\$7,079,430	\$1,536,585	C-
Total		\$69,077,926	\$13,641,277	C+

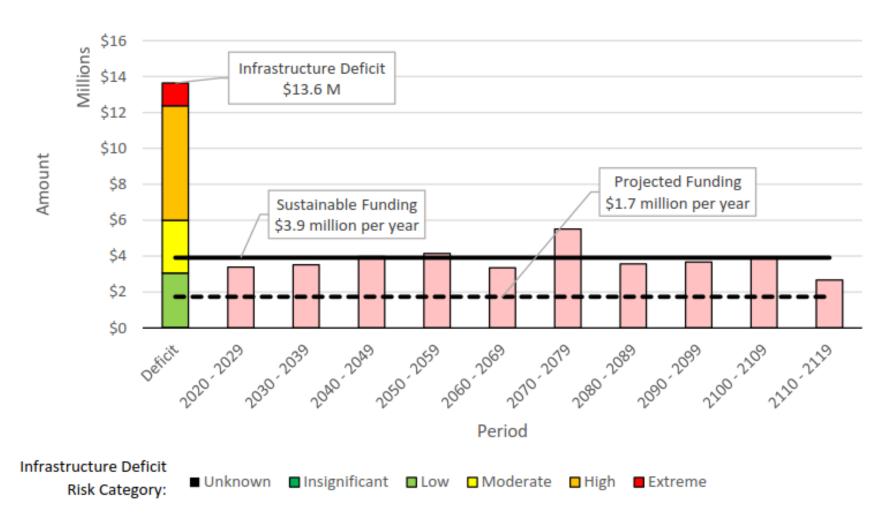








Public Safety



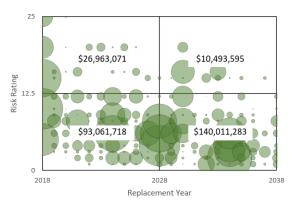


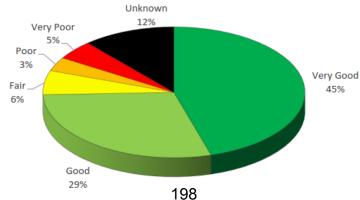
Transportation and Environment

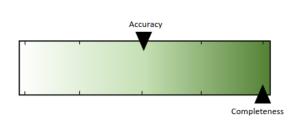
Replacement Value Infrastructure Deficit Letter Grade Trend

\$1073.3 M \$52.7 M B

Asset	Quantity	Replacement Value	Infrastructure Deficit	Letter Grade
Road Network	1,392 lane-km	\$490,562,239	\$2,453,649	B+
Retaining Walls	194	\$6,906,278	\$598,624	C+
Sidewalk Surfaces	372.6 km	\$50,081,586	\$2,396,392	A-
Culverts	1,113	\$7,272,166	\$21,865	В
Storm Lines	318.8 km	\$299,427,100	\$5,045,296	B+
Solid Waste	7	\$1,210,413	\$0	В
Parks & Public Spaces	39	\$39,952,085	\$3,851,853	В
Arenas	5	\$26,438,521	\$9,244,452	D+
Community Centers	4	\$6,703,505	\$2,308,046	С
Outdoor Sports Fields & Facilities	29	\$8,838,490	\$2,275,343	C+
Playgrounds	37	\$6.111.650	\$1.844,731	C+

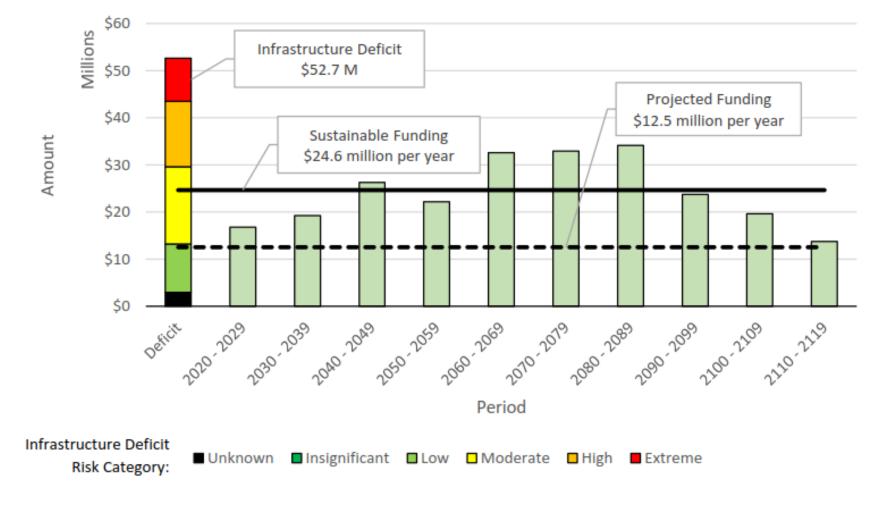








Transportation and Environment

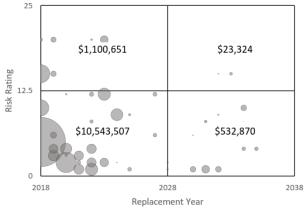


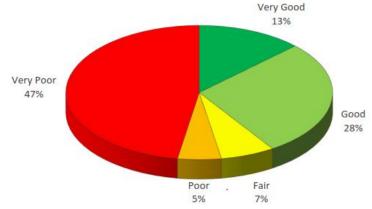


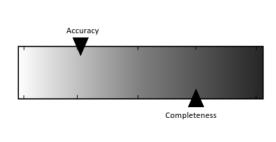
Corporate, Finance and Administrative

Replacement Value Infrastructure Deficit Letter Grade Trend
\$15.4 M \$7.1 M C-

Asset	Quantity	Replacement Value	Infrastructure Deficit	Letter Grade
Corporate Facilities	7	\$9,256,273	\$4,457,507	D+
Corporate Fleet	34	\$1,330,078	\$574,787	C-
IT & Equipment	296	\$4,029,910	\$1,689,683	C-
General Furniture & Fixtures	4	\$465,086	\$298,450	D+
General Machinery & Equipment	20	\$276,508	\$117,463	С
Total		\$15,357,854	\$7,137,891	C-

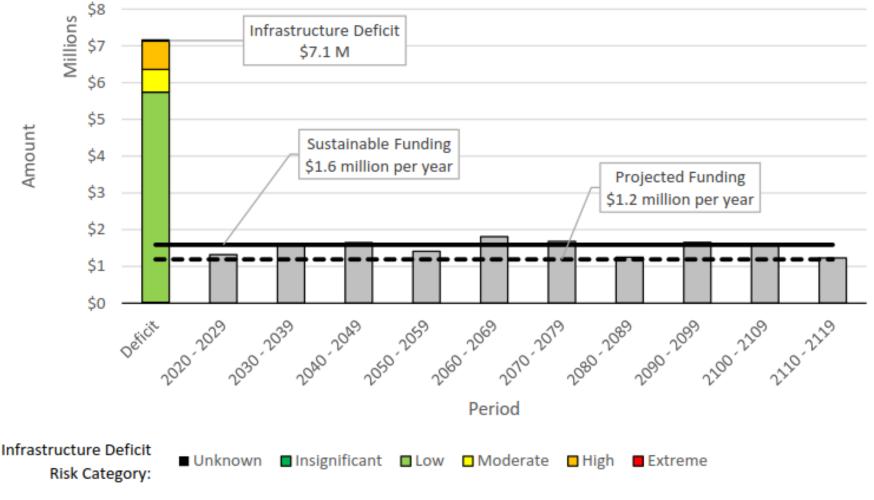








Corporate, Finance and Administrative

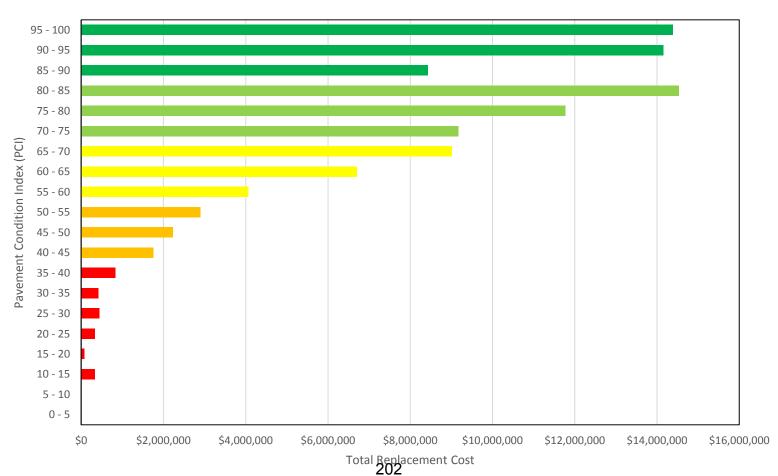




Road Surfaces

Pavement Condition Index (PCI) ratings



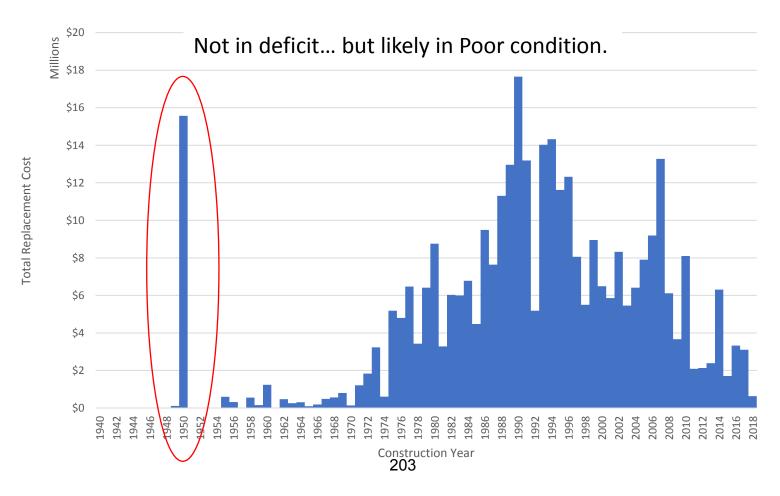




Road Bases

Age as a proxy

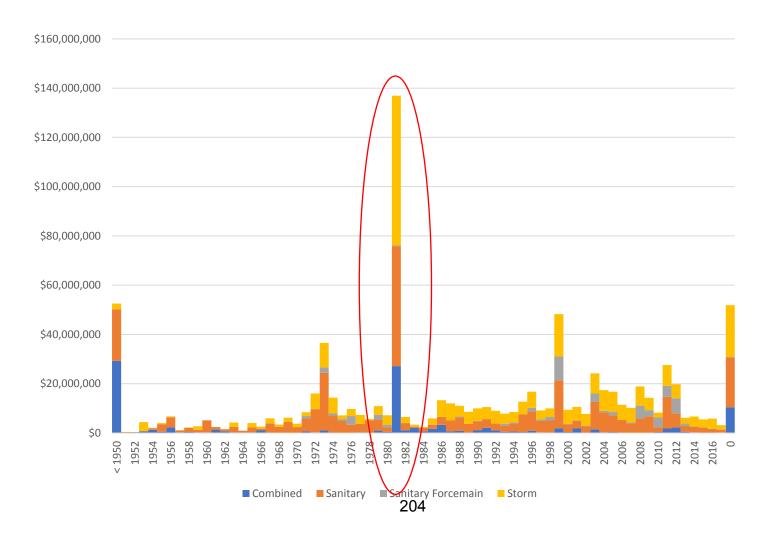
Road Base EUL = 80 years...





Storm and Sewer Lines

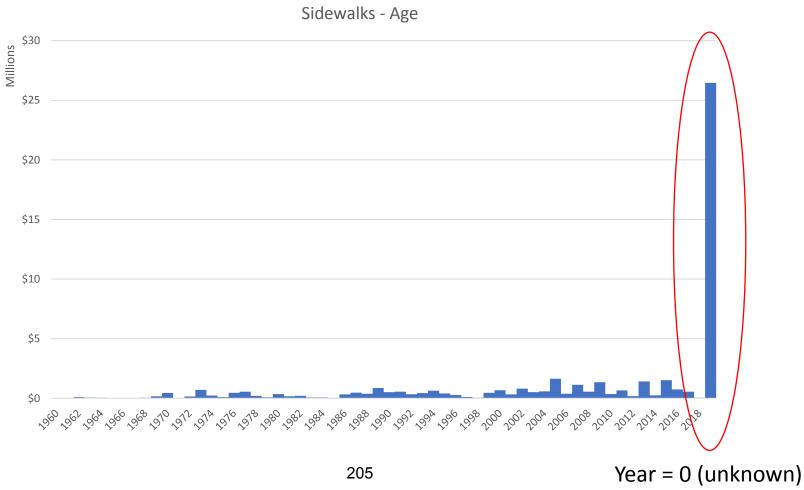
Age as a proxy





Sidewalks

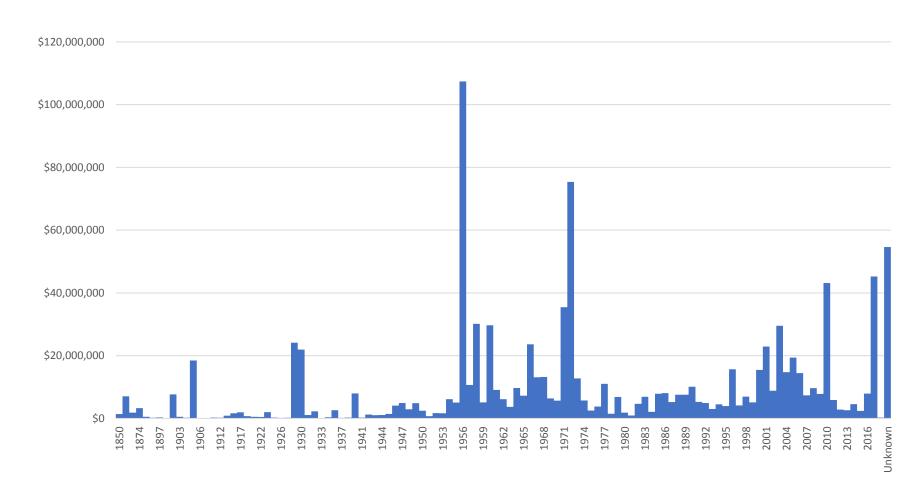
Age as a proxy





Water Lines

Age as a proxy





2020-2021 Draft Capital Budgets General Fund/Utility Fund

Finance Committee



May 29, 2019

2020-2021 Draft Capital Budget – General Fund

2020-2021 Capital Budget Inputs

- Asset Management Plan
 - State of Infrastructure Report
- Plan SJ/Play SJ/Move SJ
- Central Peninsula Neighborhood Plan
- Capital Budget Policy
- Climate Change
- Council Priorities
 - Growth & Prosperity
 - Vibrant and Safe City
 - Valued Service Delivery
 - Fiscally Responsible





2020-2021 Draft Capital Budget – General Fund

Asset Management Plan

- State of the Infrastructure Report (SOTI) 2019
- Infrastructure Deficit \$434,973,706
- SOTI report uses letter grade for asset condition. Eg. "F" highest risk of failure, beyond useful life
- 2020-2021 Capital budget focuses heavily on assets with letter grade "F"
- Asset management plan is continuing to be refined and will improve decision making for asset renewal, along with long term financial plan.



2020-2021 Draft Capital Budget – General Fund

2019 State of Infrastructure Report

Total	\$2,730,885,747	\$434,973,706	C+	\$401,122,567
Corporate, Finance and Administrative	\$15,357,854	\$7,137,891	C-	\$1,557,150
Saint John Water	\$1,443,539,753	\$313,581,339	C+	\$308,276,480
Transportation and Environment	\$1,073,263,922	\$52,650,571	В	\$39,595,653
Public Safety	\$69,077,926	\$13,641,277	C+	\$10,808,567
Growth and Community Development	\$129,646,291	\$47,962,628	C-	\$40,884,717
Asset	Replacement Value	Infrastucture Deficit	Letter Grade	Infrastructure Deficit "F" Grade



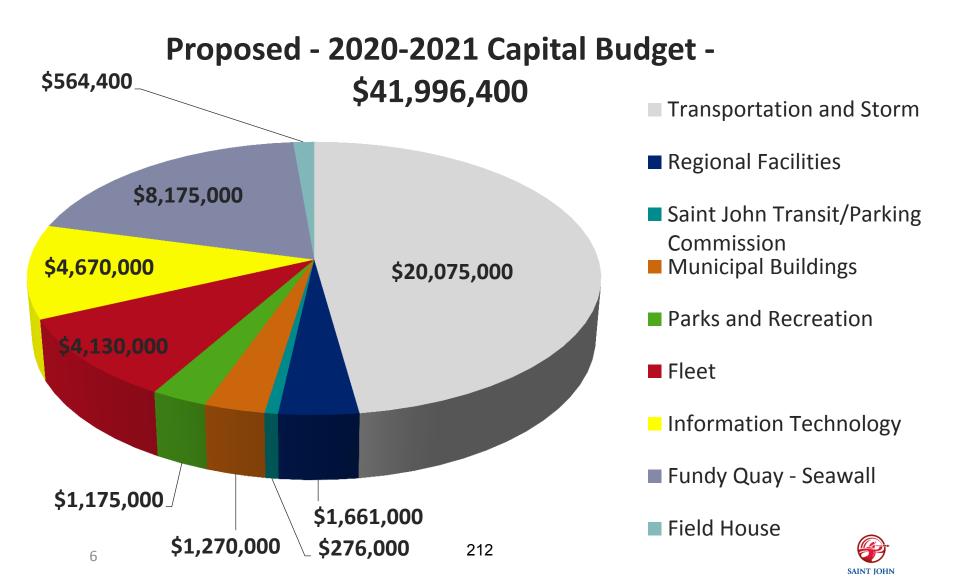
2020-2021 Draft General Capital Budget - Overview

- Proposed 2020-2021 Draft General Fund Capital Budget -\$41,996,400
- City Share \$20,009,250 (2 year)
- Other Share \$21,987,150 (2 year)
 - Gas Tax Funding (Includes additional funding recently announced)
 - Disaster Mitigation Funding
 - Reserves
 - Bi-lateral funding (Federal and Provincial)*
- Projects focus on
 - Climate Change
 - Supporting Growth
 - Infrastructure Deficit





Allocation of 2020 -2021 General Capital Budget



2020-2021 Draft General Capital Budget - Highlights

Focus on Tax Base Growth

- Continued investment in Fundy Quay
 - Total investment to rebuild Seawall \$8.174 Million
 - Funding partnership with Federal Government (\$3.27M) and City of Saint John (\$4.904M)
 - Goal to transform Saint John's waterfront
 - Allows for City to mitigate climate change by raising seawall

Strategic reinvestments

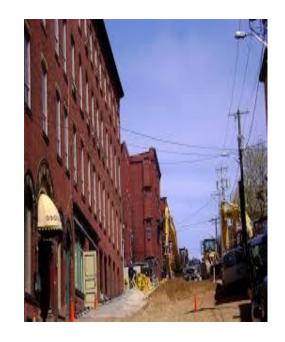
- Millidgeville Storm project \$1.0 M creating more capacity for development
- Major street reconstruction and beautification along St. James Street corridor
 - Charlotte Street St. James to Lower Cove Loop \$660K
 - St. James Street Prince William to Germain \$305K
 - St. James Street Germain to Sydney Street \$640K
 - Germain Street St. James to Lower Cove Loop \$320K



2020-2021 Draft General Capital Budget - Highlights

Balancing Infrastructure Replacement and Climate Change Mitigation

- 2020-2021 has a focus on high risk of failure assets but also addresses climate change.
- \$8,915,000 investment in sewer separation, resulting in complete street reconstruction.
- \$850K continued investment in energy efficiency measures and reducing our carbon footprint.





2020-2021 Draft General Capital Budget - Highlights

Infrastructure Deficit - Highlights

- Buildings
 - Fire stations \$200K 3 facilities require new roofs
 - CGAC \$550K for exterior windows, \$150K for exterior work and interior rehab
 - City Market \$700K for roof replacement
 - Carleton Community Centre \$325K for foundation and exterior work
 - Transit Bus shelters \$80K
- Trade & Convention \$261K replacing outdated equipment and technology
- Harbour Station \$700K for Q League requirements, heating upgrades, other assets







2020-2021 Draft General Capital Budget - Highlights

Infrastructure Deficit - Highlights

- Fleet Replacement \$4.13 million
- Arena equipment \$475K (Chillers/Compressors)
- Information Technology \$4.67 million
 - \$1.67 million for annual equipment replacement
 - \$3.0 million to replace **20 year** old ERP system
 - New ERP system will a transformational project
 - Impacts all service areas in the City
- Parking Meter \$226K earmarked for continued replacement of outdated parking meters.
- Parks and Recreation \$325K for surface replacement at Market Place playground (safety)







216

2020-2021 Draft General Capital Budget - Highlights

NEW INVESTMENTS

• Exhibition Fieldhouse - \$564K final grant of a three year commitment (2020). (Note: this is not an asset of the City of Saint John, however was approved before Capital Policy.)

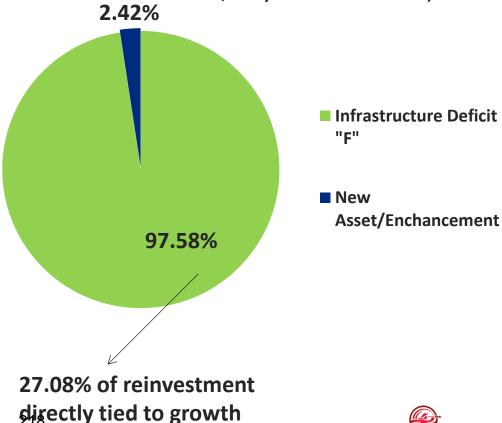




2020-2021 Draft General Fund Capital Budget

CONCLUSION

- Budget continues to focus and balancing projects between
 - Addressing infrastructure deficit (Assets at Risk Failure, Beyond useful life)
 - Growth Opportunities
 - Climate Change
 - Addressing infrastructure deficit
 - Leveraging funding opportunities
 - Disaster Mitigation Funding
 - Gas Tax Funding
 - Bi-lateral Funding





Saint John Water – 2020-2021 Capital Budgets









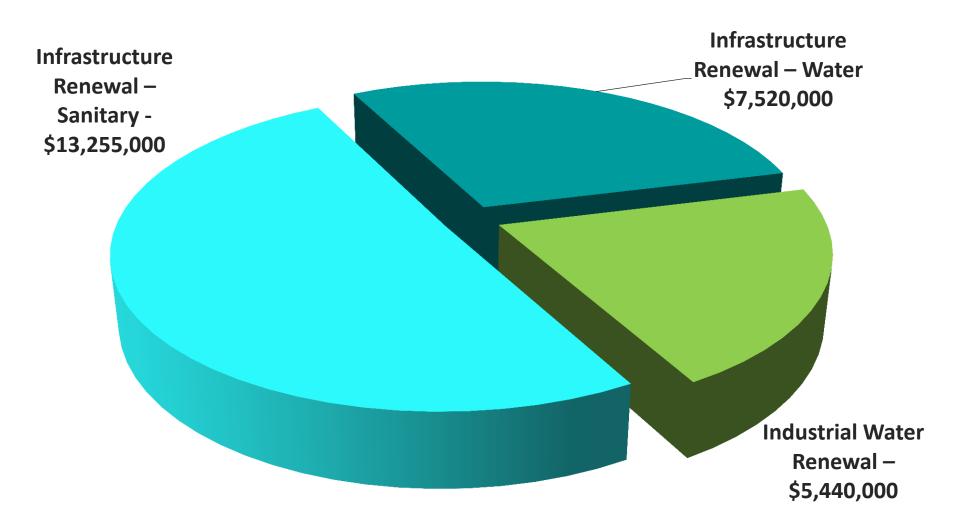
Saint John Water Capital Highlights - 2020-2021

- Proposed 2020-2021 Capital budget \$26,215,000
- Funding for Capital budget Capital from Operating (pay as you go) - \$10,283,450 over (2 years)
- Heavy reliance on funding from other sources - \$15,931,500 (2 years)
 - Disaster Mitigation Funding
 - Gas Tax Funding (71% of all GTF funding is being directed to the Utility)
 - Bi-lateral funding opportunities support: infra. renewal, Neighborhood Plan, dev. & sewer separation
- No new borrowing for 2020-2021 Capital program





2020 -21 Draft Utility Fund Capital Budgets





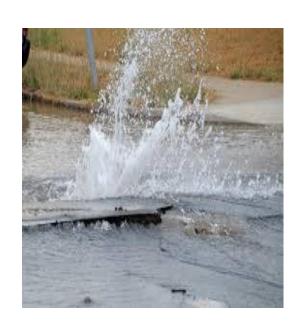
2020-2021 Draft Utility Budgets - Highlights

Latest State of Infrastructure Results

• Infrastructure Deficit - \$313,581,339

Addressing the deficit with 2020-2021 Budget

- Budget includes, in coordination with Transportation, over \$7.8M of street reconstruction projects.
 - Sewer separation falls under green infrastructure
 - Much of sewer infrastructure dates to late 1800's
 - Nearly all projects located in PDA
 - Improved infrastructure and streetscapes to focus on growth opportunities
- One Mile Sewer Lift Station \$5.0M
 - Current station is at end of life
 - Funding under Gas Tax Fund





2020-2021 Draft Utility Budgets - Highlights

Addressing the deficit with 2020-2021 Budget

- Other Infrastructure Renewal -Water
 - Hayes Avenue \$950K
- Other Infrastructure Renewal -Sewer
 - Douglas Avenue \$325K
 - Lakewood Heights Sanitary System \$720K
 - Retail Drive Area (Oakland St.) \$500K
- Fleet Renewal \$970K (funded from Reserve)

New Infrastructure

- Wastewater Pumping Station \$520K
 - Prospect Street West

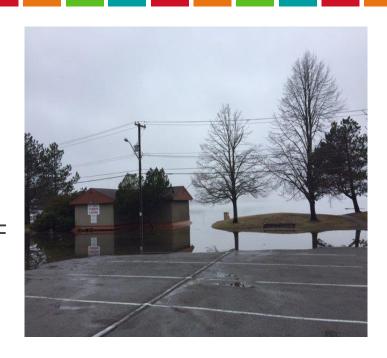




2020-2021 Draft Utility Budget - Highlights

Strategic Investments

- Climate Change Adaptation
 - WWPS Lift Station C \$500K
 Reconstruction and flood proof DMAF
 - Musquash Water Pump Station \$5.44M
 Upgrade/Reconstruction/Flood Proof DMAF
 - WWPS Lift Station Beach Crescent \$840K
 Reconstruction and flood proof DMAF
- Watermain/Sewer Cleaning and Lining \$1.45M
 - Extend useful life of watermains/sewer lines
 - Improve water pressure and water quality
 - Improve fire flows





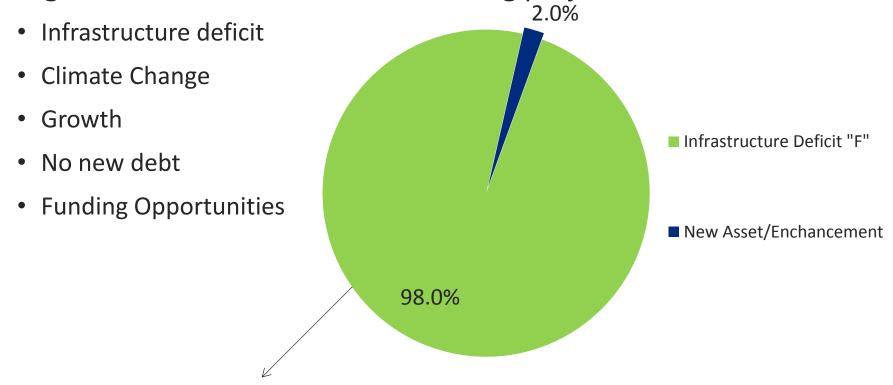


18 224

2020-2021 Draft Utility Budget - Conclusion

CONCLUSION

Budget continues to focus and balancing projects between



12.08% of reinvestment directly tied to growth



Conclusion

Recommendation

• Receive and file 2020-2021 General & Utility Capital Budgets







FINANCE COMMITTEE REPORT

Report Date	May 24, 2019
Meeting Date	May 29, 2019

Chairman Councillor Merrithew and Members of Finance Committee

SUBJECT: 4_Finance Committee Report 2020-2021 General Capital Budget.docx

OPEN OR CLOSED SESSION

This matter is to be discussed in open session of the Finance Committee.

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
Craig Lavigne	Kevin Fudge/Cathy Graham	John Collin

RECOMMENDATION

It is recommended that Finance Committee reflect upon the attached document and make any and all inquiries and recommendations to staff; and receive and file this report.

EXECUTIVE SUMMARY

The 2020 and 2021 proposed draft General Fund Capital Budgets will be the first multi-year capital budget being proposed to the Finance Committee for review. This multi-year budget is laying the foundation for the 10 year Capital Budget Plan that staff will bring to Finance Committee in Q4 of 2019.

This draft budgets continue to focus on multiple priorities; such as the City's infrastructure deficit, environmental factors, safety and growth opportunities. The proposed list of individual projects concentrates on addressing multiple priorities.

These budgets keep the emphasis on affordability and borrowing to a maximum of \$12 million per year. The last five capital budgets have been passed with a City share of no more than \$12 million and the long term debt for the general fund has seen a reduction due to this strategy. General fund debt was \$119.3 end of 2014 and is down to \$106.6 end of 2018.

PREVIOUS RESOLUTION

N/A

STRATEGIC ALIGNMENT

The proposed 2020 and 2021 proposed draft General Fund Capital Budgets are aligned with Councils' priorities, Capital Budget Policy, Asset Management Plan, Central Peninsula Neighborhood Plan, Play SJ, Move SJ, Plan SJ with a focus on growth.

REPORT

The 2020 and 2021 proposed draft General Fund Capital Budgets align with Council's priorities to support investment in creating a *Vibrant, Safe City*, offering *Valued Service Delivery, Growth and Prosperity* and being *Fiscally Responsible*. The budgets align with the Capital Budget Policy and the Asset Management Policy.

The 2020 and 2021 proposed draft General Fund Capital Budgets total \$41,996,400 over the 2 years with \$20,009,250 to be funded from other sources and the remainder \$21,987,150 to be funded by debt issue, City reserves and capital from operating. The budget has funding from federal gas tax fund, federal disaster mitigation adaptation fund and proposed bi-lateral (federal and provincial) funding.

Almost half of the overall budget is coming from other sources. Bi-lateral funding expressions of interest are currently being received by the Province and the first round deadline for submission is June 28, 2019. If the City is not successful in obtaining, staff will come back to Finance Committee with a recommendation to reallocate City funds.

2020 and 2021 PROPOSED CAPITAL BUDGET HIGHLIGHTS

The capital budget decision making was guided by the Capital Budget Policy, along with the Asset Management Plan. These documents assist in addressing the infrastructure deficit, while factoring in the needs replace existing assets with the need for new assets. It is aligned with Council Priorities and various City of Saint John plans, with Plan SJ being the overarching plan. Other factors in the decision making revolved around environmental consideration such as mitigation and reduction of greenhouse gas and focusing on growth areas.

Capital Budget Policy guided staff in prioritizing the capital budgets based on the following criteria:

- 1. Mandatory
- 2. Risk
- 3. Priority of Council
- 4. Positive Financial Impact

5. Discretionary

The capital budget is investing heavily in asset renewal in order to address the large infrastructure deficit identified in the State of the Infrastructure Report as part of the Asset Management Plan.

State of the Infrastructure (SOTI) Report

The General Fund infrastructure deficit was \$121.4 million with an estimated replacement cost of \$1.29 billion for those assets. The largest portion of the deficit identified relates to Transportation and Environment. The majority of projects being recommended as part of the capital budget have an "F" letter grade, as measured in the SOTI report, meaning the asset is at high risk of failure and near or beyond its useful life.

Focus on Tax Base Growth

Fundy Quay – The City was awarded a significant amount of funding from the Federal government through the Disaster Mitigation Adaption Fund (DMAF). This funding will split the almost \$8.175 million dollar seawall refurbishment between the City (\$4.905 million) and Federal Government (\$3.27 million) over two years.

This project is considered one the largest transformational projects the City is pursuing. The goal is to transform the City's waterfront, encourage development and create significant *tax base growth* opportunities for the City.

The seawall project also involves raising the height of the wall. This will be key to future development. It will ensure development can happen on the site and deal with climate change events.

Other *strategic investments* involve a storm project in Millidgeville for \$1.0 million that will allow more storm water capacity which will enable more growth in that area of the City. Another area of focus will be a number of major street reconstruction and beautification projects along the St. James Street corridor. This area is a key part of the Central Peninsula Neighborhood Plan to encourage growth and these projects will invest \$1.925 million in the St. James Street area.

Balancing Infrastructure Replacement with Climate Change

The proposed budget includes over \$8.9 million in sewer separation projects. Much of this infrastructure due for replacement is from the 1800's and will involve complete street reconstruction. Sewer separation is a key component in dealing with climate change and the extreme weather events that occur with climate change.

The budget also includes \$850K for replacement of infrastructure that is beyond its useful life with assets that will reduce our carbon footprint. These assets being replaced involve various energy efficiency projects, new exterior windows at the Canada Games Aquatic Centre, heat pump replacements at Harbour station, and HVAC upgrades at City Market pedway.

Infrastructure Deficit

The multi-year budget focuses on some assets that are past their useful life, assets at high risk of failure and assets that are considered extreme risk of failure. This would include new roofs at three of the City's fire stations at a cost of \$200K, exterior and foundation work at Carleton Community Centre for \$325K, replacing the roof at St. Patrick Street Pedway for \$30K and replacing part of the roof at City Market for \$700K.

The annual street rehabilitation program that includes curbs and sidewalks will see a two year investment of \$7.9 million dollars. This program has been a focus of Council for several years. The SOTI report and excellent grade mark shows that the reinvestment in roads has been a successful asset renewal program.

There are limited resources being put into arenas until a comprehensive arena strategy is completed. However, there is a need to replace chillers at the Charles Gorman and Peter Murray Arena for a total cost of \$200K. As well, the LBR requires replacement of its main electrical service for \$100K and ice plant compressor for \$75K.

The Trade and Convention Centre requires several pieces of equipment replaced that are beyond its useful life and could have safety issues and impact business if the assets fail. Over 2020 and 2021, \$261K will be allocated to replace flooring, banquet equipment, refrigeration, kitchen equipment, point of sale system and LED lighting upgrades.

Harbour Station will be replacing a Zamboni for \$115K to ensure two reliable Zamboni's are on sight as required by the Quebec Major Junior Hockey League.

Canada Games Aquatic Centre will require \$150K in addition to replacing the exterior windows. The facility needs to replace a fire panel, install new shut off valves, install controls for domestic hot water usage, replace gym equipment that is well past useful life as well as interior work such as tile replacement in various areas.

The City's Information Technology department will replace \$1.67 million of equipment over two years as part of its annual equipment replacement program and this money is all funded from internal reserves. The department will be leading the project to replace its 20 year old enterprise reporting system for \$3.0 million over two years. This will be a transformational project for all service

areas in the City and will require a significant amount of planning, testing and resource requirements to make it successful. This will be a major first step to enable the City to offer more technology based solutions for citizens.

Parking commission is continuing to move forward with replacing its aging parking machines with more up to date pay by plate machines and will invest \$226K over the next two years. Saint John Transit is focused on replacing several bus shelters that are deemed to be safety concerns for a total of \$50K.

Fleet will budget \$4.13 million over two years to replace vehicles and equipment that are past useful lives and with high operating cost. These funds will come from the vehicle reserve. Council will receive a detailed list of vehicles and equipment to approve as the replacement list is compiled.

New Capital Investments/Service Enhancements

The proposed 2020 and 2021 has a total of \$1.014 million for new capital. The last payment towards the Exhibition Field House will be made for \$564K in 2020. Also, Harbour Station must upgrade its dasher board and glass system at a cost of \$450K to meet requirements of the Quebec Major Junior Hockey League.

CONCLUSION

Planned capital expenditures total \$41,996,400, with \$20,009,250 is to be funded from other sources over two years (gas tax, reserves, government funding etc.) and the remainder \$21,987,150 funded through debt and capital from operating over two years. The annual funding from other government programs, along with Council's fiscal restraint, has helped reduce projected borrowing costs while still investing in needed infrastructure improvements.

This multi-year budget is the first step in the long term capital plan which will guide decision making to ensure strategic reinvestments are being made, at the right time, that infrastructure deficit in being addressed, fiscal responsibility is being maintained, while ensuring the City continues to invest in assets to encourage growth.

SERVICE AND FINANCIAL OUTCOMES

The City's share of the 2020 and 2021 Proposed Draft General Fund Capital budget will be funded from capital from operating with the balanced being borrowed. The projects chosen for the capital program borrowing have a useful life of approximately 15 years or more.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

Input has been received from all Service Areas, the ABCs, and Senior Leadership Team.

ATTACHMENTS

CATEGORY	DEPARTMENT	DESCRIPTION	BUDGET - OTHER SHARE	BUDGET - CITY SHARE
Parks & Public Spaces	Transportation & Environment Services	Market Place Playground - Safety Surface Replacement		\$ 325,000.00
Storm	Transportation & Environment Services	Millidgeville - Storm separation and elimination of inflow and infiltration to reduce or eliminate sewer overflows - Gas Tax Funding	\$ 1,000,000.00	
Storm	Transportation & Environment Services	Shamrock Park Sewer Renewal - Gas Tax Funding	\$ 1,000,000.00	
Storm	Transportation & Environment Services	Waterloo Street - (W&S) - Haymarket Square to Castle Street - Sewer Separation (Subject to Bilateral Funding)	\$ 350,400.00	\$ 129,600.00
Storm	Transportation & Environment Services	St. James Street - (W&S) - Prince William Street to Germain Street - Sewer Separation (Subject to Bilateral Funding)	\$ 69,350.00	\$ 25,650.00
Storm	Transportation & Environment Services	Wentworth Street - (W&S) - Elliot Row to King Street East Intersection- Sewer Separation (Subject to Bilateral Funding)	\$ 69,350.00	\$ 25,650.00
Storm	Transportation & Environment Services	Princess Street - (W&S) - Wentworth Street to Crown Street - Sewer Separation (Subject to Bilateral Funding)	\$ 156,950.00	\$ 58,050.00
Storm	Transportation & Environment Services	Germain Street- (W&S) - St. James Street to Lower Cove Loop - Sewer Separation (Subject to Bilateral Funding)	\$ 109,500.00	\$ 40,500.00
Storm	Transportation & Environment Services	Stanley Street- (W&S) - Stanley Street to end - Sewer Separation - Gas Tax Funding	\$ 100,000.00	

CATEGORY	DEPARTMENT	DESCRIPTION	BUDGET - OTHER SHARE	BUDGET - CITY SHARE
Storm	Transportation & Environment Services	Broadview Ave (W&S) - Charlotte Street to Carmarthen Street - Sewer Separation (Subject to Bilateral Funding)	\$ 193,450.00	\$ 71,550.00
Transportation	Transportation & Environment Services	Asphalt Roadway Resurfacing, Curb & Sidewalk Renewal Annual Program - Gas Tax Funding	\$ 1,500,000.00	\$ 2,450,000.00
Transportation	Transportation & Environment Services	Engineering Investigations and Design		\$ 300,000.00
Transportation	Transportation & Environment Services	Waterloo Street - (W&S) - Haymarket Square to Castle Street - Street Reconstruction (Subject to Bilateral Funding)	\$ 591,300.00	\$ 218,700.00
Transportation	Transportation & Environment Services	St. James Street - (W&S) - Prince William Street to Germain Street - Street Reconstruction (Subject to Bilateral Funding)	\$ 153,300.00	\$ 56,700.00
Transportation	Transportation & Environment Services	Wentworth Street - (W&S) - Elliot Row to King Street East Intersection- Street Reconstruction (Subject to Bilateral Funding)	\$ 131,400.00	\$ 48,600.00
Transportation	Transportation & Environment Services	Princess Street - (W&S) - Wentworth Street to Crown Street - Street Reconstruction (Subject to Bilateral Funding)	\$ 346,750.00	\$ 128,250.00
Transportation	Transportation & Environment Services	Germain Street- (W&S) - St. James Street to Lower Cove Loop - Street Reconstruction (Subject to Bilateral Funding)	\$ 124,100.00	\$ 45,900.00
Transportation	Transportation & Environment Services	Stanley Street- (W&S) - Stanley Street to end - Street Reconstruction - Gas Tax Funding	\$ 200,000.00	

CATEGORY	DEPARTMENT	DESCRIPTION	BUDGET - OTHER SHARE	BUDGET - CITY SHARE
Transportation	Transportation & Environment Services	Broadview Ave (W&S) - Charlotte Street to Carmarthen Street -Street Reconstruction (Subject to Bilateral Funding)	\$ 346,750.00	\$ 128,250.00
Transportation	Transportation & Environment Services	Courtney Bay Causeway - Replace Guide Rails		\$ 300,000.00
Fundy Quay	Growth and Development	Fundy Quay - Seawall Refurbishment - Funding DMAF	\$ 1,635,000.00	\$ 2,452,500.00
Saint John City Market	Asset and Energy Management	Saint John City Market Roof Upper and Lower		\$ 700,000.00
Municipal Buildings	Asset and Energy Management	Market Slip Sea Wall Protection Coating		\$ 150,000.00
Municipal Buildings	Asset and Energy Management	Energy Efficiency Measures		\$ 80,000.00
Carleton Community Centre	Transportation & Environment Services	Carleton Community Centre - Exterior Work		\$ 175,000.00
Lord Beaverbrook	Transportation & Environment Services	Ice Plant - Replace Compressor		\$ 75,000.00
Peter Murray Arena	Transportation & Environment Services	Chiller Replacement		\$ 100,000.00
Harbour Station	Regional Facilities	Replace Truck		\$ 25,000.00
Harbour Station	Regional Facilities	Replace Zamboni		\$ 115,000.00
Harbour Station	Regional Facilities	Heat Pump Replacement		\$ 60,000.00
Canada Games Aquatic Centre	Regional Facilities	Exterior Windows Upgrade (Phase 1)		\$ 250,000.00

CATEGORY	DEPARTMENT	DESCRIPTION	BU	DGET - OTHER SHARE	В	UDGET - CITY SHARE
Canada Games Aquatic Centre	Regional Facilities	Fire Panel Replacement, Pump shut off valves replacement, energy efficiency			\$	50,000.00
Canada Games Aquatic Centre	Regional Facilities	Exterior Wall Repairs			\$	100,000.00
Trade and Convention Centre	Regional Facilities	LED Lighting in Various Areas			\$	25,000.00
Trade and Convention Centre	Regional Facilities	Replace Various Kitchen Equipment - Convection Ovens, Hot Boxes			\$	76,000.00
Trade and Convention Centre	Regional Facilities	Update POS systems - current system out of service			\$	30,000.00
Trade and Convention Centre	Regional Facilities	Security Cameras			\$	5,000.00
Fleet	Finance and Administration Services	Fleet Replacement Program	\$	2,065,000.00		
Saint John Parking	Transportation & Environment Services	Replacement of 17 Parking Meters			\$	113,000.00
Information Technology	Corporate Services	IT Infrastructure Replacement/Upgrades/ERP System	\$	835,000.00	\$	1,500,000.00
Saint John Transit	Transportation & Environment Services	Multiple Bus Shelters (Waterloo, Mystery Lake, Mountainview, Duke St. West, Anglin Dr, Boars Head Road			\$	40,000.00
2020 Capital Asset Replacement			\$	10,977,600	\$	10,473,900
Exhibition Field House Year 3 of 3 year					\$	564,400.00
2020 New Capital Investment \$ -			\$	564,400.00		

CATEGORY	DEPARTMENT	DESCRIPTION BUDGET - OTHI SHARE		BUDGET - CITY SHARE
	Total 2020 General	Fund Capital Budget	\$ 10,977,600	\$ 11,038,300

CATEGORY	DEPARTMENT	DESCRIPTION	BUDGET - OTHER SHARE	BUDGET - CITY SHARE
Parks & Public Spaces	Transportation & Environment Services	Shamrock Score Clock/Field Work & Memorial Score Clock Replacement		\$ 150,000.00
Storm	Transportation & Environment Services	Garden Street - (W&S) - Coburg Street to City Road - Sewer Separation (Subject to Bilateral Funding)	\$ 175,200.00	\$ 64,800.00
Storm	Transportation & Environment Services	Charlotte Street - (W&S) - St. James Street to Lover Cove Loop - Sewer Separation (Subject to Bilateral Funding)	\$ 277,400.00	\$ 102,600.00
Storm	Transportation & Environment Services	St. James Street - (W&S) - Germain Street to Sydney Street - Sewer Separation (Subject to Bilateral Funding)	\$ 109,500.00	\$ 40,500.00
Storm	Transportation & Environment Services	Mecklenburg Street - (W&S) - Wentworth Street to Crown Street - Sewer Separation (Subject to Bilateral Funding)	\$ 229,950.00	\$ 85,050.00
Storm	Transportation & Environment Services	Peters Street - (W&S) - Waterloo Street to Coburg Street - Sewer Separation (Subject to Bilateral Funding)	\$ 131,400.00	\$ 48,600.00
Storm	Transportation & Environment Services	Rodney Street - (W&S) - Market Place to Watson Street - Sewer Separation		\$ 340,000.00
Storm	Transportation & Environment Services	Pitt Street - (W&S) - St. James Street to Broad Street - Sewer Separation (Subject to Bilateral Funding)	\$ 94,900.00	\$ 35,100.00
Storm	Transportation & Environment Services	Brittain Street - (W&S) - Pitt Street to Wentworth Street- Sewer Separation (Subject to Bilateral Funding)	\$ 91,250.00	\$ 33,750.00

CATEGORY	DEPARTMENT	DESCRIPTION	BUDGET - OTHER SHARE	BUDGET - CITY SHARE
Transportation	Transportation & Environment Services	Asphalt Roadway Resurfacing, Curb & Sidewalk Renewal Annual Program - Gas Tax Funding	\$ 1,500,000.00	\$ 2,450,000.00
Transportation	Transportation & Environment Services	Engineering Investigations and Design		\$ 300,000.00
Transportation	Transportation & Environment Services	Garden Street - (W&S) - Coburg Street to City Road - Street Reconstruction (Subject to Bilateral Funding)	\$ 317,550.00	\$ 117,450.00
Transportation	Transportation & Environment Services	Charlotte Street - (W&S) - St. James Street to Lover Cove Loop - Street Reconstruction (Subject to Bilateral Funding)	\$ 204,400.00	\$ 75,600.00
Transportation	Transportation & Environment Services	St. James Street - (W&S) - Germain Street to Sydney Street - Street Reconstruction (Subject to Bilateral Funding)	\$ 357,700.00	\$ 132,300.00
Transportation	Transportation & Environment Services	Mecklenburg Street - (W&S) - Wentworth Street to Crown Street - Street Reconstruction (Subject to Bilateral Funding)	\$ 335,800.00	\$ 124,200.00
Transportation	Transportation & Environment Services	Peters Street - (W&S) - Waterloo Street to Coburg Street - Street Reconstruction (Subject to Bilateral Funding)	\$ 292,000.00	\$ 108,000.00
Transportation	Transportation & Environment Services	Pitt Street - (W&S) - St. James Street to Broad Street - Street Reconstruction (Subject to Bilateral Funding)	\$ 197,100.00	\$ 72,900.00
Transportation	Transportation & Environment Services	Brittain Street - (W&S) - Pitt Street to Wentworth Street- Street Reconstruction (Subject to Bilateral Funding)	\$ 182,500.00	\$ 67,500.00

CATEGORY	DEPARTMENT	DESCRIPTION	BUDGET - OTHER SHARE	BUDGET - CITY SHARE
Transportation	Transportation & Environment Services	Rodney Street - (W&S) - Market Place to Watson Street - Sewer Separation		\$ 550,000.00
Transportation	Transportation & Environment Services	Charlotte Street - Trinity Church to Princess Street - Street Reconstruction. Saint John Energy to provide additional services for approximately \$220,000 to move overhead high voltage lines to underground		\$ 360,000.00
Municipal Buildings	Asset and Energy Management	Fundy Quay - Seawall Refurbishment - Funding DMAF	\$ 1,635,000.00	\$ 2,452,500.00
Municipal Buildings	Asset and Energy Management	Energy Efficiency Measures		\$ 80,000.00
Municipal Buildings	Asset and Energy Management	City Market Pedway HVAC Upgrade		\$ 30,000.00
Municipal Buildings	Asset and Energy Management	Firestations # 5,7,8 - Roof Replacement		\$ 200,000.00
Municipal Buildings	Asset and Energy Management	St. Patrick Street Pedway - Roof Replacement		\$ 30,000.00
Carleton Community Centre	Transportation & Environment Services	Foundation - Water proofing		\$ 150,000.00
Charles Gorman Arena	Transportation & Environment Services	Chiller Replacement		\$ 100,000.00
Lord Beaverbrook	Transportation & Environment Services	Main Electrical Service Upgrade		\$ 100,000.00
Harbour Station	Regional Facilities	Heat Pump Replacement		\$ 50,000.00
Canada Games Aquatic Centre	Regional Facilities	Exterior Window Replacement Phase 2		\$ 300,000.00

CATEGORY	DEPARTMENT	DESCRIPTION	BU	DGET - OTHER SHARE	Е	BUDGET - CITY SHARE
Trade and Convention Centre	Regional Facilities	Replace Equipment (Banquet Equipment & Tables, Walkin Fridge)			\$	80,000.00
Trade and Convention Centre	Regional Facilities	Replace Flooring and Staging Equipment			\$	30,000.00
Trade and Convention Centre	Regional Facilities	Security Upgrades			\$	15,000.00
Fleet	Finance and Administration Services	Fleet Replacement	\$	2,065,000.00		
Information Technology	Corporate Services	IT Infrastructure Replacement/Upgrades/ERP System	\$	835,000.00	\$	1,500,000.00
Saint John Parking	Transportation & Environment Services	Replacement of 17 Parking Meters			\$	113,000.00
Saint John Transit	Saint John Transit Transportation & Environment Services Bus Shelter - Market Square				\$	10,000.00
	Total 2021 General	Fund Capital Budget	\$	9,031,650	\$	10,498,850
Harbour Station	Harbour Station Regional Facilities Dasher Board and Glass System Upgrade				\$	450,000.00
2021 New Capital Investment			\$	-	\$	450,000.00
	Total 2021 General Fund Capital Budget \$ 9,031,650			9,031,650	\$	10,948,850



FINANCE COMMITTEE REPORT

Report Date	May 24, 2019
Meeting Date	May 29, 2019

Chairman Councillor Merrithew and Members of Finance Committee

SUBJECT: 2020 -2021 Proposed Draft Utility Fund Capital Budget

OPEN OR CLOSED SESSION

This matter is to be discussed in open session of Finance Committee.

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	, ,
Craig Lavigne	Brent McGovern	John Collin

RECOMMENDATION

It is recommended that Finance Committee reflect upon the attached document and make any and all inquiries and recommendations to staff; and receive and file this report.

EXECUTIVE SUMMARY

The Utility is proposing a very limited multi-year capital budget for 2020 - 2021 that focuses on leveraging monies from other levels of government for investments being made by the Utility. Debt associated with the Safe, Clean Drinking Water Project (SCDWP) and Harbour Clean-up, limited growth, a large infrastructure deficit and rates that have increased are challenges facing the Utility for both the medium and long term. A new rate structure to be completed in 2019, along with the Long Term Financial plan to be completed in 2019 will provide the road map for the Utility to deal with these challenges.

PREVIOUS RESOLUTION

N/A

STRATEGIC ALIGNMENT

The proposed 2020 - 2021 Utility Fund Capital Budget is aligned with Councils' priorities, Asset Management Plan, Capital Budget Policy the Central Peninsula Neighbourhood Plan and in addition the budget prepares the Utility for challenges associated with climate change.

REPORT

The proposed 2020 - 2021 (2 year) Draft Utility Capital Budget is a total of \$26,215,000. Funding from other sources, (Gas tax and other government funding) is \$15,931,500 over two years and Saint John Water's share is \$10,283,450 over two years and will be funded from pay as you go (no borrowing).

The completion of the Safe, Clean Drinking Water Project and Harbour Clean-up has caused the Utility's long term debt to peak at just over \$107 million at the end of 2017 (2018 - \$101 million). The Utility will continue to focus on debt reduction and in order to achieve this the Utility will not borrow any money for its 2020 or 2021 capital program, focusing instead on stretching every ratepayer dollar invested by seeking funding support from others for essentially all projects.

This significant debt coupled with escalated rates and stagnant growth will be challenging for the Utility as it tackles the infrastructure deficit. The deficit as reported to Council as part of the State of the Infrastructure report is approximately \$313.6M which represents over 75% of the City's infrastructure deficit.

The Utility received funding recently as part of the Federal Government's Disaster Mitigation Adaptation Fund (DMAF) and National Disaster Mitigation Program (NDMP). The Utility will spend approximately \$10.2 million over the next 5-6 years raising and rebuilding critical infrastructure that was prone to flooding. The cost will now be spilt \$4.084M Federal Share and \$6.126M utility share.

The completion of the rate study in 2019, along with the Asset Management Plan and Long Term Financial plan will guide the Utility's decision making around asset replacement and how to fund the infrastructure deficit to ensure services are reliably provided to rate payers while balancing the ability to fund more investments in infrastructure renewal.

<u>Infrastructure Renewal – Water and Sanitary</u>

The proposed budget focuses on assets that are well past their useful life, subject to risk of failure and in some cases extreme risk of failure with severe consequences such as the One Mile Life Station.

There are several proposed street rebuild projects that are included in the budget and most of these projects involve the general fund. These projects have assets underground and are at a high risk of failure due to their age and material type. Numerous streets within the draft program have terra cotta sanitary

sewers, much of which were installed between 1876 and 1895 and cast iron watermain installed in the early 1900s.

The total capital for the Utility on street rebuilds is approximately \$7.8 million over two years and some of these street sections include; Wentworth Street, Germain Street, Lower Cove Loop, Waterloo Street, Celebration Street, Princess Street, Peters Street, Brittain Street, Pitt Street, Rodney Street and St. James Street. These street reconstructions are located in the primary development area (PDA).

St. James Street, Germain Street and Charlotte Street are prime examples of leveraging assets that need to be replaced and aligning with the City's priority of growth. St. James Street for example was listed on the Central Peninsula Neighborhood Plan as key corridor and this transformational project will be coordinated between; Transportation, Water, Growth and Community Development and Develop SJ.

Additional projects that benefit both the Utility and supports the growth and development of Saint John are the Lakewood Heights and Millidgeville Sanitary Systems projects. These projects are geared towards asset improvements to allow for more growth and development while maximizing the use of existing infrastructure and lowering costs for all. These projects create capacity on the system for growth initiatives without having to build new infrastructure – a best use of assets.

The budget also includes phase seventeen and eighteen of watermain cleaning and lining that will continue to extend the life of these assets and improve water quality for citizens serviced by them while minimizing the need for investment by lining as opposed to replacing. There is also structural lining of sewers in both years and this will also extend the life of these assets.

There is a major investment being made at the One Mile Lift Station in 2020. The existing lift station is at the end of its life and needs to ensure there is reliability around the collection of wastewater.

There are two other wastewater lift stations at Greenhead Road and Beach Crescent that not only need to be rebuilt, these stations will also be raised to ensure they can withstand future flood events and these projects have received funding under the DMAF program.

The other major project under the DMAF program in this multi-year budget is the complete upgrade and reconstruction of the Musquash Water Pump Station. This asset will also be rebuilt to ensure flood proofing.

The budget also includes a fleet replacement program for any vehicles and equipment past its useful life or with extraordinary operating costs. In previous

years the Utility funded its fleet reserve directly to the General fund fleet reserve and all vehicles and equipment were funded from that reserve. These reserves have now been separated to ensure each entity is properly segregating its reserves.

The budget only includes one new asset which is a wastewater pumping station at Prospect Street West and this is to ensure all residential wastewater is properly being directed for treatment at the Lancaster Lagoon treatment plant.

Conclusion

The 2020-2021 budgets are focused on leveraging as much additional funding the Utility can secure with its smaller capital from operating program. Projects identified are long past their useful life and have a high risk of failure. There are several projects that are asset renewal that are being done to replace or extend the life of the asset but also have a positive impact on growth.

The 2020 - 2021 Draft Utility Capital budget will continue to focus on ensuring assets can provide reliable services to all customers, meet environmental regulations and mitigate against future climate change events.

SERVICE AND FINANCIAL OUTCOMES

The 2020 - 2021 Utility Fund Capital budget will be funded from the operations (pay as you go) and from other sources of funding with no new borrowing proposed.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

Input and coordination was received from Engineering, Senior Leadership Team, Growth and Community Development, Finance, Transportation and Environment and Develop SJ.

ATTACHMENTS

Exhibit 1 - 2020 - 2021 Proposed Draft Utility Capital Budget

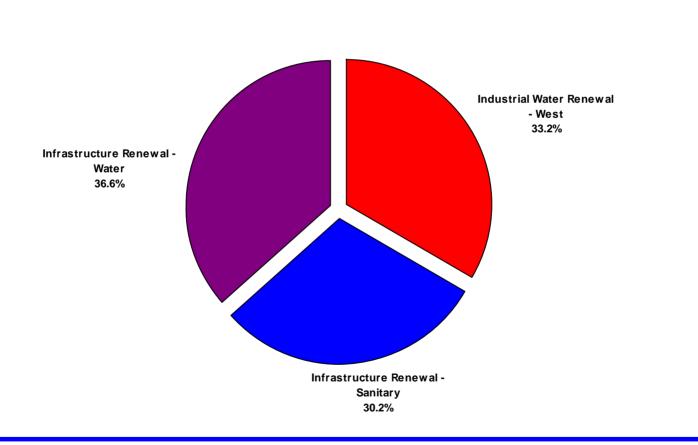


THE CITY OF SAINT JOHN SAINT JOHN WATER CAPITAL PROGRAM SUMMARY W & S UTILITY FUND

Proposed Program Summary For - 2020

Category	No. of Projects	Other Share	Utility Share	Total	
Industrial Water Renewal - West	1	\$1,020,000	\$1,700,000	\$2,720,000	
Infrastructure Renewal - Sanitary	13	\$6,938,450	\$1,546,550	\$8,485,000	
Infrastructure Renewal - Water	13	\$2,551,200	\$1,873,800	\$4,425,000	
TOTALS:	27	\$10,509,650	\$5,120,350	\$15,630,000	





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23-May-19

2020

MDH: MUNICIPAL DESIGNATED HIGHWAYS
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w&s: WATER AND SEWER RELATED PROJECTS
G&D: PROJECT IS FOR GROWTH AND DEVELOPMENT
*: PROJECTS DEPENDANT ON FUNDING FROM OTHERS

This is a tentative program listing of proposed capital projects. This list has not been approved by Common Council. Priority assignments are subject to change at any time.

Industrial Water Renewal - West

Project	Location	Description	Other Share	Utility Share
* Musquash Water Pump Station	Musquash	Upgrade/reconstruction - appropriate pump sizing, electrical upgrades, flood proofing, etc. Including design and construction management services. Phase A. Project to be partially funded under DMAF.	1,020,000	1,700,000

TOTAL: \$1,020,000 \$1,700,000



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Infrastructure Renewal - Sanitary

Project	Location	Description	Other Share	Utility Share
G&D* Germain Street	St. James Street to Lower Cove Loop	Renew 100 m of 375 mm T.C sanitary sewer (with an in service year of 1884), including design and construction management services. Subject to successful funding under Bilateral Funding.	105,850	39,150
G&D* Lower Cove Loop	Charlotte Street to Germain Street	Install 150 m of 525 mm sanitary sewer, including design and construction management services. Subject to successful funding under Bilateral Funding.	248,200	91,800
* One Mile Lift Station	Rothesay Avenue at Russell Street	New pumping station, new screening channel structure and associated building to replace the existing pumping station that is at the end of asset life to provide for relible collection of wastewater, including design and construction management services. Project to be funded under the G.T.F.	5,000,000	0
Structural lining	Various Locations	Structurally line and point repairs to sanitary sewers, including design and construction management services.	0	225,000
* WWPS Lift Station C	515 Green Head Road	Reconstruct lift station above flood level to provide for reliable collection of wastewater, including design and construction management services Project to be partially funded under DMAF.	200,000	300,000
* Douglas Avenue	Civic 399 to 425	Install approx. 150m of 200mm and 27m of 150mm sanitary sewer, including land, design, and construction management services. Project to be partially funded under G.T.F.	300,000	25,000
Wastewater Pumping	Prospect Street West at Walnut Street	Pumping station, land acquisition, and required piping to direct flows to sewer on Main Street West for treatment at the Lancaster Lagoon, including construction management services.	0	520,000
* Wentworth Street	Elliott Row through King Street East Intersection	Renew 90 m of 300 mm T.C. sanitary sewer (Condition Grade of 4 with a year in service of 1867), including construction management services. Subject to successful funding under Bilateral Funding.	83,950	31,050
* Waterloo Street	Haymarket Square to Castle Street	Renew approx. 330m of 300mm and 375mm T.C.sanitary sewer (Condition Grade of 5 with a in service year of 1869), including design and construction management services. Subject to successful funding under Bilateral Funding.	299,300	110,700



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Infrastructure Renewal - Sanitary

Project	Location	Description	Other Share	Utility Share
* St. James Street	Prince William Street to Germain Street	Renew 111 m of 250mm and 375 mm T.C. sanitary sewer (Condition Grade of 3.5 with an in service year of 1876), including design and construction management services. Subject to successful funding under Bilateral funding.	94,900	35,100
* Celebration Street	Stanley Street to end	Renew 100 m of 375mm and 450mm T.C. sanitary sewer, including design and construction management services. Project to be funded under the G.T.F.	150,000	
* Broadview Avenue	Charlotte Street to Carmarthen Street	Renew 275 m of 375 mm T.C. sanitary sewer (Condition Grade of 4), including design and construction management services. Subject to successful funding under Bilateral Funding.	237,250	87,750
* Princess Street	Wentworth Street to Crown Street	Renew approx. 250m of 225mm and 300mm T.C. sanitary sewer (Condition Grade of 5 with an in service year of 1893), with new 200mm and 300mm sanitary sewer, including design and construction management services. Subject to successful funding under Bilateral Funding.	219,000	81,000

TOTAL: \$6,938,450 \$1,546,550



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Infrastructure Renewal - Water

Project	Location	Description	Other Share	Utility Share
* Fleet Replacement	Various locations	Fleet Replacement for Saint John Water. Project to be funded under Fleet Reserve.	485,000	0
G&D * Germain Street	St. James Street to Lower Cove Loop	Renew 100 m of 200 mm C.I. watermain (1955), including design and construction management services. Subject to successful funding under Bilateral Funding.	87,600	32,400
G&D * Lower Cove Loop	Charlotte Street to Germain Street	Install 150 m of 200 mm watermain, including design and construction management services. Subject to successful funding under Bilateral Funding.	131,400	48,600
Removal of cross- connections on Potable Water and Raw Water Transmission mains	Ocean Westwest / Route 7 Overpass	Removal of two cross- connections on Potable Water and Raw Water Transmission mains , including construction management services.	0	150,000
Engineering Investigations and Design	Various locations	Funding for engineering investigations and design for various projects under the Water and Sanitary categories.	0	250,000
* Wentworth Street	Elliott Row through King Street East Intersection	Renew 90 m of 300 mm C.I. watermain (1931), including construction management services. Subject to successful funding under Bilateral Funding.	124,100	45,900
* Waterloo Street	Haymarket Square to Castle Street	Renew approx. 330m of 300mm C.I. watermain (1856), including design and construction management services. Subject to successful funding under Bilateral Funding.	434,350	160,650
* St. James Street	Prince William Street to Germain Street	Renew 110 m of 250 mm C.I. watermain (1876), including design and construction management services. Subject to successful funding under Bilateral funding.	120,450	44,550
Hayes Avenue Area	Civic #289 Gault Road to Civic #484 Gault Road	Install approx. 530m of 200mm watermain on Gault Road as well as a PRV to connect the Hayes Avenue system, including construction management services.	0	950,000
* Celebration Street	Stanley Street to end	Renew 100 m of 300mm C.I. watermain, including design and construction management services. Project to be funded under the G.T.F.	150,000	
* Broadview Avenue	Charlotte Street to Carmarthen Street	Renew 275 m of 150 mm C.I. watermain (1917), including design and construction management services. Subject to successful funding under Bilateral Funding.	219,000	81,000



23-May-19

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This is a tentative program listing of proposed capital projects. This list has not been approved by Common Council. Priority assignments are subject to change at any time.

Infrastructure Renewal - Water

Project	Location	Description	Other Share	Utility Share
* Princess Street	Wentworth Street to Crown Street	Renew approx. 275m of 250mm C.I. (1924) watermain, including design and construction management services. Subject to successful funding under Bilateral Funding.	299,300	110,700
* Watermain Cleaning and Lining Phase 17	Various locations	Cleaning and lining of existing unlined C.I. watermains to improve pressure, water quality, and fire flows. Project to be funded under G.T.F.	500,000	0

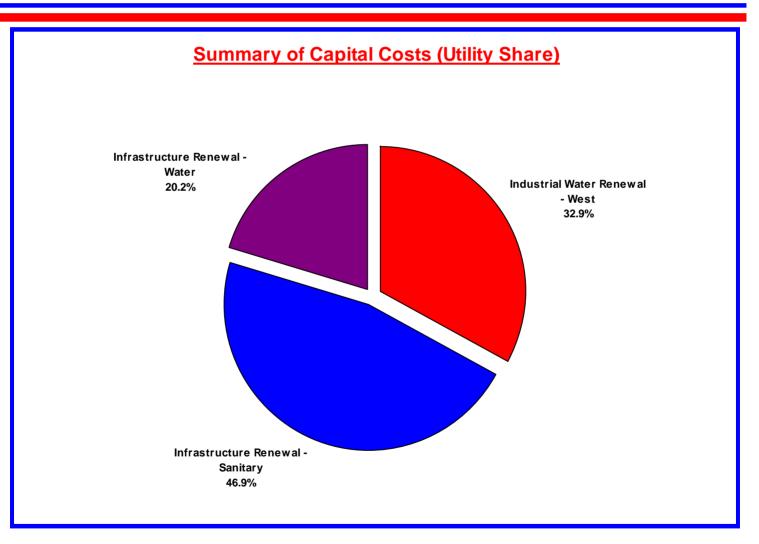
TOTAL: \$2,551,200 \$1,873,800



THE CITY OF SAINT JOHN SAINT JOHN WATER CAPITAL PROGRAM SUMMARY W & S UTILITY FUND

Proposed Program Summary For - 2021

Category	No. of Projects	Other Share	Utility Share	Total
Industrial Water Renewal - West	1	\$1,020,000	\$1,700,000	\$2,720,000
Infrastructure Renewal - Sanitary	13	\$2,347,450	\$2,422,550	\$4,770,000
Infrastructure Renewal - Water	11	\$2,054,450	\$1,040,550	\$3,095,000
TOTALS:	25	\$5,421,900	\$5,163,100	\$10,585,000





23-May-19

2021

MDH: MUNICIPAL DESIGNATED HIGHWAYS
PDH: PROVINCIALLY DESIGNATED HIGHWAYS
RDH: REGIONALLY DESIGNATED HIGHWAYS
w&s: WATER AND SEWER RELATED PROJECTS
G&D: PROJECT IS FOR GROWTH AND DEVELOPMENT
*: PROJECTS DEPENDANT ON FUNDING FROM OTHERS

This is a tentative program listing of proposed capital projects. This list has not been approved by Common Council. Priority assignments are subject to change at any time.

Industrial Water Renewal - West

Project	Location	Description	Other Share	Utility Share
* Musquash Water Pump Station	Musquash	Upgrade/reconstruction - appropriate pump sizing, electrical upgrades, flood proofing, etc. Including design and construction management services. Phase B. Project to be partially funded under DMAF.	1,020,000	1,700,000

TOTAL: \$1,020,000 \$1,700,000



23-May-19

2021

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Infrastructure Renewal - Sanitary

Project Location Description		Description	Other Share	
G&D * Charlotte Street	* Charlotte Street St. James Street to Lower Cove Loop Renew 155 m of 525 mm Concrete sanitary sewer (With an in service year of 1965), including design and construction management services. Subject to successful funding under Bilateral Funding.		171,550	63,450
* Garden Street	Street Coburg Street to City Road Renew approx. 101m of 300mm, and 86m of 375mm T.C. sanitary sewers (Condition Grade of 3), including design and construction management services. Subject to successful funding under Bilateral Funding.		156,950	58,050
G&D Lakewood Heights Sanitary System	East of Hickey Road Pumping Station	Line concrete sewers to eliminate Inflow/Infiltration in the Sanitary sewer system, including construction management services.	0	720,000
Rodney Street	Market Place to Watson Street	Renewal of approx.290m of T.C., Brick, and Concrete saintary sewer (Condition Grade of 3), including design and construction management services.	0	410,000
Structural lining	Various Locations	Structurally line and point repairs to sanitary sewers, including design and construction management services.	0	225,000
* WWPS Beach Crescent	11 Beach Crescent	Reconstruct lift station above flood level to provide for reliable collection of wastewater, including design and construction management services, Phase A. Project to be partially funded under DMAF.	340,000	510,000
* Pitt Street	St. James Street to Broad Street	Renew 155m of 370mm T.C. sanitary sewer (Condition Grade of 4), including design and construction management services. Subject to successful funding under Bilateral Funding.	127,750	47,250
* Mecklenburg Street	Wentworth Street to Crown Street	Renew approx. 265m of 600mm concrete with new 600mm sanitary sewer (Condition Grade of 2.5), including design and construction management services. Subject to successful funding under Bilateral Funding.	248,200	91,800
* Combined Sewer Separation Reduction Strategy - South / Central	South / Central	A strategy prioritizing the separation of combined sanitary and storm sewers for the Southend and giving an estimate for budget purposes. One of the deliverables would be maps showing all existing sewers (storm, sanitary and combined) with proposed new sewers for separation. Subject to successful funding under Bilateral Funding	365,000	135,000



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This is a tentative program listing of proposed capital projects. This list has not been approved by Common Council. Priority assignments are subject to change at any time.

Infrastructure Renewal - Sanitary

Project	Location	Description	Other Share	Utility Share
* St. James Street	Germain Street to Sydney Street	Renew 195 m of 300mm and 375 mm T.C. sanitary sewer (Condition Grade of 4 with an in service year of 1878), including design and construction management services. Subject to successful funding under Bilateral funding.	164,250	60,750
G&D* Retail Drive Area	Rockwood Avenue to Gull Street	Renew 275 m of 450mm sanitary sewer, including design and construction management services. Project to be funded under the G.T.F.	500,000	
* Britain Street	Pitt Street to Wentworth Street	Renew 145 m of 300 mm T.C sanitary sewer (Condition Grade of 4 with a year in service of 1875), including design and construction management services. Subject to successful funding under Bilateral Funding.	116,800	43,200
* Peters Street	Waterloo Street to Coburg Street	Renew approx. 190m of 300mm, and 375mm T.C. sanitary sewers (Condition Grade of 2.5 with an in service year of 1889), including design and construction management services. Subject to successful funding under Bilateral Funding.	156,950	58,050

TOTAL: \$2,347,450 \$2,422,550



23-May-19

2021

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This is a tentative program listing of proposed capital projects. This list has not been approved by Common Council. Priority assignments are subject to change at any time.

Infrastructure Renewal - Water

Project	Location	Description	Other Share	Utility Share
G&D * Charlotte Street	St. James Street to Lower Cove Loop Renew 75 m of 200 mm C.I. watermain (1965), including design and construction management services. Subject to successful funding under Bilateral Funding.		69,350	25,650
* Fleet Replacement	Various locations	Fleet Replacement for Saint John Water. Project to be funded under Fleet Reserve.	485,000	0
* Garden Street	Coburg Street to City Road	Renew approx. 258m of 200mm C.I. watermain, including design and construction management services. Subject to successful funding under Bilateral Funding.	208,050	76,950
Rodney Street	Market Place to Watson Street	Renew approx. 295m of 300mm C.I. watermain, including design and construction management services.	0	345,000
Engineering Investigations and Design	Various locations	Funding for engineering investigations and design for various projects under the Water and Sanitary categories.	0	300,000
* Pitt Street	St. James Street to Broad Street	Renew 155m of 200 mm C.I. watermain with 200 mm watermain, including design and construction management services. Subject to successful funding under Bilateral Funding.	124,100	45,900
* Mecklenburg Street	Wentworth Street to Crown Street	Renew approx. 265m of 200mm C.I. watermain, including design and construction management services. Subject to successful funding under Bilateral Funding.	211,700	78,300
* St. James Street	Germain Street to Sydney Street	Renew 230 m of 200 mm C.I. watermain (1878), including design and construction management services. Subject to successful funding under Bilateral funding.	182,500	67,500
* Britain Street	Pitt Street to Wentworth Street	Renew 145 m of 200 mm C.I. watermain (1934), including design and construction management services. Subject to successful funding under Bilateral Funding.	116,800	43,200
* Peters Street	Waterloo Street to Coburg Street	Renew approx. 190m of 200mm watermain, including design and construction management services. Subject to successful funding under Bilateral Funding.	156,950	58,050
* Watermain Cleaning and Lining Phase 18	Various locations	Cleaning and lining of existing unlined C.I. watermains to improve pressure, water quality, and fire flows. Project to be funded under G.T.F.	500,000	0



23-May-19

2021

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*: PROJECTS DEPENDANT ON FUNDING FROM OTHERS

This is a tentative program listing of proposed capital projects. This list has not been approved by Common Council. Priority assignments are subject to change at any time.

Infrastructure Renewal - Water

Project Location	Location	Description	Other	Utility
	Location	Description	Share	Share

TOTAL: \$2,054,450 \$1,040,550

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COUNCIL REPORT

M&C No.	2019-129
Report Date	May 24, 2019
Meeting Date	June 03, 2019
Service Area	Finance and
	Administrative Services

His Worship Mayor Don Darling and Members of Common Council

SUBJECT: Greening Our Fleet Policy FAS-010

OPEN OR CLOSED SESSION

This matter is to be discussed in open session of Common Council.

AUTHORIZATION

Primary Author(s)	Commissioner/Dept. Head	Acting City Manager
Kevin Loughery	Kevin Fudge /	John Collin
	Ian Fogan	

RECOMMENDATION

Be it resolved that:

Finance Committee recommends that Common Council approve the attached City of Saint John Greening Our Fleet Policy Statement FAS-010;

EXECUTIVE SUMMARY

It is recommended that Common Council approve the Green Our Fleet Policy Statement for the City of Saint John.

"Whereas, the City of Saint John recognizes that unnecessary vehicle and motorized equipment idling and longhauling wastes fuel and generates needless harmful emissions, and

Whereas, the City of Saint John recognizes its responsibility to the public to implement fuel efficient practices, conserve natural resources, prevent air pollution, and improve environmental performance and be environmentally conscious;

The aim of this Policy is to reduce greenhouse gas emissions (GHGs), other air pollutants and fuel consumption resulting from the operation of fleet vehicles and motorized equipment, implement and promote energy conservation and awareness, improve environmental performance, and reduce maintenance requirements and fuel costs."

PREVIOUS RESOLUTION

Not applicable.

STRATEGIC ALIGNMENT

This report aligns with Council's Priority for Valued Service Delivery, specifically as it relates to investing in sustainable City services and municipal infrastructure.

SERVICE AND FINANCIAL OUTCOMES

The adoption of the Green Our Fleet Policy will reduce greenhouse gas emissions (GHGs), other air pollutants and fuel consumption resulting from the operation of fleet vehicles and motorized equipment, implement and promote energy conservation and awareness, improve environmental performance, and reduce maintenance requirements and fuel costs.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

Staff from Corporate Services, Finance and Administrative Services, Protective Services (Fire) and Saint John Water have reviewed this report and support the recommendations being put forth.

ATTACHMENTS

Greening Our Fleet Policy FAS-010 Greening Our Fleet Presentation



GREENING OUR FLEET

CITY OF SAINT JOHN POLICY STATEMENT

POLICY SECTION: FINANCE AND ADMINISTRATIVE SERVICES

POLICY STATEMENT

Whereas, the City of Saint John recognizes that unnecessary vehicle and motorized equipment idling and longhauling wastes fuel and generates needless harmful emissions, and

Whereas, the City of Saint John recognizes its responsibility to the public to implement fuel efficient practices, conserve natural resources, prevent air pollution, and improve environmental performance and be environmentally conscious;

The aim of this Policy is to reduce greenhouse gas emissions (GHGs), other air pollutants and fuel consumption resulting from the operation of fleet vehicles and motorized equipment, implement and promote energy conservation and awareness, improve environmental performance, and reduce maintenance requirements and fuel costs.



Title: Greening Our Fleet Policy

Subject: Fleet Management	Category: Policy		
Policy No.: FAS-010	M&C Report No.: 2019-129		
Effective Date: 2019-06-04	Next Review Date: (3 years) 2022-06-03		
Area(s) this policy applies to: Fleet Management	t Office Responsible for review of this Policy:		
and Operations	Administrative Services / Fleet Division		
Related Instruments:	Policy Sponsor: Commissioner Finance and		
Fleet Policy – FAS-009	Administrative Services		
	Document Pages: This document consists of 4		
	pages.		
Pavision History:			

Revision History:

Common Clerk's Annotation for Official Record

I certify that the —Insert Title-Policy Statement was adopted by resolution of Common Council on Month-Day-Year.

I certify that the –Insert Title -Policy was approved by the City Manager on Month-day-Year

Common Clerk Date

Contact: Telephone: Email:

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1. Policy Statement:

Whereas, the City of Saint John recognizes that unnecessary vehicle and motorized equipment idling and longhauling wastes fuel and generates needless harmful emissions, and

Whereas, the City of Saint John recognizes its responsibility to the public to implement fuel efficient practices, conserve natural resources, prevent air pollution, and improve environmental performance and be environmentally conscious;

The aim of this Policy is to reduce greenhouse gas emissions (GHGs), other air pollutants and fuel consumption resulting from the operation of fleet vehicles and motorized equipment, implement and promote energy conservation and awareness, improve environmental performance, and reduce maintenance requirements and fuel costs.

2. Scope:

This Policy applies to the entire fleet of vehicles and motorized equipment in use by The City, whether owned, rented or leased for use by employees of The City in the performance of their duties and the delivery of services.

3. Legislation and Standards:

The following City of Saint John Policy and / or Standard Operating Procedures are related to this Policy:

City of Saint John Fleet Policy
City of Saint John Safety Policy
City of Saint John Corporate GHG & Energy Action Plan
City of Saint John Asset Management Policy

4. Roles and Responsibilities:

1. Fleet Services

Administration of the "Greening Our Fleet" Policy shall be the direct responsibility of the Operations Manager of the Fleet Services Division of Finance and Administrative Services.

2. Service Areas

The day to day administration of this Policy shall rest with the supervisory and management staffs of all departments which operate vehicles and motorized equipment in the course of delivering services to the public or in support of other front line service areas.

3. Employees

Serve as asset stewards and shall adhere to applicable laws and regulations, as well as to Fleet Management and Safety Policies of The City, including the requirements of this "Greening our Fleet" Policy Document.

5. Monitor and Review:

This policy will be reviewed every 3 years, and as determined by the City Manager.

6. Implementation:

Fleet Services will work directly with Human Resources to:

Integrate the "Greening Our Fleet" Policy into the orientation of all new permanent or temporary employees, and to;

Communicate the "Greening Our Fleet" Policy to employees in general through the 5*22 Safety Management System, as well as through On Job Training (OJT) and Career Field Training Programs, and through established corporate networks, including SharePoint and InfoCenter.

7. Authorization:

This Policy shall be authorized by the City Manager pursuant to a resolution of Common Council approving the associated "Greening Our Fleet" Policy Statement.

8. Resources:

This Policy was developed with the advice and assistance of Corporate Services, Finance and Administrative Services, Protective Services (Fire), Saint John Water and consulted general fleet policies and best practices utilized by other municipalities across Canada, including but not limited to Vancouver, Calgary, Guelph, Halifax, Charlottetown, Fredericton and Moncton.

9. Procedures:

To ensure a consistent approach to the "Greening Our Fleet" Policy, all employees operating a City vehicle or motorized equipment must adhere to the following limitations:

- 1. Vehicles and motorized equipment shall never be left idling when unattended.
- 2. Engine warm-up periods will not exceed three (3) minutes (provided required airbrake pressure and/or other critical settings have been reached).
- 3. Vehicles and motorized equipment will be shut off whenever idling time is expected to exceed three (3) minutes.
- 4. Employees are to take the most direct safe route to their destination. Vehicles are not to be utilized for longhauling.

As with all Policies there will be some situations or conditions which are not conducive to the implementation of the above limitations. The following exceptions to this Policy have been identified and exist only under the following circumstances:

- 1. For vehicle and motorized equipment maintenance and diagnostic purposes;
- 2. During periods of extreme temperatures (below -10 and above 27 Celsius) or any other time when the health and safety of employees or others may be jeopardized;
- 3. If the vehicle or motorized equipment is not expected to be able to restart due to mechanical problem (this situation must be reported to Fleet Services immediately.);
- 4. Emergency response vehicles and motorized equipment while on the scene of an emergency or during training sessions;
- 5. Support vehicles and motorized equipment while on the scene of an emergency and while actively involved in a support function;
- 6. When the operation of vehicles and motorized equipment is required to power auxiliary equipment (e.g. hoist, lift platform, hydraulic tools, power inverters, electronic equipment, etc.).

Periodic audits, as often as required, of vehicle and motorized equipment use will be performed by both Fleet Services and/or Service Area supervisory and management staff to ensure adherence to the "Greening Our Fleet" Policy.

Employees may be subject to coaching and/or discipline for violations of this Policy Document.

The Greening our Fleet Policy provides essential support for forward-looking leadership strategy and responsible, community-centered Fleet Management practices in the 21st Century.

10. Glossary:

Fuel: any energy source, usually gasoline, diesel, propane or natural gas, consumed via the operation of a vehicle or motorized equipment.

Idling: the act of running an engine while a vehicle is stationary or motorized equipment while it is not performing work.

Motorized Equipment: any self-powered/person operated equipment used in support of municipal operations and services (i.e. lawn mowers, boat engines, bush cutters, etc.).

Longhauling (Excessive Travel): the act of taking a long or unnecessary detour en route to one's destination. Needless or preventable travel between two direct points.

Vehicle: any on-road or off-road, self-propelled vehicle that is required to be registered and have a license plate by the Department of Motor Vehicles, Province of New Brunswick.

11. Inquiries:

Inquiries regarding this Policy can be addressed to the City of Saint John's Fleet Services Division, Finance and Administrative Services.

12. Appendices:

None



"Greening Our Fleet" Policy

May 29th, 2019



Purpose

Fleet Background

Review "Greening Our Fleet" Policy

Policy Roll-Out

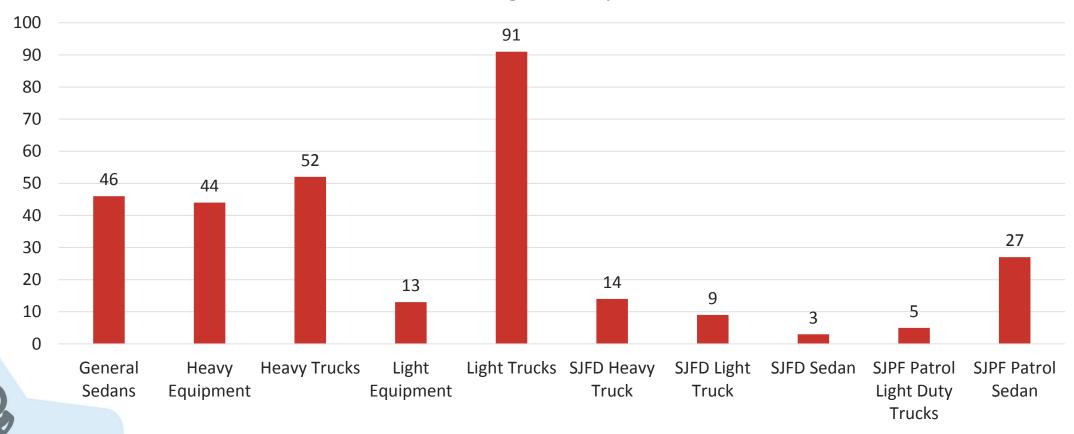
Implementation Samples Review





Fleet – Background

Licensed Rolling Stock By Class Code





Greening Our Fleet – Statement of Purpose

"Whereas, the City of Saint John recognizes that unnecessary vehicle and motorized equipment idling and longhauling wastes fuel and generates needless harmful emissions, and

Whereas, the City of Saint John recognizes its responsibility to the public to implement fuel efficient practices, conserve natural resources, prevent air pollution, and improve environmental performance and be environmentally conscious;

The aim of this Policy is to reduce greenhouse gas emissions (GHGs), other air pollutants and fuel consumption resulting from the operation of fleet vehicles and motorized equipment, implement and promote energy conservation and awareness, improve environmental performance, and reduce maintenance requirements and fuel costs."



Greening Our Fleet - Scope

This Policy applies to the entire fleet of vehicles and motorized equipment in use by The City, whether owned, rented or leased for use by employees of The City in the performance of their duties and the delivery of services.







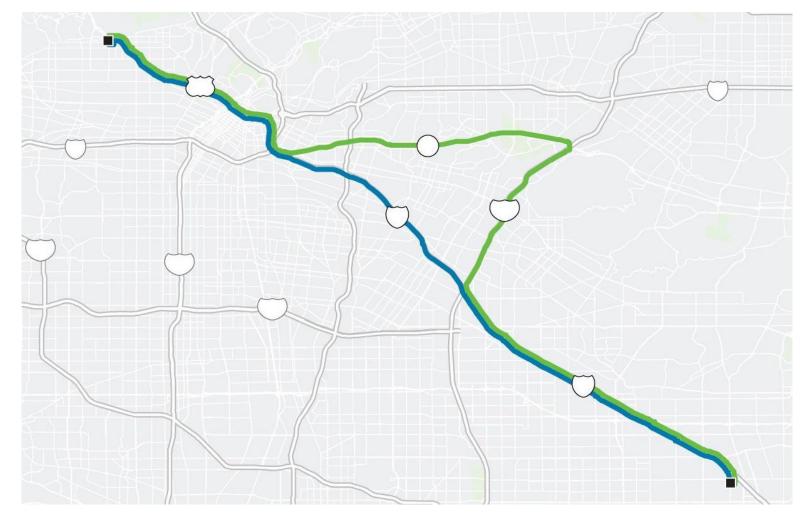
Greening Our Fleet - Limitations

- Shall never be left idling when unattended.
- Engine warm-up periods will not exceed three (3) minutes.
- Will be shut off whenever idling time is expected to exceed three (3) minutes.
- Employees are to take the most direct safe route to their destination. Vehicles are not to be utilized for longhauling.





Greening Our Fleet – Longhauling







Greening Our Fleet - Exceptions

- Equipment maintenance and diagnostic purposes;
- Extreme Weather Conditions (below -10 and above 27 Celsius) or for the health and safety of employees or others;
- Not expected to be able to restart due to mechanical problem;
- While on the scene of an emergency or during training sessions;
- While on the scene of an emergency and while actively involved in a support function;
- And when the operation is required to power auxiliary equipment.





Green Our Fleet - Monitoring

- This policy will be reviewed every 3 years, and as determined by the City Manager.
- Periodic audits, as often as required, of vehicle and motorized equipment use will be performed by both Fleet Services and/or Service Area supervisory and management staff to ensure adherence to the "Greening Our Fleet" Policy.

• The "Greening Our Fleet" Policy provides essential support for forward-looking leadership strategy and responsible, community-centered Fleet Management

practices in the 21st Century.



Greening Our Fleet – Glossary

- Fuel: means any fossil fuel, usually gasoline, diesel or propane, consumed on the operation of a vehicle or motorized equipment.
- Idling: means the engine is running while the vehicle is stationary or the piece of motorized equipment is not performing work.
- Motorized Equipment: means any self-powered/person operated equipment used in support of municipal operations and services (i.e. lawn mowers, boat engines, bush cutters, etc.).
- Longhauling: The act of taking a long or excessive detour enroute to one's destination.
- Vehicle: means any on-road or off-road, self-propelled vehicle that is required to be registered and have a license plate by the Department of Motor Vehicles, Province of New Brunswick.





Greening Our Fleet – Roles and Responsibilities

- Fleet Services
- Service Areas
- Employees
- Human Resources





Greening Our Fleet – Implementation

Fleet Services will work directly with Human Resources to:

- Integrate the "Greening Our Fleet" Policy into the orientation of all new permanent or temporary employees, and to;
- Communicate the "Greening Our Fleet" Policy to employees in general through the 5*22 Safety Management System, as well as through On Job Training (OJT) and Career Field Training Programs, and through established corporate networks, including SharePoint and InfoCenter.





Employee Roll Out – Logo Sample Option







Employee Roll Out – Implementation Sample Options









Recommendation

• City staff recommends Finance Committee refer the policy statement to Council for adoption.

Questions?



