



# AUDIT COMMITTEE AGENDA

---

Audit Committee Meeting  
**Tuesday, December 8, 2020**  
Tom Davies Square - Council Chamber / Electronic Participation

---

**COUNCILLOR DEB MCINTOSH, CHAIR**

---

**Mike Jakubo, Vice-Chair**

4:30 p.m. AUDIT COMMITTEE MEETING COUNCIL CHAMBER / ELECTRONIC PARTICIPATION

City of Greater Sudbury Council and Committee Meetings are accessible and are broadcast publically online and on television in real time and will also be saved for public viewing on the City's website at: <https://agendasonline.greatersudbury.ca>.

Please be advised that if you make a presentation, speak or appear at the meeting venue during a meeting, you, your comments and/or your presentation may be recorded and broadcast.

By submitting information, including print or electronic information, for presentation to City Council or Committee you are indicating that you have obtained the consent of persons whose personal information is included in the information to be disclosed to the public.

Your information is collected for the purpose of informed decision-making and transparency of City Council decision-making under various municipal statutes and by-laws and in accordance with the *Municipal Act, 2001, Planning Act, Municipal Freedom of Information and Protection of Privacy Act* and the City of Greater Sudbury's *Procedure By-law*.

For more information regarding accessibility, recording your personal information or live-streaming, please contact Clerk's Services by calling 3-1-1 or emailing [clerks@greatersudbury.ca](mailto:clerks@greatersudbury.ca).

## **ROLL CALL**

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

## **REGULAR AGENDA**

### **MANAGERS' REPORTS**

- R-1. Report dated November 25, 2020 from the Auditor General regarding Performance Audit of Compensation Management Processes. **4 - 18**  
**(RESOLUTION PREPARED)**  
(This report provides a recommendation regarding the compensation management processes and improvements for value for money in City operations.)
- R-2. Report dated November 24, 2020 from the Auditor General regarding Performance Audit of Wastewater Services Section. **19 - 30**  
**(RESOLUTION PREPARED)**  
(This report provides a recommendation regarding the performance audit of the Wastewater Services Section.)

### **MEMBERS' MOTION**

### **CORRESPONDENCE FOR INFORMATION ONLY**

- I-1. Audit Plans for 2021 and 2022  
**(FOR INFORMATION ONLY) (REPORT TO FOLLOW)**  
(This report provides information regarding the audit planning process and provides the audit plans for 2021 and 2022.)

### **ADDENDUM**

### **CIVIC PETITIONS**

### **QUESTION PERIOD**

## **ADJOURNMENT**

## Request for Decision

### Performance Audit of Compensation Management Processes

Presented To:	Audit Committee
Presented:	Tuesday, Dec 08, 2020
Report Date	Wednesday, Nov 25, 2020
Type:	Managers' Reports

### Resolution

THAT the City of Greater Sudbury approves the recommendations as outlined in the report entitled "Performance Audit of Compensation Management Processes", from the Auditor General, presented at the Audit Committee meeting on December 8, 2020.

Signed By

**Auditor General**

Ron Foster

Auditor General

*Digitally Signed Nov 25, 20*

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

This report supports the strategic goal of asset management and service excellence as well as the supporting initiative of demonstrating innovation and cost-effective service delivery.

### Report Summary

This audit recognizes the steps taken by staff to reduce overall compensation costs from their high of 51.8% of total expenses in 2012 and the recent development of a draft human capital management plan to strengthen CGS' ability to develop, attract and retain a highly skilled workforce. It also recommends that staff continue to evolve CGS' human resource systems, policies and programs to ensure their ongoing relevance, appropriateness and alignment with CGS's mission statement, strategic goals and long-term financial plan.

### Financial Implications

No immediate financial implications.

---

Performance Audit of Compensation  
Management Processes

---

November 24, 2020

Final Report

---



## OBJECTIVES

The objective of this audit was to assess the effectiveness of compensation management processes.

## BACKGROUND

Human Resources staff manage compensation processes within the City. Compensation management includes the development and implementation of the total compensation package including salaries, wages and benefits which accounted for 50.1% of the City's annual operating expenses in 2019. While salaries and wages increased by 2.8% per annum on average since 2014, benefits costs increased by 5.6% per annum on average over the same period.

Annual Operating Expenses in millions	2014		2015		2016		2017		2018		2019	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Salaries & Wages	182.9	41.2	185.1	41.4	186.4	39.8	190.9	39.2	198.8	39.0	208.2	38.9
Benefits	46.7	10.5	46.2	10.3	54.4	11.6	52.8	10.8	56.7	11.1	59.9	11.2
Total Compensation	229.6	51.7	231.3	51.7	240.8	51.4	243.7	50.0	255.5	50.2	268.1	50.1
Other Expenses	214.2	48.3	215.7	48.3	227.4	48.6	243.1	50.0	253.9	49.8	266.9	49.9
Total Expenses Except Amortization	443.8	100.0	447.0	100.0	468.2	100.0	486.8	100.0	509.4	100.0	535.0	100.0
Annual Increase to Salaries & Wages	2.3%		1.2%		0.7%		2.4% *		4.1% *		4.7%	
Annual Increase to Benefits Costs	-0.6%		-1.1%		17.8% **		-2.9%		7.4%		5.3%	
Annual Increase to Compensation Costs	1.7%		0.7%		4.1%		1.2% *		4.8% *		4.9%	

\*These increases were offset by reductions to contract services as jobs were contracted in to the Growth & Infrastructure Dept.

\*\*This increase was mainly due to adjustments to the disability life reserve in 2015 and 2016 as well as increased WSIB costs following the introduction of presumptive legislation in 2016 for post-traumatic stress disorder.

## METHODOLOGY & SCOPE

Audit procedures included interviews, benchmarking, analysis of financial results, inspection of records and process in place between 2012 and 2019, excluding controls tested during the annual financial statement audit. Appendix 1 contains our assessment criteria for the effectiveness of compensation management processes in CGS.

## EXECUTIVE SUMMARY

In 2003, staff developed a pay philosophy and comprehensive salary administration plan to compensate jobs in CGS so that internal and external equity were achieved and individual employees were compensated at a level equivalent to their job performance. Adherence to this pay philosophy in any given year was to be contingent on CGS' financial health, or ability to pay, as assessed by Council. This audit recognizes the steps taken by staff to reduce overall compensation costs from their high of 51.8% of total expenses in 2012 and the recent development of a draft human capital management plan to strengthen CGS' ability to develop, attract and retain a highly skilled workforce. It also recommends that staff continue to evolve CGS' human resource systems, policies and programs to ensure their ongoing relevance, appropriateness and alignment with CGS's mission statement, strategic goals and long-term financial plan.

## AUDIT STANDARDS

We conducted our audit in accordance with Generally Accepted Government Auditing Standards which require that we adequately plan audits; properly supervise staff; obtain sufficient, appropriate evidence to provide a reasonable basis for audit findings and conclusions; and document audits. For further information about this report, please contact Ron Foster by phone at 705-674-4455 extension 4402 or via email at [ron.foster@greatersudbury.ca](mailto:ron.foster@greatersudbury.ca)

## **OBSERVATIONS AND ACTION PLANS:**

### **A. Human Capital Management Plan**

#### **Observations:**

A Human Capital Plan is an important management tool that can be used by an organization to develop focused actions to achieve its vision, mission, and goals. In 2019, Human Resources staff took the major step of developing a draft Human Capital Management Plan to strengthen CGS' ability to develop, attract and retain a highly skilled workforce to demonstrate innovation and cost-effective service delivery to support CGS' corporate strategic plan.

While the draft Human Capital Management Plan identifies actions to deliver on CGS' strategic goal of demonstrating innovation, it does not clearly align with the strategic goal of demonstrating cost-effective service delivery or the following sustainability principles within CGS' mission statement and long-term financial plan:

- Focusing on fiscal, social and environmental responsibility for current and future generations;
- Providing resilient, dependable, accessible services and progressive policies that promote sustainable progress;
- Continuously finding improvements to meet our community's changing needs;
- Making financial decisions that will not respond to short-term perspectives but rather will consider long-term implications; and
- Ensuring the City's financial position, funding sources and resource allocations (i.e. operating expenditures, capital investments), will allow it to continue to achieve its intended role and responsibility over the long-term.

According to the long-term financial plan, sustainability is the degree to which the City can deliver services and meet its financial commitments without increasing its debt or tax burden relative to the economy in which it operates.

#### **Recommendation:**

Refine the draft Human Capital Management Plan to continue to evolve CGS' human resource systems, policies and programs to ensure their ongoing relevance, appropriateness and alignment with CGS's mission statement, strategic goals and long-term financial plan.

#### **Management Response:**

*The development and implementation of a human capital management plan is included under the strategic priority to continue to demonstrate innovation and cost-effective service delivery. There is ample research that specifically ties supported and motivated employees to financial success for an organization. By investing in its employees, organizations are able to improve customer/citizen satisfaction and realize positive, bottom-line financial results. Motivated and engaged employees foster a healthy, safe, and productive work environment for all which results in higher productivity and achievement or corporate strategic goals and objectives.*

*The Human Capital Management Plan provides the "blueprint" for priority actions to ensure there are sustainable staffing plans in place and to align Human Resource systems, policies and processes with the long-term financial and human resource strategic goals of the organization. As all organizations are constrained by limited financial resources, the Human Capital Management Plan will enable the City to focus our efforts on those activities which ensure we can continue to attract, develop and retain a high performing, diverse workforce now and into the future.*

#### **Action Plan:**

*To provide additional clarity, management will incorporate a stronger statement within the Human Capital Management Plan about the linkage with the Long-Term Financial Plan.*

## **B. Salary Administration Plan**

A comprehensive Salary Administration Plan was developed in 2003 by the CGS Compensation Committee which included the Chief Administration Officer, two General Managers and the Director of Human Resources. This committee was also tasked with administering the plan. In 2004, the following statement of pay philosophy was adopted by Council:

“CGS’s ongoing pay philosophy will support the purpose of the Organization by compensating jobs such that internal and external equity are achieved. The compensation of individual employees will be set at a level equivalent to their job performance.”

This philosophy addresses each of CGS’s four compensation goals that are set out below.

1. Internal Equity - Looking at our internal culture, CGS’s goal is to set job rates such that jobs are paid relative to their value to the organization as determined through job evaluation.
2. Employee Compensation – Looking at individual employees, CGS has a goal to pay for performance. Where applicable, employees move through our salary grids to the job rate at the top of the grid provided performance warrants an increase. General wage increases are afforded to employee groups from time to time by resolution of Council, and/or collective bargaining. CGS’ pay philosophy will continue to reflect the employer’s goal of attracting and retaining qualified employees, and motivating them towards excellence in their field of expertise.
3. External Equity – Looking at external labour markets, CGS’ goal is to set job rates such that total cash compensation is competitive in the labour market place.
4. Ability to Pay – CGS believes the above philosophy is in harmony with the long-term purpose of the organization. Adherence to the above philosophy in any given year is contingent on CGS’ financial health, or ability to pay, as assessed by Council.

### **Observations:**

#### **1. Benchmarking of Compensation Costs**

CGS has historically hired candidates for the Executive/Managerial/Supervisory and Professional group from other municipalities because candidates from non-municipal settings require longer learning curves to adjust to the specialized roles in CGS. To establish salaries for this group, the Compensation Committee obtained Council’s approval to rely on recommendations from a consultant to select data from a peer group which includes Chatham-Kent, Thunder Bay, Kingston, Oshawa, Burlington, Kitchener, London, Hamilton, Region of Halton, Region of Niagara and Region of Waterloo. Salary data from these comparators is formally analyzed every two years by staff who also formally monitor compensation levels and the impact compensation practices have on the City’s ability to attract and retain key talent. CGS aims to pay within 10 percent of the 50<sup>th</sup> percentile of the Council-approved comparators.

#### External Equity

When looking specifically at the external labour markets, staff’s goal is to set total cash compensation competitively within the municipal market. To achieve this goal, market information is collected from comparator municipalities and analyzed on a regular basis. Staff also participate in numerous ad hoc compensation surveys in preparation for collective bargaining, to review ability to attract or retain staff in certain classifications, and on a more formal basis with a review of the pay line in comparison to external comparators. In 2019, staff performed sixty formal and ad hoc salary surveys to support decision-making and collective bargaining processes.



## Internal Equity

With respect to internal equity, the job evaluation plans and processes establish the relative value of the jobs within the organization. The legislative requirement of pay equity is established through job evaluation tools and plans negotiated with each of the bargaining units where applicable.

## Review of Benefit Costs

Staff actively monitor and manage benefit costs by benchmarking with our peer municipalities and take steps to reduce/minimize costs wherever possible while ensuring that the City's plans remain competitive and meet the changing needs of the employees and organization. Staff recently implemented a number of cost containment measures related to extended health benefits for non-union employees. Benefits rates are negotiated annually with the City's benefits provider and strategies such as pooling and cross experience rating for different kinds of benefits are used to minimize the overall cost of benefits.

- Some of CGS' benefits costs can be controlled by interventions to improve employee health and wellness while others are uncontrollable because they are influenced by external factors. The most significant cost drivers include greater prescription drug utilization, principally for chronic diseases. Over the past 15 years, CGS has experienced increases in premium rates associated with providing extended health care, dental and life benefits. Nationally, chronic disease drugs were responsible for 67% of total private drug plan costs in 2018. Another cost driver of benefits is short and long-term disability costs. Over the last 15 years, CGS has experienced an increase of 10% in the rates associated with the costs for short-term disability benefits. After a two-year freeze, CGS had an increase of 24% increase on rates for extended health, dental, short term and long-term disability benefits.
- Workplace Safety and Insurance Benefits (WSIB) premiums and administration costs have risen sharply in recent years. For example, rates for Long Term Care also increased from \$1.20 per \$100 of payroll in 2016 to \$1.60 by 2020. The total WSIB administration costs for employees outside of Long Term Care, whom CGS self-insures, have risen by almost 200% over the last 10 years, mainly due to the introduction of presumptive legislation in 2016 for post-traumatic stress disorder for emergency responders and the increase in overall cost of claims. The increase reflects the increase in length of claims and the additions of new employee conditions such as chronic mental stress, post-traumatic stress disorder for emergency services employees and heart disease and certain cancers for Firefighters.

## Annual review of Contract Services

Where it makes financial sense, staff have contracted work into the City. For example, following the collective bargaining process with CUPE in 2016, CGS added full time employees to perform emergency water and sewer main repair and solid waste collection. CGS' recruiting policies require all hiring managers to review options to fill any full time vacancy and seek appropriate levels of approval of the request to hire staff or use contract services prior to posting. This analysis must accompany hiring requisitions prior to authorization to proceed with the recruitment process

Despite the positive steps outlined above to manage compensation costs, Appendices 3 and 4 suggest that additional benchmarking with other single-tier municipalities may lead to the identification of further opportunities for improvement. However, caution is required when comparing salaries, wages and benefits across municipalities as these costs are influenced by differences in economic factors, service levels, delivery methods as well as the mix of full-time, part-time and seasonal staff.

## **Recommendation:**

Benchmark with additional single-tier municipalities to identify further opportunities to update compensation management practices to improve the cost effectiveness of service delivery within CGS by adopting practices such as:

- Changing the mix of staff to employ more students, part-time staff and volunteers to deliver seasonal programs;
- Creating entry-level positions at lower rates of compensation to perform basic functions;
- Creating business cases for co-op students for the IT, Engineering Services, Linear Infrastructure Services and Water/Wastewater Divisions;
- Introducing additional pay steps to move staff more slowly to top rates of pay; and
- Contracting in or contracting out additional services or functions where business cases support change.

### **Management Response and Action Plan**

*Staff will review the current list of approved comparators and make recommendations to Council to add additional single-tier municipalities. In addition, staff will review the recommendations with the operating areas to see if there are additional opportunities to improve the cost effectiveness of service delivery. CGS hires an average of 275 summer students each year to deliver summer programs and approximately 1300 part-time staff (43%) to deliver programs. CGS does hire co-op students as well as apprentices in a number of areas. Staff will continue to explore additional opportunities where feasible.*

## **2. Job Evaluation Plan for Non-Union Staff**

Salary levels are determined by output factors, input factors, work demand factors and compensation rates for other staff. Output factors include core service delivery and independence to act; fulfilling regulatory or other formal requirements; initiating and managing change; leadership; managing people; managing assets; impact on clients; and impact on financial effectiveness. Input factors include core knowledge; maintaining technical proficiency; supplementary knowledge; communication skills; interpersonal skills/challenges; and thinking skills/challenges. Work demand factors include physical and sensory demands and environmental demands. The weightings assigned to these factors considered Council's 2002 mission and values statement, the core job competencies that incumbents needed to display to be effective as well as traditional factors such as size of budget and number of people supervised.

As the current job evaluation plan was developed in 2003, some refinements may be required to address areas with higher rates of turnover such as engineering services.

### **Recommendation:**

Implement formal processes to track the source and destination of salaried personnel to improve retention rates.

### **Management Response**

*A job evaluation plan must be applied consistently across all job classifications to meet the requirements for pay equity legislation as well as meet the intention to ensure internal equity. CGS has a policy driven approach to deviating from job rates derived from job evaluation where there is difficulty recruiting or where "hot skills" drive rates of pay out of line with the market on a temporary basis. The Non-union Market Adjustment Policy establishes a set of criteria which allows for an increase of one CGS pay increment to address these types of situations. To ensure we continue to meet our goal of external equity, on an annual basis, CGS participates in the MERCER Ontario Municipal Compensation Survey, the Municipal Benchmarking Network Canada Survey, and the Human Resources Benchmarking Network Survey. Additionally, CGS initiates eight to ten ad hoc external market surveys annually with other municipalities and participates in around 60 ad hoc external market surveys with other municipalities.*

*The Human Capital Management Plan (HCMP) highlights a number of initiatives to address the challenges experienced with a competitive labour market, higher turnover rates, pending retirements and evolving skills and abilities required to meet the strategic priorities of the organization moving forward. Feedback from exit interviews with employees who voluntarily leave or retire was reviewed and considered in the development of the action items in the HCMP.*

### **Action Plan**

*Management will include the implementation of a more formal process to track our appeal for successful candidates and to track where employees go when they leave the City. A more formal process to capture information obtained through onboarding and exit interviews, along with other information from employee engagement surveys will help direct our efforts to improve our ability to attract, retain and develop employees.*

### **3. Collective Bargaining with Unionized Staff**

Appendix 5 provides an overview of the salary increases to the various collective bargaining units between 2010 and 2019. The control positions that staff recommended to Council during collective bargaining for these periods were supported by research of market conditions and analyses of relevant factors such as the potential merits of enhancing certain benefits programs and revising the hours of work of some groups of staff.

In the most recent interest arbitration process with the International Association of Fire Fighters (IAFF), the City made an ability to pay argument as a part of its submissions. The compensation portion of the award for the term ending December 2017 did not specifically address the issue of ability to pay. In December 2018, the province amended the Fire Protection and Prevention Act to put the fiscal circumstances of the local municipality more clearly within the decision-making process of an arbitrator.

#### **Recommendation:**

During the collective bargaining process, continue to identify the significant limitations that exist on the City's ability to pay such as the City's sizable infrastructure deficit and modest annual rates of economic growth.

#### **Management Response:**

*In each set of negotiations, the City's proposal document contains financial and service related information as context for the negotiations process. For renewal negotiations with our locals, (IAFF, CLAC, CUPE Local 4705 – Inside, Housing and Outside, ONA, and CUPE 148 Units), managerial staff from operations as well as Finance provide the ability to pay context for the City's proposals throughout the process.*

#### **Action Plan:**

*Staff will continue to provide Council with substantive information during the collective bargaining process, including cost benefit analysis of opportunities to negotiate changes to collective bargaining agreements to enable changes to service delivery models or contracting in opportunities. With respect to interest arbitration with Fire Services, it is too early to tell the impact this legislation will have on outcomes from arbitrators. However, staff will continue to present ability to pay arguments during the negotiation and/or interest arbitration process.*

**Table 1 – Summary of Significant Risks**

Risk	Total No. of Risks	Inherent Risks (Before Controls)			Residual Risks (After Controls)		
		High (15 to 25)	Med (9 to 14.99)	Low (1 to 8.99)	High (15 to 25)	Med (9 to 14.99)	Low (1 to 8.99)
Reputation	-	-	-	-	-	-	-
Operational	5	5	-	-	-	4	1
Financial	5	5	-	-	-	4	1
Legal	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>10</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>2</b>

**Table 2 – Significant Risks**

Risk	Risk Description	Inherent Risk	Residual Risk*
O1/F1	Compensation management processes may not fully align with the goals within the corporate strategic plan or principles in the long-term financial plan	20	13
O2/F2	Compensation management processes may not be appropriate or relevant as they do not respond fully to external pressures, risks and threats	20	13
O3/F3	Compensation management processes may not be appropriate or relevant as they are not updated periodically to support internal objectives, pressures and opportunities	20	12
O4/F4	Opportunities to contract in/contract out work may not be identified or properly assessed to manage operational expenses effectively	20	10
O5/F5	Employee benefits may not be managed to motivate employees, bolster retention rates and reduce illness	17.5	8

*\*Note that it is not cost-effective to eliminate residual risks.*

## Appendix 1 - Assessment Criteria for the Effectiveness of Compensation Management Processes in CGS

<b>12 Attribute of Effectiveness</b>	<b>Assessment Criteria<sup>1</sup></b>
Management Direction	The extent of alignment of compensation management processes with the mission and goals in the corporate strategic plan and the principles in the long-term financial plan approved by Council
Relevance	The extent to which compensation management processes continue to make sense in regard to the problems or conditions they were intended to address
Appropriateness	The extent to which compensation management processes, and the level of effort being made to implement them, are logical in light of their objectives.
Achievement of Intended Results	The extent to which goals and objectives of compensation management have been realized
Acceptance	The extent to which constituencies or relevant municipal stakeholders to which compensation management processes are directed judge them to be satisfactory
Secondary Impacts	The extent to which other significant consequences, either intended or unintended and either positive or negative, have occurred.
Costs and Productivity	The relationship between costs (inputs) and outputs. Management and Council must be able to demonstrate that the City is using its scarce resources to best advantage and that the City is constantly looking for opportunities to free up resources so that they can be re-invested where they will do the most good.
Responsiveness	How well the compensation management processes respond to changes in factors such as markets, competition, available funding, and technology. How well these processes respond to the public with which it interacts, and to the various forces that are pertinent to the City's objectives and goals
Financial Results	The accounting for revenues and costs as well as the valuation of assets, liabilities and surpluses/deficits as reflected in approved budgets or financial statements
Working Environment	The extent to which the City provides an appropriate work atmosphere for its employees; provides opportunities for development and achievement; and promotes commitment, initiative and safety
Protection of Assets	The extent to which important assets are safeguarded so that the City is protected from the danger and risk of losses that could threaten its success, including key personnel, sources of supply, valuable property agreements, and important systems and information.
Monitoring and Reporting	The extent to which key matters pertaining to performance and organizational strength and weakness are identified and carefully monitored

<sup>1</sup> Accountability, Performance Reporting, Comprehensive Audit - An Integrated Perspective, Canadian Accounting and Auditing Foundation, 1996.

## Appendix 2 – Corporate Risk Assessment Criteria

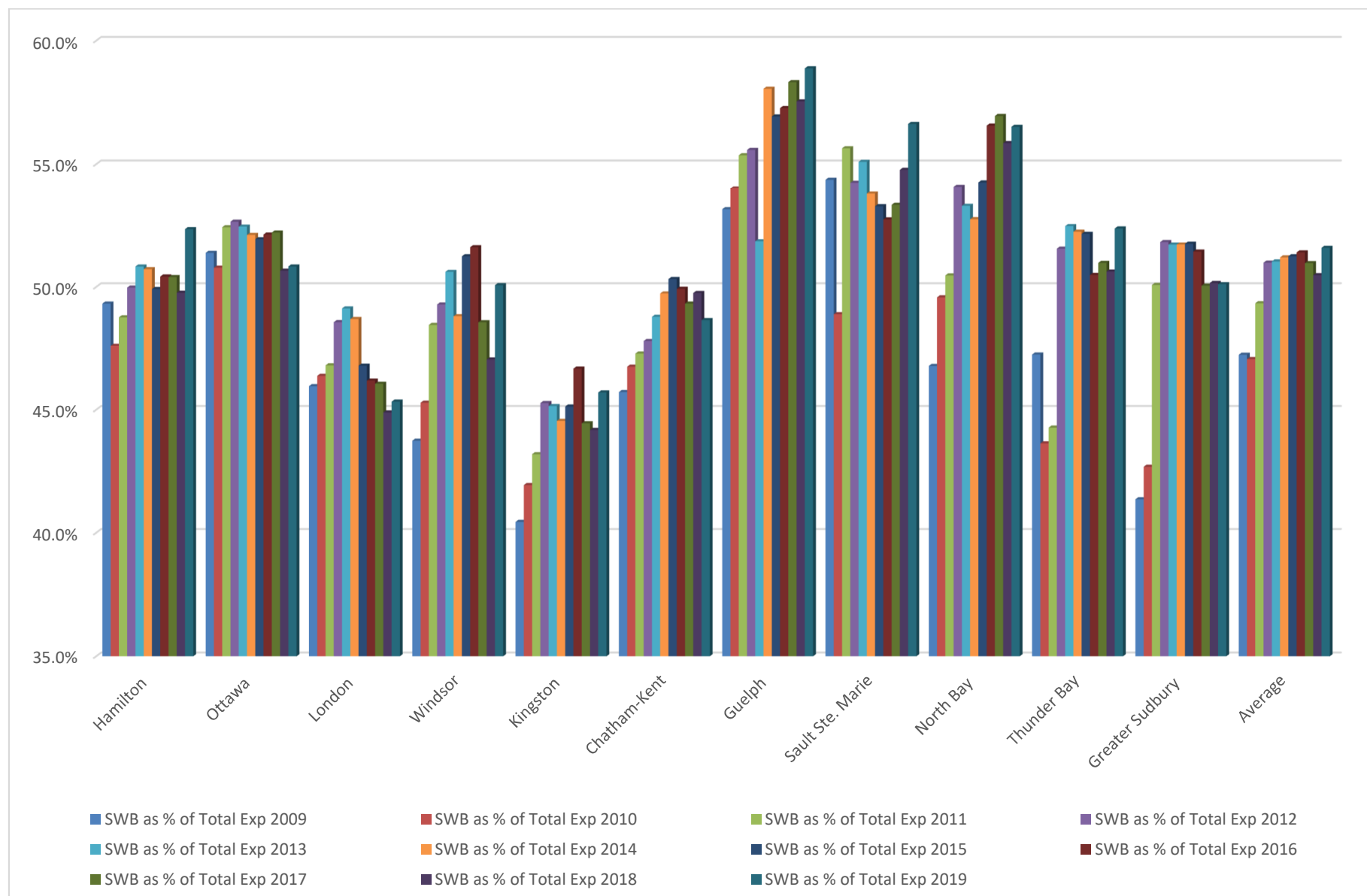
Impact	Service Delivery	Technology	People	Strategic	Legal/Reputational	Financial
<b>Extreme</b> <b>(5)</b>	<ul style="list-style-type: none"> <li>Less than 30% of service objectives achieved.</li> <li>Unable to perform several essential services where no alternatives exist.</li> </ul>	<ul style="list-style-type: none"> <li>Unrecoverable loss of information from critical system.</li> <li>External exposure of confidential information</li> <li>Unavailability of critical systems or data loss or corruption.</li> </ul>	<ul style="list-style-type: none"> <li>Death of an employee</li> <li>Major legal judgment against the City in workplace matter.</li> <li>Significant turnover of key employees with ELT</li> <li>Sustained strike of key services</li> </ul>	<ul style="list-style-type: none"> <li>Many actions are significantly at odds with the strategic priorities.</li> </ul>	<ul style="list-style-type: none"> <li>Public/media outcry for change in CAO or Council</li> <li>Senior officials criminally charged or convicted</li> <li>Severe legal judgment against the City in a workplace matter</li> <li>Major integrity breach resulting in complete loss of trust in City Council or Administration.</li> <li>Theft/Fraud&gt;\$1,000,000</li> </ul>	<ul style="list-style-type: none"> <li>Uninsured loss, cost overruns or fines &gt;\$10 M</li> <li>Insured loss &gt; \$100M</li> <li>File for bankruptcy</li> <li>Failure to maintain financial capacity to support current demands.</li> <li>City action results in decrease in economic condition.</li> </ul>
<b>Major</b> <b>(4)</b>	<ul style="list-style-type: none"> <li>Less than 45% of service objectives achieved.</li> <li>Unable to perform an essential service where no alternative exists.</li> </ul>	<ul style="list-style-type: none"> <li>Unrecoverable loss of information from important system.</li> <li>External exposure of important information</li> <li>Unavailability of significant systems or data loss or corruption.</li> </ul>	<ul style="list-style-type: none"> <li>Serious injury of one or more employees</li> <li>Legal judgment against the City in workplace matter.</li> <li>Turnover of key employees</li> <li>Sustained strike of services.</li> </ul>	<ul style="list-style-type: none"> <li>Numerous actions are significantly at odds with the strategic priorities.</li> </ul>	<ul style="list-style-type: none"> <li>Public/media outcry for change in CAO or Council</li> <li>Public or senior officials charged or convicted</li> <li>Legal judgment against the City in a workplace matter</li> <li>Integrity breach resulting in decreased trust in City Council or Administration.</li> <li>Theft or Fraud&gt;\$100,000</li> </ul>	<ul style="list-style-type: none"> <li>Uninsured loss, cost overruns or fines of &gt;\$1M - \$10M</li> <li>Insured loss of &gt;\$10M - \$100M</li> <li>Unable to pay employees and contractors on a time.</li> <li>Failure to maintain financial capacity to support current demands.</li> <li>City action results in decrease in economic condition.</li> </ul>
<b>Moderate</b> <b>(3)</b>	<ul style="list-style-type: none"> <li>Less than 60% of service objectives achieved.</li> <li>Unable to perform essential service but</li> </ul>	<ul style="list-style-type: none"> <li>Disruptions of significant systems or data loss or corruption</li> <li>Recoverable loss from important system.</li> </ul>	<ul style="list-style-type: none"> <li>Multiple employee injuries or long-term disability from one incident.</li> <li>Inability to retain or attract competent staff.</li> </ul>	<ul style="list-style-type: none"> <li>Numerous actions are at odds with strategic priorities.</li> </ul>	<ul style="list-style-type: none"> <li>Public/media outcry for removal of management</li> <li>Long-term damage to City's reputation</li> <li>Citizen satisfaction survey indicates unacceptable performance.</li> </ul>	<ul style="list-style-type: none"> <li>Uninsured loss, cost overruns or fines of &gt;\$100K to \$1M</li> <li>Insured loss &gt;\$1M to \$10M</li> <li>Having to delay payments to contractors/suppliers.</li> <li>&gt;20% current demands cannot be services with</li> </ul>

## Appendix 2 – Corporate Risk Assessment Criteria

	alternatives exist.		<ul style="list-style-type: none"> <li>• Increase in stress leave, sick leave or WCB claims.</li> <li>• Work-to-rule union disagreement or short-term strike.</li> </ul>		<ul style="list-style-type: none"> <li>• Complaints elevated to Council level.</li> <li>• Results inconsistent with commitments made to citizens</li> <li>• Theft or Fraud under \$100,000.</li> </ul>	existing and approved infrastructure. <ul style="list-style-type: none"> <li>• City action results in lost revenue for significant number of City businesses.</li> </ul>
<b>Minor (2)</b>	<ul style="list-style-type: none"> <li>• Less than 75% of service objectives achieved.</li> <li>• Unable to perform non-essential service.</li> </ul>	<ul style="list-style-type: none"> <li>• Disruptions of systems or data loss or corruption</li> <li>• Disclosure of non-confidential but embarrassing information.</li> </ul>	<ul style="list-style-type: none"> <li>• Reportable employee injury.</li> <li>• Loss of key staff but able to recruit competent replacements</li> <li>• Significant increase (&gt;10%) in number of union grievances.</li> </ul>	<ul style="list-style-type: none"> <li>• Instances of actions at odds with strategic priorities.</li> </ul>	<ul style="list-style-type: none"> <li>• Complaints elevated to the Director level.</li> <li>• Short-term repairable damage to City's reputation</li> <li>• Public outcry for discipline of employee.</li> <li>• Moderate amount of negative media coverage</li> <li>• Theft or Fraud of \$1,000 to \$10,000.</li> </ul>	<ul style="list-style-type: none"> <li>• Uninsured loss, cost overruns or fines of \$10K to \$100K</li> <li>• Insured loss &lt; \$100K - \$1M</li> <li>• Inefficient processes</li> <li>• City action results in reduced economic development.</li> </ul>
<b>Very Minor (1)</b>	<ul style="list-style-type: none"> <li>• Less than 90% of service objectives achieved.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor disruptions of secondary systems or data loss or corruption.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor reportable employee injury.</li> <li>• Increase in number of union grievances.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor instances of actions that are at odds with strategic priorities.</li> </ul>	<ul style="list-style-type: none"> <li>• Small amount of negative media coverage or complaints to City.</li> <li>• Non-lasting damage or no reputational damage</li> <li>• Theft or Fraud under \$1,000.</li> </ul>	<ul style="list-style-type: none"> <li>• Uninsured loss, cost overruns or fines &lt; \$10K</li> <li>• Insured loss &lt; \$100K</li> <li>• Loss of replaceable asset.</li> </ul>

Likelihood	Unlikely (1)	Possible (2)	Probable (3)	Likely (4)	Very Likely (5)
	Less than 20%	>20% but < 40%	>40% but < 60%	>60% but < 80%	80% or more
	Less frequent than every 10 years	May occur in the next 2 years	Will occur this year or next year at least once	May occur regularly this year	Will occur within a matter of months may reoccur often

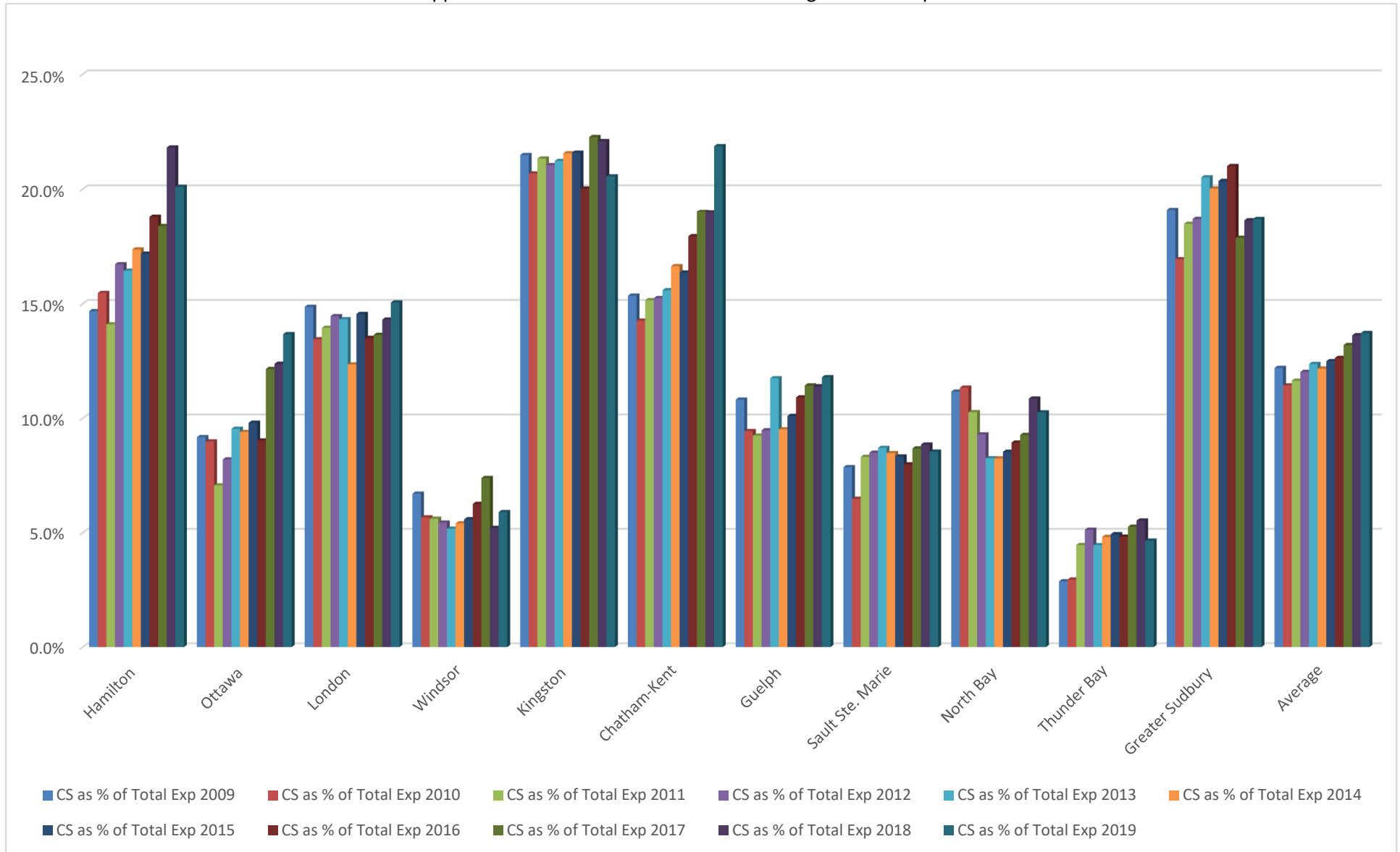
### Appendix 3 – Salaries, Wages & Benefits (SWB) Costs as a Percentage of Total Expenses



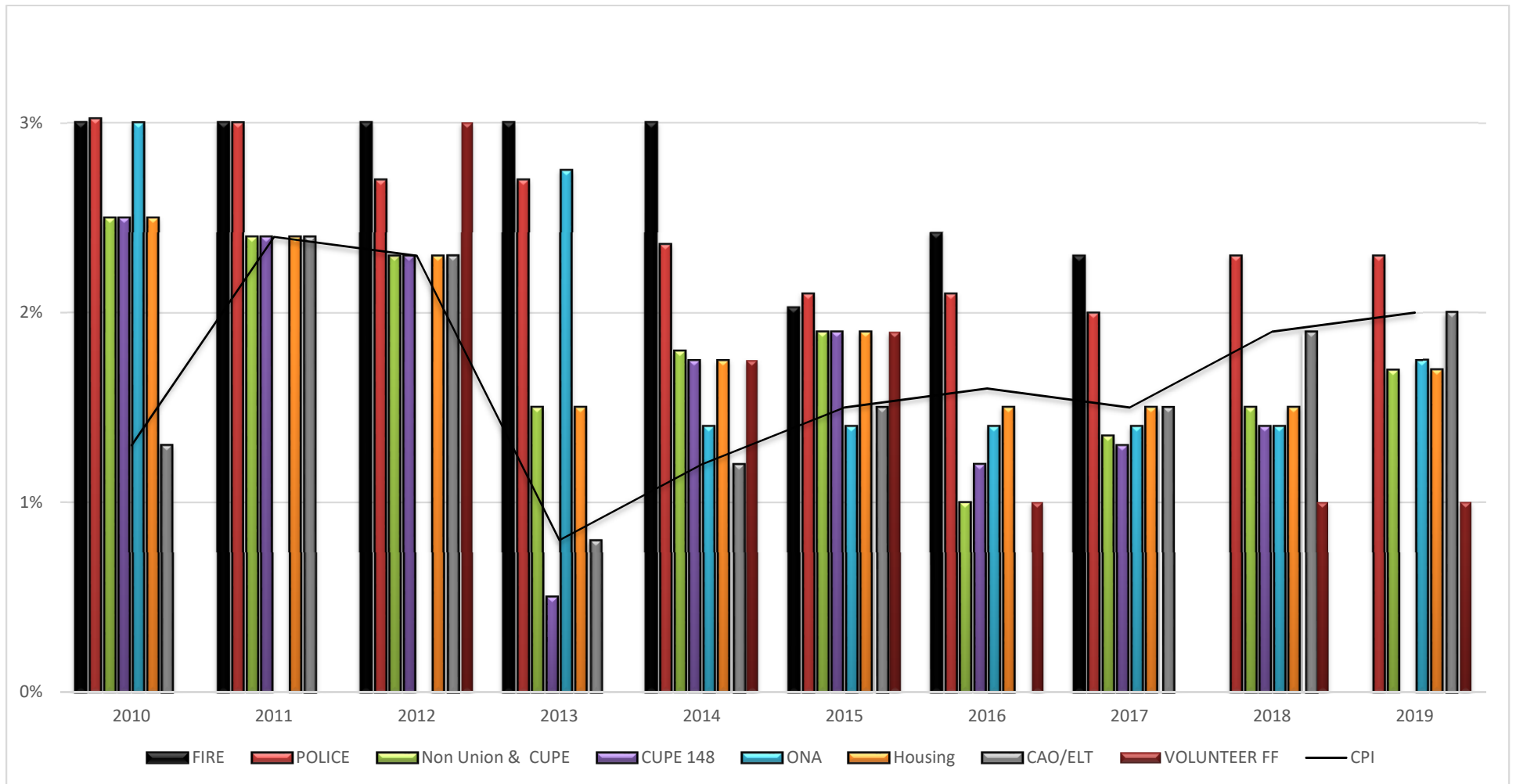
*Note – caution is required when comparing salaries, wages and benefits across municipalities as these costs are influenced by differences in economic factors, service levels, delivery methods as well as the mix of full-time, part-time and seasonal staff.*



Appendix 4 – Contract Services as a Percentage of Total Expenses



## Appendix 5 – History of General Wage Increases in CGS versus CPI



### Notes:

1. Salaries for CAO/ELT for 2016 were frozen at 2015 levels as part of Project \$6 Million.
2. Increases have not been finalized yet for Fire for 2018 and 2019 or for CUPE 148 for 2019.

Presented To:	Audit Committee
Presented:	Tuesday, Dec 08, 2020
Report Date	Tuesday, Nov 24, 2020
Type:	Managers' Reports

## Request for Decision

### Performance Audit of Wastewater Services Section

#### Resolution

THAT the City of Greater Sudbury approves the recommendations as outlined in the report entitled "Performance Audit of Wastewater Services Section", from the Auditor General, presented at the Audit Committee meeting on December 8, 2020.

#### Signed By

**Auditor General**  
Ron Foster  
Auditor General  
*Digitally Signed Nov 24, 20*

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

This report supports the strategic goal of asset management and service excellence as well as the supporting initiative of demonstrating innovation and cost-effective service delivery.

#### Report Summary

While staff have managed the wastewater treatment plants and lift stations efficiently, work has been delayed on a number of upgrades to treatment plants and lift stations that were recommended in the 2017 water and wastewater master plan. Management should update the water and wastewater long-range financial plan in 2024 to ensure it incorporates sound asset management and risk management practices and recommends sufficient funding to maintain and, where necessary, expand the capacity of the wastewater assets.

#### Financial Implications

No immediate financial implications.

---

Performance Audit of  
Wastewater Services

---

November 24, 2020

Final Report

---



## OBJECTIVE

To assess the extent of regard for economy, efficiency and effectiveness within Wastewater Services.

## BACKGROUND

Wastewater Services is a section of the Water/Wastewater Division of the Growth and Infrastructure Department with 38 staff who are responsible for the operation and maintenance of 12 wastewater treatment plants, 69 sewage lift stations and 4 lagoons. The financial results for the Section are shown below.

Revenues and Expenses (000s)	Dec 31 2017		Dec 31 2018		Dec 31 2019		Sept 30 2020	
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual
User Fees	23,290	22,275	26,361	25,799	27,304	26,103	20,022	20,000
Other Revenues	407	839	705	862	705	803	529	538
Total Revenues	23,697	23,114	27,066	26,661	28,009	26,906	20,551	20,538
Salaries & Benefits	1,721	1,758	1,743	1,762	1,785	1,790	1,319	1,433
Materials	1,697	2,227	1,706	1,942	1,797	2,213	1,379	2,071
Energy Costs	2,145	2,395	2,485	2,195	2,535	2,338	1,719	1,284
Purchased Services	1,273	1,695	1,338	1,909	1,363	1,994	979	1,460
Indirect Costs	2,600	2,409	4,084	3,085	3,407	2,990	2,207	2,224
Labour Fringes	904	1,025	929	1,122	936	1,080	704	764
Engineering Costs	791	728	768	745	837	816	655	651
Biosolids Costs	6,420	5,971	6,479	6,120	6,540	6,422	4,931	4,462
Finance & Capital	5,855	5,854	7,208	7,207	8,441	8,450	6,384	6,376
Internal Recoveries	291	313	326	326	368	432	274	292
Total Expenses	23,697	24,375	27,066	26,413	28,009	28,525	20,551	21,017
Net Expenses	0	-1,261	0	248	0	-1,619	0	-479

## METHODOLOGY & SCOPE

This audit included interviews of staff, analysis of policies, procedures, and reports and tests of controls for the period January 1, 2017 to September 30, 2020 but excluded the collection network within Linear Infrastructure Services.

## EXECUTIVE SUMMARY

While staff have managed the wastewater treatment plants and lift stations efficiently, work has been delayed on a number of upgrades to treatment plants and lift stations that were recommended in the 2017 water and wastewater master plan. Management should update the water and wastewater long-range financial plan in 2024 to ensure it incorporates sound asset management and risk management practices and recommends sufficient funding to maintain and, where necessary, expand the capacity of the wastewater assets.

## AUDIT STANDARDS

We conducted our audit in accordance with Generally Accepted Government Auditing Standards which require that we adequately plan audits; properly supervise staff; obtain sufficient, appropriate evidence to provide a reasonable basis for audit findings and conclusions; and document audits. For further information regarding this report, please contact Ron Foster at the City of Greater Sudbury at 705-674-4455 extension 4402 or via email at [ron.foster@greatersudbury.ca](mailto:ron.foster@greatersudbury.ca)

## **OBSERVATIONS AND ACTION PLANS**

### **A. Master Plan and Long-Range Financial Plan**

In 2010, a ten-year financial plan was prepared for the City's water and wastewater services. To achieve financial sustainability over the next ten years, that plan recommended an annual increase to water and wastewater rates of 7.4 percent. These recommended increases were approved in 2016, 2017, 2018 and 2019. The annual increases approved between 2011 and 2015 averaged just 3.5 percent. As a result, a significant maintenance backlog on the wastewater assets had developed by 2017 when the last water and wastewater master plan was completed. The objectives of this plan were:

- To plan for safe, robust servicing systems;
- To accommodate planned growth within the community,
- To ensure system performance and efficiency within the servicing systems is maintained, and
- To comply with existing legal and regulatory requirements.

In 2019, the City engaged external consultants to develop a new water and wastewater long-range financial plan. The goal of this plan was to provide the City with a realistic and informed view of the water and wastewater operating and capital expenditures needed over time to maintain the integrity and health of its physical infrastructure and to accommodate growth and new environmental standards. To ensure affordability, the consultants recommended a phase-in strategy of 20 years for capital contributions to move toward the recommended annual replacement funding requirements. Annual rate increases of 4.6 percent for wastewater that were introduced in the 2020 budget flowed from this strategy.

### **Observations**

This audit determined that the 20-year phase in strategy that was recommended within the 2019 water and wastewater long-range financial plan places insufficient emphasis on the risks of asset failure and ignores significant capacity limitations within some of the City's treatment plants. As a result, a number of upgrades to treatment plants and lift stations that have higher risks of failure and were recommended in the 2017 master plan have been deferred.

### **Recommendation**

Update the water and wastewater long-range financial plan in 2024 to ensure it incorporates sound asset management and risk management practices and recommends sufficient funding to maintain and, where necessary, expand the capacity of the wastewater assets.

### ***Management Response and Action Plan***

*The Long-Range Financial Plan is scheduled to be updated in 2024. Even though the current plan is following a 20-year timeframe, by Ontario Regulation the plan has to be updated no less frequently than every 5 years as part of the drinking water license renewal process. This 5-year renewal period may see a change in forecasted rates and, if necessary, an appropriate recommendation for a rate change to Council will be made at that time. Two factors that will have a major impact on the financial plan will be the implementation of the Advanced Meter Infrastructure (AMI) and the work of the Inflow and Infiltration (I&I) Task Force.*

*The AMI portion is significant and as of mid-2022, we will have a more accurate value of water consumption and available funding. The Infiltration and Inflow (I&I) task force is now gaining momentum and have started formulating design plans and producing recommendations which will assist in Council's intent of minimizing the impact of peak weather flow on our Wastewater systems. The data collected between now and 2024 will provide an update to our risk assessments and have an impact on capital allocation that may differ from recommendations in the 2017 Master Plan (MP) by directing funds towards maximizing reduction of I&I thereby minimizing the more costly option of expanding facilities.*

## **B. Asset Management**

Regulation 588/17 requires municipalities to develop Asset Management Plans (AMPs) for their infrastructure assets, to manage their life cycle costs and to communicate the service levels for these assets to residents. In April 2018, staff presented an Enterprise Asset Management Policy to, among other things:

- Establish full life-cycle costing principles aligned with asset management strategies that minimize ownership costs over the asset's service life;
- Maintain assets in order to deliver defined levels of service that meet legislative requirements and customer expectations;
- Establish risk management strategies to support service delivery at expected levels of service;
- Maintain a system of performance monitoring and reporting on asset level of service and the impacts of potential changes in policy, levels of service or risk;
- Maintain assets to protect the safety of the public and health & safety of our employees; and
- Establish clear and continuous connections to the long-term financial plan and related financial policies.

### **Observations:**

In 2016, an infrastructure backlog of \$882 million was identified in the Water/Wastewater division that needed to be addressed by 2026. Since then, the City has spent less than 5% of that amount on capital upgrades to the wastewater treatment plants and lift stations to improve their reliability and efficiency. Table 3 summarizes the status of the upgrades to wastewater assets with higher risks of failure that were identified within the 2017 water and wastewater master plan.

### **Recommendations**

1. In the short-run, introduce or expand cost effective infiltration and inflow control programs within communities where insufficient capacity exists to treat peak flows; and
2. Update the water and wastewater long-range financial plan in 2024 to address the updated condition assessments and any significant risks of failure identified within the asset management plans for the wastewater assets.

### **Management Response and Action Plan:**

*The expansion of the I&I program with the deliberate attempt of focusing capital funding on minimizing system leaks into the collection system will require constant adjustment and updates of any risk assessments conducted, including those identified in the 2017 Master Plan (MP) that have not yet had capital funding allocated. Our intent is to use this process to ensure capital is allocated to areas determined critical through the ongoing updates to the condition and risk assessments completed during the asset management planning process rather than relying on old data from the 2017 MP.*

### C. Overall Management

Management currently monitors and reports on the following performance measures within the annual budget package:

- Cost per Megalitre Treated in 2019: \$ 259.47
- Cost of Energy in 2019: \$2 million/annually
- Cost of Chemicals in 2019: \$600,000/annually
- Number of Wastewater Regulatory Non-Compliance events in 2019: zero

Management also participates within annual benchmarking exercises such as the BMA municipal study and the National Benchmarking Index study for Water/Wastewater but does not disclose relevant performance measures from these studies in the annual budget package.

### Recommendation

To provide more insights on wastewater services operations, provide additional performance measures in the annual budget package from the BMA and National Benchmarking studies.

### ***Management Response and Action Plan:***

*Staff will expand annual reporting to include the recommended performance measures. In addition to the BMA performance measures that provide municipal averages, staff will make an effort to compare the City to municipalities with similar processes and magnitude of infrastructure. The number of facilities over the broad square area of coverage continues to create a disproportionate factor when comparing to other municipal benchmarks. Additionally some of our costs also include the treatment of a Class A Biosolids facility, which may not be the case with a number of the municipalities in the BMA study.*

### D. Operational Improvements

During the audit, we noted that management has made significant strides in recent years to improve the operational efficiency of the wastewater treatment plants and reliability of the sewage lift stations. Management has achieved approximately \$1 million of cost avoidance since 2017 by participating in the Independent Electricity System Operator of Ontario Industrial Conservation Initiative. Annual energy savings of over \$200,000 have also been achieved by implementing an aeration tank cleaning program at the Sudbury and Walden treatment plants. The reliability of lift stations has also been improved by implementing a preventative maintenance program and replacing outdated equipment. Finally, by increasing employee engagement and enhancing safety training and equipment, management has achieved zero lost time injuries in the last two years.

### ***Management Response***

*The improvements listed above are all due to active engagement in benchmarking groups and conferences where staff can learn new ideas and implement what works in Sudbury. Additionally the implementation of a reasonably solid planned maintenance program has paid dividends in Wastewater Treatment as our corrective maintenance has been minimized and the longevity of equipment has been maximized.*



## E. Risk Management

Risks are uncertain events which can be measured by calculating the product of the likelihood and impact of these events. Risks can be mitigated by applying controls related to the acquisition and application of human and contract resources; implementation of formal procedures; acquisition and utilization of plant, equipment and tools; collection and utilization of relevant information or the acquisition of insurance. Tables 1 and 2 on the next page identify the significant risks associated with the City's Wastewater Services Section.

### Observations:

Management has taken steps to mitigate significant risks within the Wastewater Services Section.

### Recommendation:

Management should take steps to further mitigate residual risks that are above 10.

### **Management Responses on Significant Risks:**

*F1/O1 are being addressed by continuing to complete the facility assessments in order to be compliant with the provincial mandate of recognizing assets as part of the overall asset management plan. This will give us a clear picture of the state of the assets and allow us to develop a plan to prioritize capital spending over a 5-year period (subject to updates as per management responses as noted above).*

*F3 will be considered at least every 5 years and an appropriate adjustment will be recommended to Council if required.*

*O3 is mitigated by our upgrade of high-risk facilities from a capital perspective but also by maintaining a robust emergency response by our crews during periods of asset failures/peak flow during weather events.*

*F2/O2 are addressed by Wastewater Treatments continuous improvement program where analysis of data is conducted and any recommendations for an increase in efficiency is implemented. It should be noted that the funding allocated to O and M has minimally increased over the past 5 years despite disproportionate cost increases in labour, energy, chemicals and materials.*

*O4 has been designated a high inherent risk, but field data indicates this risk can be effectively mitigated. Wastewater Treatment has seen "0" Loss Time Injuries over the last 2 years due in large part to the serious manner in which we administer both our employee engagement as well as the robustness of our health and safety program.*

*L1 is mitigated by our Compliance section which oversees and proactively recommends solutions regarding all legal and regulatory parameters for wastewater.*

*R1 takes into account the process of our Standard Operating Procedures for which all staff are regularly trained. These SOP's serve to minimize situations that may damage the City's reputation.*

*F4 indicates that all purchases, tenders and RFPs made by wastewater staff adhered to the Purchasing By-law.*

**Table 1 – Summary of Significant Risks**

Risk	Total No. of Risks	Risks (Before Controls)			Residual Risks (After Controls)		
		High (15 to 25)	Med (9 to 14.99)	Low (1 to 8.99)	High (15 to 25)	Med (9 to 14.99)	Low (1 to 8.99)
Reputation (R)	1	1	0	0	0	0	1
Operational (O)	4	4	0	0	0	4	0
Financial (F)	4	4	0	0	0	3	1
Legal (L)	1	1	0	0	0	0	1
<b>TOTAL</b>	<b>10</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>3</b>

**Table 2 – Significant Risks**

Type of Risk	Description of Risk	Risk Before Controls	Residual Risk*
F3	User fees may be insufficient to maintain and, where necessary, expand the capacity of the wastewater assets.	20	13.5
F1/O1	Wastewater assets may not be maintained in accordance with the City's enterprise asset management policy and enterprise risk management policy.	20	13.5
O3	Asset failures may cause damages to private properties.	17.5	11
F2/O2	Wastewater assets may not be operated with due regard for efficiency.	17.5	10
O4	Injuries may arise from failure to follow health and safety practices.	17.5	10
L1	Legal and regulatory obligations may not be managed effectively.	20	8
R1	Issues may arise which could damage the City's reputation.	16	8
F4	Purchases may not be made in accordance with the City's Purchasing By-law.	16	8

\* Eliminating residual risks (risks after controls) is not cost-effective.

**Table 3 - Status of the Higher-Risk Wastewater Assets Identified in 2017 Master Plan**

<b>Lift Station (LS) or Plant (WWTP)</b>	<b>Capital Upgrades Recommended and Status Comments</b>	<b>Upgrade Complete</b>	<b>Upgrade In Progress</b>	<b>Plan In Progress</b>	<b>Study Under Way</b>
<b>Nickel LS</b>	This was a capital project that was completed successfully. We have increased pumping capacity by upgrading pumps. In addition, we have upgraded electrical and mechanical systems and built a new forcemain from Copper Cliff to Sudbury WWTP.	X			
<b>Valley East WWTP</b>	Implement I&I program. As part of the capital needs study and through capital program, we have addressed risks related to sludge handling by building a sludge handling unit operation. We are in the process of upgrading the aeration system. The design is complete and ready for tender.		X	X	
<b>St. Charles LS</b>	Construct new LS. We have completed the first phase of moving the museum buildings from the existing lift stations site to O'Conner park. The detail design for the lift station is complete and ready for tender. We are waiting for property acquisition to proceed with construction.			X	
<b>Jacob LS</b>	Upgrade then expand. We have completed the first phase of upgrades that included new larger pumps and a new standby power unit with electrical upgrades. The lift station has enough capacity to handle existing flows and we will be looking at adding additional pumping capacity as Walden WWWWTP is upgraded and ready to receive additional flows. We are taking a phased approach for infrastructure upgrades in Lively/Walden.	Phase 1 X			
<b>Sudbury WWTP</b>	Minor upgrades. As part of capital program, we are in the process of upgrading the electrical system by building a new generator capable of providing enough power to run the plant during periods of peak flow and also meet the environmental requirements for running a standby power unit for continued involvement in our peak power program/energy savings. We have recently completed the upgrades to the aeration system by installing a new blower (2 now) and we have completed electrical upgrades for our large lift station pumps. We have also completed concrete work on the deck of the main structure to prevent continued rain and melt water from leaking inside the building process structure area. Future phases of upgrades will be assessed on a regular basis.	X	X	X	
<b>Chelmsford WWTP</b>	Minor upgrades. UV disinfection units, new blowers and new aeration diffusers were installed. We will be reevaluating the needs for upgrades in the future as the flows changes over time.	X			
<b>Lively WWTP</b>	Decommission once EA process for Walden/Lively is complete and work at Walden WWWWTP commences.			X	
<b>Lagace LS</b>	Assess condition. This lift station requires assessment due to the manner in which the discharge is connected to the existing force main from St. Charles. Once St. Charles is reconfigured, a solution for Lagace will have to be determined. The station itself is in good working condition.			X	

Lift Station (LS) or Plant (WWTP)	Capital Upgrades Recommended and Status Comments	Upgrade Complete	Upgrade In Progress	Plan In Progress	Study Under Way
<b>Capreol Lagoon</b>	Upgrade for compliance. To comply with regulations, we have completed detail design and are in the procurement process for construction. The work should be completed by end of next year.			X	
<b>Jeanne D'Arc LS</b>	Implement I&I program; new pumps installed in 2015	X		X	
<b>Anderson LS</b>	Decommission if Walden plant upgraded.			X	
<b>Riverside LS</b>	Upgrade pumps & Implement I&I program.			X	
<b>Walden WWTP</b>	Expand treatment capacity following Environmental Assessment				X
<b>Azilda WWTP</b>	Upgrade LS, implement I&I program and re-evaluate the need for storage tanks for peak flows. We have completed process upgrades in recent years and we have planned a second phase of upgrades to the electrical system and the building. The detail design is already complete and ready for tender once additional funding is approved for 2021.	X		X	
<b>Coniston WWTP</b>	Assess condition. We are doing condition assessment and process performance for the plant. We will be engaging in implementing the recommendations once the work is complete.			X	
<b>Levack WWTP</b>	Assess condition. Completed condition assessment this year and will be implementing recommendations for the first phase of capital needs once additional funding is approved.			X	
<b>Dowling WWTP</b>	Assess condition. Completed condition assessment this year and will be implementing recommendations for the first phase of capital needs once additional funding is approved.			X	
<b>Levesque LS</b>	Upgrade LS. Design complete, RFP awarded and the lift station upgrades are currently underway.		X		
<b>Walford LS</b>	Upgrade LS. Upgrade complete including new pumps, standby power and electrical upgrades.	X			

## Appendix 1 – Risk Assessment Criteria

Impact	Services	Technology	People	Strategic	Legal/Reputational	Financial
<b>Very Minor</b> <b>(1)</b>	<ul style="list-style-type: none"> <li>Less than 90% of service objectives achieved.</li> </ul>	<ul style="list-style-type: none"> <li>Minor disruptions of secondary systems or data loss or corruption.</li> </ul>	<ul style="list-style-type: none"> <li>Minor reportable employee injury.</li> <li>Increase in number of union grievances.</li> </ul>	<ul style="list-style-type: none"> <li>Minor instances of actions that are at odds with strategic priorities.</li> </ul>	<ul style="list-style-type: none"> <li>Small amount of negative media coverage or complaints to City.</li> <li>Non-lasting damage or no reputational damage</li> <li>Theft or Fraud under \$1,000.</li> </ul>	<ul style="list-style-type: none"> <li>Uninsured loss, cost overruns or fines &lt; \$10K</li> <li>Insured loss &lt; \$100K</li> <li>Loss of replaceable asset.</li> </ul>
<b>Minor</b> <b>(2)</b>	<ul style="list-style-type: none"> <li>Less than 75% of service objectives achieved.</li> <li>Unable to perform non-essential service.</li> </ul>	<ul style="list-style-type: none"> <li>Disruptions of systems or data loss or corruption</li> <li>Disclosure of non-confidential but embarrassing information.</li> </ul>	<ul style="list-style-type: none"> <li>Reportable employee injury.</li> <li>Loss of key staff but able to recruit competent replacements</li> <li>Significant increase (&gt;10%) in number of union grievances.</li> </ul>	<ul style="list-style-type: none"> <li>Instances of actions at odds with strategic priorities.</li> </ul>	<ul style="list-style-type: none"> <li>Complaints elevated to the Director level.</li> <li>Short-term repairable damage to City's reputation</li> <li>Public outcry for discipline of employee.</li> <li>Moderate amount of negative media coverage</li> <li>Theft or Fraud of \$1,000 to \$10,000.</li> </ul>	<ul style="list-style-type: none"> <li>Uninsured loss, cost overruns or fines of \$10K to \$100K</li> <li>Insured loss &lt; \$100K - \$1M</li> <li>Inefficient processes</li> <li>City's actions result in reduced economic development.</li> </ul>
<b>Moderate</b> <b>(3)</b>	<ul style="list-style-type: none"> <li>Less than 60% of service objectives achieved.</li> <li>Unable to perform essential service but alternatives exist.</li> </ul>	<ul style="list-style-type: none"> <li>Disruptions of significant systems or data loss or corruption</li> <li>Recoverable loss from important system.</li> </ul>	<ul style="list-style-type: none"> <li>Multiple employee injuries or long-term disability from one incident.</li> <li>Inability to retain or attract competent staff.</li> <li>Increase in stress leave, sick leave or WCB claims.</li> <li>Work-to-rule union disagreement or short-term strike.</li> </ul>	<ul style="list-style-type: none"> <li>Numerous actions are at odds with strategic priorities.</li> </ul>	<ul style="list-style-type: none"> <li>Public/media outcry for removal of management</li> <li>Long-term damage to City's reputation</li> <li>Citizen satisfaction survey indicates unacceptable performance.</li> <li>Complaints elevated to Council level.</li> <li>Results inconsistent with commitments made to citizens</li> <li>Theft or Fraud under \$100,000.</li> </ul>	<ul style="list-style-type: none"> <li>Uninsured loss, cost overruns or fines of &gt;\$100K to \$1M</li> <li>Insured loss &gt;\$1M to \$10M</li> <li>Having to delay payments to contractors/suppliers.</li> <li>&gt;20% current demands cannot be services with existing and approved infrastructure.</li> <li>City's actions results in lost revenue for significant number of City businesses.</li> </ul>

Impact	Services	Technology	People	Strategic	Legal/Reputational	Financial
<b>Major (4)</b>	<ul style="list-style-type: none"> <li>Less than 45% of service objectives achieved.</li> <li>Unable to perform an essential service where no alternative exists.</li> </ul>	<ul style="list-style-type: none"> <li>Unrecoverable loss of information from important system.</li> <li>External exposure of important information</li> <li>Unavailability of significant systems or data loss or corruption.</li> </ul>	<ul style="list-style-type: none"> <li>Serious injury of one or more employees</li> <li>Legal judgment against the City in workplace matter.</li> <li>Turnover of key employees</li> <li>Sustained strike of services.</li> </ul>	<ul style="list-style-type: none"> <li>Numerous actions are significantly at odds with the strategic priorities.</li> </ul>	<ul style="list-style-type: none"> <li>Public/media outcry for change in CAO or Council</li> <li>Public or senior officials charged or convicted</li> <li>Legal judgment against the City in a workplace matter</li> <li>Integrity breach resulting in decreased trust in City Council or Administration.</li> <li>Theft or Fraud &gt;\$100,000</li> </ul>	<ul style="list-style-type: none"> <li>Uninsured loss, cost overruns or fines of &gt;\$1M - \$10M</li> <li>Insured loss of &gt;\$10M - \$100M</li> <li>Unable to pay employees and contractors on a time.</li> <li>Failure to maintain financial capacity to support current demands.</li> <li>City's actions impair local economic conditions.</li> </ul>
<b>Extreme (5)</b>	<ul style="list-style-type: none"> <li>Less than 30% of service objectives achieved.</li> <li>Unable to perform several essential services where no alternatives exist.</li> </ul>	<ul style="list-style-type: none"> <li>Unrecoverable loss of information from critical system.</li> <li>External exposure of confidential information</li> <li>Unavailability of critical systems or data loss or corruption.</li> </ul>	<ul style="list-style-type: none"> <li>Death of an employee</li> <li>Major legal judgment against the City in workplace matter.</li> <li>Significant turnover of key employees with ELT</li> <li>Sustained strike of key services</li> </ul>	<ul style="list-style-type: none"> <li>Many actions are significantly at odds with the strategic priorities.</li> </ul>	<ul style="list-style-type: none"> <li>Public/media outcry for change in CAO or Council</li> <li>Senior officials criminally charged or convicted</li> <li>Severe legal judgment against the City in a workplace matter</li> <li>Major integrity breach resulting in complete loss of trust in City Council or Administration.</li> <li>Theft/Fraud &gt;\$1,000,000</li> </ul>	<ul style="list-style-type: none"> <li>Uninsured loss, cost overruns or fines &gt;\$10M</li> <li>Insured loss &gt; \$100M</li> <li>File for bankruptcy</li> <li>Failure to maintain financial capacity to support current demands.</li> <li>City's actions significantly impair local economic conditions.</li> </ul>

Likelihood	Unlikely (1)	Possible (2)	Probable (3)	Likely (4)	Very Likely (5)
	Less than 20%	>20% but < 40%	>40% but < 60%	>60% but < 80%	80% or more
	Less frequent than every 10 years	May occur in the next 2 years	Will occur this year or next year at least once	May occur regularly this year	Will occur within months may reoccur often