Agenda
Audit Committee

1st Meeting of the Audit Committee
March 11, 2020, 12:00 PM
Council Chambers
<u>Members</u>

Deputy Mayor J. Helmer (Chair), M. van Holst, J. Morgan, S. Turner, L. Higgs

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6. Confidential (Enclosed for Members only.)

    6.1   Security of Property

        A matter pertaining to the security of the property of the municipality or local board.

7. Adjournment

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March 2, 2020

Members of The Corporation of the City of London Audit Committee

Subject: Internal Audit Summary Update

Internal Audit has included a summary memo with our material to highlight major accomplishments since our last update to the Audit Committee and to draw your attention to the matters of greatest importance. We will cover these documents in more detail at the meeting and respond to all questions you may have.

1. **Internal Audit Plan**
   a. Internal Audit has updated the 2020-2022 Internal Audit Plan as per the request of the Audit Committee.

      i. Included an Appendix D with Summary of changes from 2019 to 2020 IA plan, and
      ii. The audit universe has been updated to reflect the requested changes.

2. **Internal Audit Dashboard Report**
   a. The approved 2020 plan is underway. Internal Audit has initiated actions to execute on the plan and scoping meetings have been scheduled with management.
   b. The Smart City Office Pre-implementation assessment: Internal Audit is requesting approval from the Audit Committee to allow this assessment to be put on hold. It will be reviewed at a future date for inclusion in the internal audit plan.
   c. Class Replacement Pre-implementation Project Review remains ongoing and is set to go live in March 2020.
   d. Internal Audit continues to have quarterly meetings with the Acting City Manager and City Treasurer.
   e. Internal Audit has issued five (5) internal audit reports since the last Audit Committee update:

      i. IT Security Assessment: Agencies, Boards, Commissions and Corporations: Moderate process control or efficiency weaknesses identified. The report identified one (1) medium priority observation.
      ii. Electronic Fund Transfer Assessment: Minor process control or efficiency weaknesses identified. The report identified one (1) medium priority observation, one (1) low priority observation and one (1) leading practice recommendations.
      iii. Dearness Home Process Assessment: Moderate process control or efficiency weaknesses identified. The report identified four (4) medium priority observations.
      iv. Computerized Maintenance Management System (CMMS) Review: Moderate process control or efficiency weaknesses identified. The report identified six (6) high priority observations, three (3) medium priority observations, and one (1) leading practice recommendation.
      v. Class Replacement Project Pre-Implementation Review – Progress Memorandum: Moderate process control or efficiency weaknesses identified. The report identified two (2) high priority observations, two (2) medium priority observations, one (1) low priority observation and one (1) leading practice recommendation.

Action plans are in place, including a responsible party and timeline, to address the observations noted in the issued reports.

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3. Audit Observation Status Summary of High and Medium Priority Observations

a. Since the last Audit Committee meeting, Internal Audit closed three (3) high priority observation and fifteen (15) medium priority observations as noted in the table below:

Review conducted	Number of observations and priorities
Building Permit Process Assessment	One (1) medium priority observation
Health and Safety Assessment	Two (2) medium priority observations
Parking Revenue Generation Assessment	Two (2) high priority observations
Homeless Prevention Assessment	One (1) medium priority observation
Housing Process Assessment	One (1) high priority observation and three (3) medium priority observations
Construction Procurement Process Assessment	Eight (8) medium priority observations

b. There are no observations past due as of March 2, 2020 compared to two (2) medium priority observations past due as at October 2019.

We are comfortable that management is making progress to remediate open items based on the timelines and work plans in place which they have committed and asserted to completing.

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City of London Audit Committee Observation Summary
As at March 2, 2020

LEGEND	
Observations closed	All observations have been addressed by management.
Remediation in progress	Observations in progress are being addressed by management including observations where initial timeline was missed but a plan is in place for remediation that appears acceptable.
Remediation in progress - exceptions noted	Management has missed implementation deadlines for observations and no adequate resource plan has been identified.
Management accepts the risk	Management has accepted the remaining risk.

	Report Summary				Observation Status for Management Action Plans due March 2, 2020.					
Internal Audit Plan Year	**Report**	**Report Issue Date**	**Total High & Medium Observations**	**Observations Closed Per Management**	**Closed Per Internal Audit**	**In Progress Observations (Not Due)**	**Past Due Observations**	**Observations Closed by IA Since November 2019 update**	**Timing**
2017/2018	Building Permit Process Assessment	Jan-18	3	3	3	0	0	1	**Complete**
2017/2018	Parking Revenue Generation Assessment	Jun-18	5	4	4	1	0	2	**Jun-20**
2017/2018	Homeless Prevention Assessment	Oct-18	4	2	2	2	0	1	**Jun-20**
2017/2018	Health and Safety Assessment	Mar-19	3	3	3	0	0	2	**Complete**
2017/2018	Housing Process Assessment	Mar-19	5	5	5	0	0	4	**Complete**
2017/2018	IT Portfolio Management and Project Management Assessment	Mar-19	4	3	3	1	0	0	**Apr-20**
2017/2018	Class Replacement Pre-implementation Project Review (Progress Memo #1)	Jun-19	2	1	1	1	0	0	**Apr-20**
2017/2018	Construction Procurement Process Assessment	Aug-19	8	8	8	0	0	8	**Complete**
Sub-total 2017/2018 reports			**34**	**29**	**29**	**5**	**0**	**18**	
2019	IT Security Assessment: Agencies, Boards, Commissions and Corporations	Nov-19	1	0	0	1	0	0	**Sep-20**
2019	Electronic Fund Transfer Assessment	Feb-20	1	0	0	1	0	0	**May-20**
2019	Class Replacement Pre-implementation Project Review (Progress Memo #2)	Feb-20	4	0	0	4	0	0	**Jun-20**
2019	Computerized Maintenance Management System (CMMS) Review	Feb-20	9	0	0	9	0	0	**May-20**
2019	Dearness Home Process Assessment	Feb-20	4	0	0	4	0	0	**Mar-21**
Sub-total 2019 reports			**19**	**0**	**0**	**19**	**0**	**0**	
Total High and Medium observations			**53**	**29**	**29**	**24**	**0**	**18**	

Closed per Management: Management has indicated that action plans due to be acted upon by March 2, 2020 are complete.
Closed per IA: Internal Audit has validated Management's assertions of observation closure through review of evidence.
In Progress Observations: Management action plans due beyond March 2, 2020 are underway or management has asserted observations are closed but Internal Audit has not yet validated.
Past Due Observations: Actions plans due by March 2, 2020 have not been fully acted upon.
Observations Closed by Internal Audit since last update: Management has indicated in the current period that action plans are complete and Internal Audit has validated through review of evidence.

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The Corporation of the City of London

January – December 2019 internal audit dashboard as at March 2, 2020

Project status – 2019 internal audit plan

2019 Audit plan project	Percent complete		Est. timeframe[1]	Project status	Report issued
Parking enforcement assessment	▇	100%	Jun – Aug		●
Smart City Office pre-implementation assessment	▇	25%	Aug – Dec	DL*	○
Electronic fund transfer compliance assessment	▇	100%	Sept – Nov		●
Dearness Home process assessment	▇	100%	Nov – Jan		●
IT cyber risk workshop	▇	100%	Jun – Jul		●
Computerized Maintenance Management System (CMMS) pre-implementation review	▇	100%	Sept - Nov		●
IT security assessment: Agencies, Boards, Commissions and Corporations	▇	100%	Jul – Sept		●
Class replacement pre-implementation project review	▇	100%	Ongoing		●

OT – On track   DF – Deferred   DL – Delayed

Internal audit activities – March to June 2020

- Activities as part of the 2020 internal audit plan to be conducted.

Other activities

- Prepare Audit Committee meeting materials
- Observation follow-ups and validation

2019 Performance metrics

Project customer satisfaction

Overall quality of work/satisfaction level? (Based on completed reports surveys returned)

1   3   5
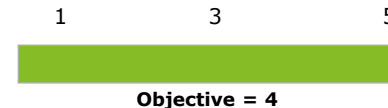
Objective = 4

% Complete of the 2019 internal audit plan

87% complete
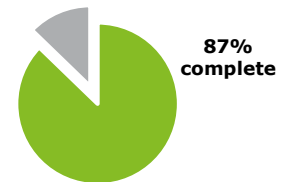
Internal audit 2019 reporting

	Draft (days)	Management comment (days)	Issue final (days)	Final (days)
• **Objective**	5.0	15.0	10.0	30.0
• **Performance**	7.8	48.5	8.5	57.0

Comments

[1] Agreed timing with management to scope project and kick-off fieldwork

* Due to changes in Smart City Office management, the project is currently on hold.

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The Corporation of the City of London
January – December 2020 internal audit dashboard as at March 2, 2020

Project status – 2020 internal audit plan

2020 Audit plan project	Percent complete		Est. timeframe[1]	Project status	Report issued
• Service London assessment		40%	Jan – Mar	OT	◯
• Traffic Management Project review		0%	Apr – Jun	OT	◯
• Clerks Office assessment		5%	Jun – Aug	OT	◯
• Fire Process assessment		0%	July – Sept	OT	◯
• Class replacement pre-implementation project review		90%	Ongoing	OT	◯

OT – On track   DF – Deferred   DL – Delayed

Internal audit activities – March to June 2020

- Service London assessment (fieldwork and reporting)
- Traffic Management Project review (scoping and fieldwork)
- Clerks Office assessment (scoping and fieldwork)
- Class replacement pre-implementation project review (reporting)

Other activities

- Prepare Audit Committee meeting materials
- Observation follow-ups and validation

2020 Performance metrics

Project customer satisfaction

Overall quality of work/satisfaction level? (Based on completed reports surveys returned)

1   3   5
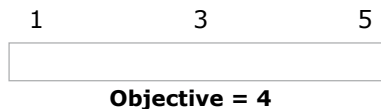
Objective = 4

Internal audit 2020 reporting

	Draft (days)	Management comment (days)	Issue final (days)	Final (days)
• **Objective**	5.0	15.0	10.0	30.0
• **Performance**	N/A	N/A	N/A	N/A

% Complete of the 2020 internal audit plan
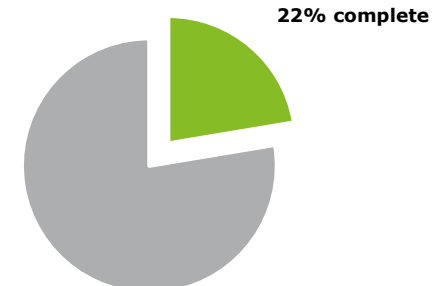
22% complete

Comments

[1] Agreed timing with management to scope project and kick-off fieldwork

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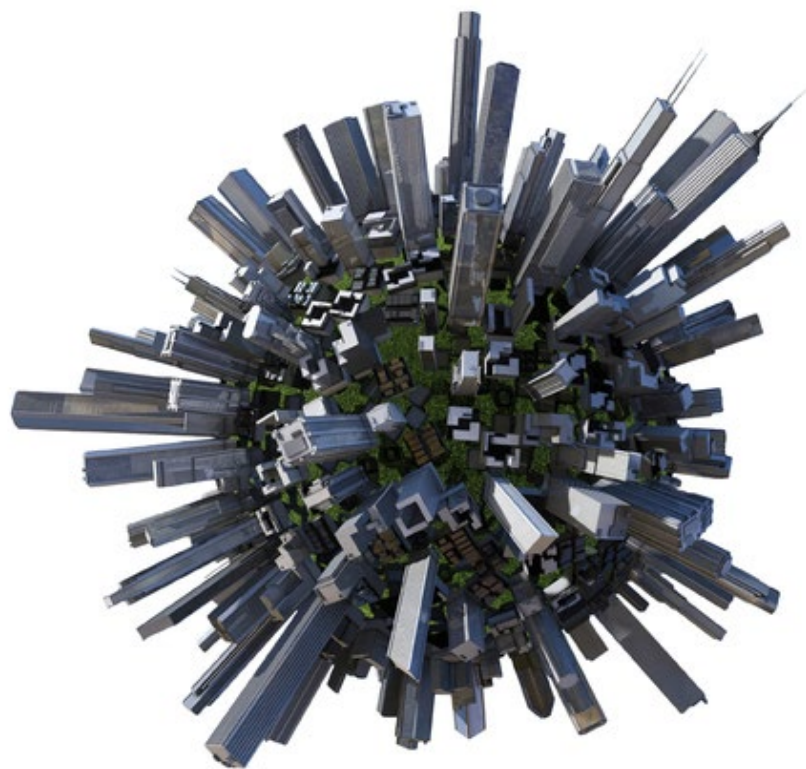
**Electronic Fund Transfer (EFT)
Compliance Assessment**
The Corporation of the City of London

February 2020

Agile Internal Audit Report

Executive Summary

Background

The City of London (the "City") Finance department is responsible for the Electronic Fund Transfer (EFT) process, including wire transfers. EFTs are used by the City to facilitate payments for goods, services and payroll. In 2019, significant upgrades were made to move wire transfers from fax-based to the ScotiaConnect system. Associated process changes have been made to align with the change in EFT system.

Below are the review's scope, objectives, and noted strengths:

Scope and objectives

The objective of this engagement was to review and assess the City's control framework surrounding outbound EFTs, specifically including:

- Reviewed inbound/outbound activities for adequate documentation, segregation of duties, policy compliance and timely processes;
- Evaluated signing officer activities to review and authorize wire transfers;
- Reviewed user access permissions related to EFTs;
- Reviewed process to reconcile bank account to GL for wire transfers; and
- Assessed management oversight activities over EFT process, including monitoring of financial activity and policy compliance.

Strengths:

- **Outbound transfer processing:** Processes for outbound EFTs and wire transfers ensure adequate segregation of duties, process documentation, compliance with applicable policy requirements, and timely processing.
- **Signing officer activities:** Procedures in place for the review and authorization of EFTs and wire transfers ensure effective prevention and detection of errors.

Highlights

A compliance assessment of the EFT process identified the following areas of continued enhancement:

- Standard operating procedures for the review of the ScotiaConnect system user access has not been established, including the cadence of the user access review. Furthermore, documentation is not maintained to evidence the completion of a user access review which results in no audit trail to validate that follow-up actions have been addressed;
- A standardized method for the completion check sign-off on Accounts Payable Batch Reports has not been established; and
- A leading practice was identified to enhance the procedures for reconciliation write-offs.

Risk priority heat map

This chart maps observations based on priority and anticipated ease of implementation of our recommendations.
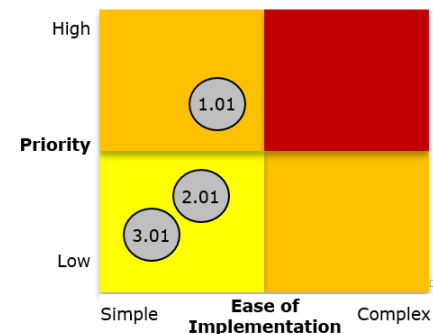
Summary of key results

For the exceptions identified, Management should address the following recommendations:

1. formally document and implement standard operating procedures for the user access review of the ScotiaConnect system;
2. consider revising the "Authorization" sign-off on Accounts Payable Batch Reports to reflect that an invoice and data accuracy check is what has been performed, and implement a standardized sign-off procedure.
3. expand upon the current procedures related to the stale dating and writing off cheques to include dates and an escalation process prioritizing high value outstanding amounts to ensure that these items are monitored and do not remain on the reconciliation for extended periods of time.

Detailed Observations

1. User Access Permission Reviews

Observation	Recommendation	Management response
EFTC 1.01 – User access review of the ScotiaConnect system The ScotiaConnect system is not a part of the City of London IT ecosystem and is not governed by the IT Service Management (ITSM)/Access & Identity Management (AIM) process. Management performs individual reviews of user access for the ScotiaConnect system when users are added or removed, which occurs on an as needed and infrequent basis, with a full monthly review. However, standard operating procedures for the review of the ScotiaConnect system user access have not been established, including the cadence of the user access review. Furthermore, documentation is not maintained to evidence the completion of a user access review which results in no audit trail to validate that follow-up actions have been addressed. **Implication:** Lack of documented standard operating procedures could lead to ineffective, inefficient, or duplicated processes and may restrict new and existing staff from fully understanding relevant processes and controls when undertaking their responsibilities.	**EFTC 1.01 – User access review of the ScotiaConnect system** Management should formally document and implement standard operating procedures for the user access review of the ScotiaConnect system. Included in this document would be the outline of the user access review procedures, the timeline to complete (at least on an annual basis), and how to evidence the results of the review. For example, the evidence maintained could be documented meeting minutes of user access review during quarterly meeting with the bank or email approval of the user population, and completed follow-up of any outstanding actions.	**EFTC 1.01 – User access review of the ScotiaConnect system** **Management agrees.** Management agrees with the recommendation noting that all ScotiaConnect system security has been reviewed and restructured over the past eight months (Jan-July 2019) as banking processes were updated and modernized. Management is currently undertaking the necessary steps to formalize both process and documentation related to maintaining security within the ScotiaConnect system. **Responsible party**: *Melissa McErlain, Manager, Accounts Payable* **Timing**: *May, 2020*

(Priority label in left margin of Observation cell: **Medium Priority**)

2. Electronic Fund Transfer Authorizations

Observation	Recommendation	Management response
EFTC 2.01 – Accounts Payable Batch Report sign-off format	**EFTC 2.01 – Accounts Payable Batch Report sign-off format**	**EFTC 2.01 – Accounts Payable Batch Report sign-off format**
Through review of documentation and discussions with key personnel, Internal Audit noted that the "Authorization" sign-off on the Accounts Payable Batch Reports represents the performance of invoice batch data validation, post-entry.	Management should consider revising the "Authorization" sign-off on Accounts Payable Batch Reports to reflect that an invoice and data accuracy check is what has been performed. In addition, implement a standardized sign-off procedure to note that this check has been completed. This will reduce confusion and provide a clear understanding of the purpose of the check.	**Management agrees** Management agrees with the recommendation noting that the Accounts Payable Batch Report is used as the cover page for the duly authorized source documents, which follow a standard process. The Accounts Payable Batch Report is used by both internal and external areas processing and assembling accounts payable batches. The difference in use of the report is determined by where the person entering and preparing the batch is physically located. All authorizations must be completed on the backup (invoice, purchase receiver, payment certificate etc.). Management will undertake the necessary steps to update the Accounts Payable Batch Report to include wording that covers all streams.
If the invoice batch is entered centrally, the sign-off for the data check of the invoices is noted in the top right-hand corner, and the "Authorization" sign-off line is left blank.		
If the invoice batch is entered de-centrally, the sign-off for the performance of the completion and data check of the invoices is on the "Authorization" line.		
Implementing a standardized use and wording to cover all streams for the Accounts Payable Batch Report is recommended.		
During the review, no instances were found with an inappropriate authorization on the backup/source documentation.		**Responsible party**: *Melissa McErlain, Manager, Accounts Payable*
Implication: Unclear authorization labeling and non-standardized sign-off methods is misleading to a reviewer, and may cause confusion as to what has been approved for payment.		**Timing**: *June, 2020*

Low Priority

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3. General Ledger Reconciliation

Observation	Recommendation	Management response
EFTC 3.01 – Reconciliation write-offs	**EFTC 3.01 – Reconciliation write-offs**	**EFTC 3.01 – Reconciliation write-offs**
In review of the two most recently completed reconciliations (May and June 2019), Internal Audit noted that although there were no outstanding items related to EFTs, there were stale dated items that were up to a year overdue. The Accounting Manager will meet with the department responsible for the item. **Implication:** There is risk the City may inefficiently spend limited AP resources to follow-up on low value stale dated items without direction on escalation and prioritization.	Management should expand upon the current procedures related to the stale dating and writing off cheques to note dates and include an escalation process prioritizing high value outstanding amounts to ensure that these items are monitored and do not remain on the reconciliation for extended periods of time. Increasing the dollar threshold should also be considered.	**Management agrees** Management agrees with the recommendation noting that there were procedures in place at the time of the audit that included timeframes for review. Due a number of factors including staff turnover, year-end activities and several new ScotiaConnect system processes coming on-line, the reconciliation of stale dated cheques was given a lower priority. As of September 2019 all items are up-to-date and the quarterly schedule for review has resumed. The procedures will be updated to include an escalation process, an order of operation scale for priority which will include higher dollar amounts and other factors as well as a threshold for investigation.

(Left margin, vertical text: Leading Practice)

Appendix 1 – Internal Audit rating scale

Internal audit observations and recommendations are prioritized on the following basis.

	Description	Definition
	High	Observation is high priority and should be given immediate attention (e.g. 0-3 months) due to the existence of either significant internal control risk or a potential significant operational improvement opportunity.
	Medium	Observation is a moderate priority risk or operational improvement opportunity and should be addressed in the near term (e.g. 3-6 months).
	Low	Observation does not present a significant or medium control risk but should be addressed (e.g. within a 6-12 month timeframe) to either improve internal controls or process efficiency.
	Leading Practice	Consideration should be given to implementing recommendations in order to improve the maturity of the process and align with leading practices.

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The Corporation of the City
of London
Dearness Home Process Assessment

Audit Performed: October 2019 – November 2019
Report Issued: February 2020

Table of contents

Executive summary

Background
The Dearness Home is a municipal long-term care facility that is owned and operated by the Corporation of the City of London (the "City"). It is the sole long-term care facility operated by the City. An administrative services and consulting agreement with Extendicare, which had been in place since 2012, ended in 2018.

The Dearness Home strives to enrich the lives of its residents and the community through the provision of the following programs: assisted living, senior care, dietary and nutritional services, recreation and therapy services, day programs, social work and spiritual care.

Objectives and scope
As part of the 2019 Internal Audit Plan, an assessment of Dearness Home's processes were conducted. The purpose and objective of this review was to assess the existing structure, delegation of responsibilities, and understanding of roles and responsibilities for administration/clerical roles, as well as the processes and controls in place for operational management within the Dearness Home. The assessment also reviewed admissions, policies, scheduling and staff training.

The detailed internal audit scope can be found in *Appendix 1: Internal audit detailed scope* of this report.

Strengths
In completion of this assessment, we identified the following areas of strength.

Commitment to improvement	Understanding of roles	Admissions process	Shared purpose to provide resident care
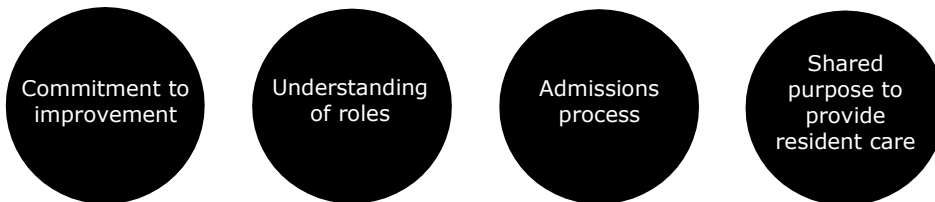
Areas for continued enhancement
Based on our assessment of Dearness Home's processes, we identified four medium priority observations that management should consider going forward. Please refer to *Appendix 2: Internal Audit rating scale* for definitions of the four-point scale below.

High priority	Medium priority	Low priority	Leading practice
0	4	0	0

Priority	Observation item	Observation description
Medium	DHPA 1.01	**Organizational design and culture**: Due to past reorganizations, a misalignment between culture and business objectives exists within the Administrative roles. Employees currently are not experiencing a connectedness to or ownership of the values and beliefs of Dearness Home.

Medium	DHPA 1.02	**Cross training:** There is an opportunity for formal cross training to be established beyond that of clerks in similar functions.
Medium	DHPA 2.01	**Standard operating procedures:** There are a limited number of documented standard operating procedures (SOPs) recorded for clerk roles in the Home.
Medium	DHPA 3.01	**Digitization of manual processes and documents:** There is reliance on manual, paper-driven processes and documentation in the Administration unit.

Priority heat map

Based on our assessment of Dearness Home's processes, the following image maps the areas of continued enhancement based on priority and anticipated ease of implementation.
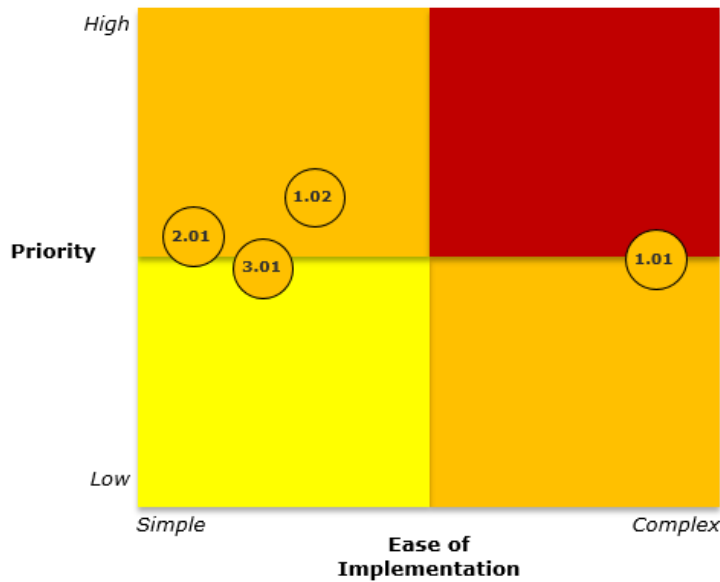
Conclusion

Based on our assessment of Dearness Home's processes, we have identified four weaknesses that should be addressed to improve process efficiency and effectiveness. The identified considerations and observations noted in this report should be addressed in a timely manner to enhance current controls and mitigate relevant risks.

Management is in agreement with and has provided action plans for all observations noted in the 'Detailed observations and recommendations' section.

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Strengths

In the completion of this assessment, internal audit noted the following areas of strength:

Commitment to improvement: Management has demonstrated commitment to improving operating processes across Administrative roles. Specifically management has implemented an operations metrics tracking system, where specific operational data points are tracked and subsequent strengths and weaknesses are identified and dealt with.

Understanding of roles: Administration staff adequately understand their current roles and responsibilities, as well as reporting lines. This understanding enables Administrative staff to successfully perform their assigned duties such as admissions processing, daily census reporting and staff scheduling.

Admissions processes: Dearness Home has a well-defined admissions process. This process incorporates controls such as ensuring that only the most up to date records are reviewed when assessing resident applications, two thorough layers of review of resident applications and the use of definitive timeframes for actions to ensure compliance with timeliness in the admissions process. As well, this process has been set-up with management and the Local Health Integration Unit (LHIN) to maximize effectiveness and confirm that required standards are met.

Shared purpose to provide resident care: Management and administrative staff have a unified purpose to provide the best possible service to their residents. This goal was noted by staff interviewed during the audit and further observed in our review of the admissions process. Such a unified purpose is vital to the success and provision of quality service in a long-term care facility.

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Areas for continued enhancement

In completing the procedures noted in *Appendix 4: Audit procedures performed*, internal audit identified the following areas for continued enhancement:

DHPA 1.0 – Organizational design	
Medium Priority	**DHPA 1.01 – Organizational design and culture**
Observation	Due to past reorganizations, a misalignment between culture and business objectives exists within the Administrative roles. Currently, employees are not experiencing a connectedness to or ownership of the values and beliefs of Dearness Home. As well, there is not a collective focus on collaboration, teaming and cooperation within the operations of the roles reviewed. It has been observed that there is an awareness of cultural barriers leading to business performance issues. Current management has implemented strategies to fix this with actions such as revising the employee rounding process to improve employee engagement and overall morale, and metrics tracking to identify where challenges exist. However, a prior history of changes that have been reactive rather than proactive has created impediments to achieving strategic objectives. Specific barriers identified through the audit include a perceived inequality in the delegation of activities and reporting lines between Clerks, and siloes of activities which have resulted in a lack of customer focus and alignment to the core values of Dearness Home.
Implication	Misalignment between an organization's values, employee behaviors and/or organizational systems may result in sub-optimal employee performance, employee disengagement, low employee retention, decreased focus on service delivery and difficulty achieving strategic goals.
Recommendation	From the perspective of continuous improvement and the opportunity to increase the quality service delivery to residents, management should implement the following: • Perform a job activity analysis or time study to obtain key data points on the duties of each Clerk and reorganize responsibilities to maximize efficiency. This will create a sense of pride and connectedness to tasks; • Ensure operational plans proactively address issues with engagement and employee experience, as well as, agility, digitalization, ways of working and organizational design that supports long term success; • Ensure that core values and strategic objectives are well communicated to develop a commitment and understanding of role specific values; and • Maintain a strong point of contact with City of London Human Resource Partners to ensure that the uniqueness of Dearness Home's operations is appropriately considered.

Management comments	Management agrees with the observation and recommendation. Management will meet with HR to discuss the report and to seek the necessary support to realize the action plan. The outcome for Q1 2020 is for HR to understand the action plan and be engaged in supporting and enabling improvements. In Q1 2020 management will also meet with clerical staff and their union to discuss this report and future actions. Management will communicate core values and strategic objectives to Clerical staff and work to achieve improved engagement, equitable work distribution, more efficient processes and enhanced employee experience. To seek practical, actionable improvements, management will engage external consultants with long-term care experience to conduct an activity study, identify possible process enhancements, suggest metrics to track progress, and to recommend optimization strategies and implementation plans. Following the steps above, analysis will be conducted by senior Home and City leadership, HR, and Finance to ensure that organizational systems enable clerical staff to fully support business objectives and the values and beliefs of the Dearness Home.
Responsible party and timing	*Leslie Hancock, Administrator - Long Term Care – Dearness Home* *March 2021*

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DHPA 1.0 – Organizational design	
Medium Priority	**DHPA 1.02 – Cross training**
Observation	There is a lack of formal cross training established beyond that of clerks in similar functions. Employees have had informal cross training from peers to cover key aspects of their role during an absence or leave. However, this informal cross training does not ensure that all priority activities are completed in a timely manner during an absence. For example, tasks such as admissions tours, admissions metrics tracking and the filing of Long-Term Care Ministry claims may not be performed when the employees who perform these duties are absent.
Implication	A lack of sufficient employee cross training could lead to inefficiencies and/or a lack of key processes being performed in the absence or loss of staff in key roles.
Recommendation	Management should identify key prioritized tasks and roles performed, as well as appropriate back-up and second line back-up with the skills and capabilities to perform these activities, and ensure that formalized cross training occurs. This could include offering mandatory learnings on duties, the provision of relevant standard operating procedures needed to complete the role and annual check-ins to ensure that knowledge required to effectively complete the role is sufficient. Furthermore, Management could consider including a requirement for formal cross training in current job descriptions, to ensure that staff with relevant skill-sets and training are covering specific activities during staff absence or leave.
Management comments	Management agrees with the observation and recommendation. Management will work with stakeholders to identify cross training opportunities for Clerical roles to ensure business continuity, maintenance of high quality services and job satisfaction. The goal of these activities is to achieve a future state where the Clerical roles are flexible, mutually supportive, and aligned with the Home's strategic plan and vision.
Responsible party and timing	*Leslie Hancock, Administrator - Long Term Care – Dearness Home* *March 2021*

DHPA 2.0 – Policies and Procedures	
Medium Priority	**DHPA 2.01 – Standard operating procedures**
Observation	A limited number of documented standard operating procedures (SOPs) exist for Clerical roles in the Home. While an existing SOP library exists with formal SOPs for finance processes, operating procedures for key processes that Clerks perform are either informally documented or non-existent. For example, processes for staff scheduling, completion of daily census reporting and patient admissions processes do not have documented SOPs, and these are key processes that must be performed accurately, completely and timely to ensure compliance with regulations mandated by the Ministry and operational effectiveness.
Implication	A lack of documented SOPs could lead to ineffective, inefficient, or duplicated processes. As well, this may restrict new and existing staff from fully understanding relevant processes and controls when undertaking their responsibilities.
Recommendation	Management should expand upon the existing SOP library and undertake formally documenting all relevant processes in SOPs, including staff scheduling processes, daily census reporting processes and patient admissions processes. Furthermore, a cycle should be established to regularly review and revise SOP documentation. When preparing to document an SOP and creating a review cycle, Management should consider the following: • Generating an inventory of all relevant SOP documents; • Storing all relevant documentation centrally for ease of access using a Corporate approved database (e.g., SharePoint, etc.); • Utilizing version control including documenting the date of last revision with Management approval to clearly articulate completion of any review and revision; and • Adopting a schedule with assigned responsibility to regularly review and revise standard operating procedures and guidelines at minimum annually.
Management comments	Management agrees with the observation and recommendation. Management will create a complete set of current state SOPs for clerical roles by working with stakeholders to capture existing processes. As the improvements are implemented and efficiencies are realized, work will continue to define and capture those revised processes. To house this material, Dearness Home will expand upon and improve the functioning library of SOPs already established, which is centrally stored and accessed according to role. The enhanced SOP library will be an invaluable reference tool that will ensure consistent practice and also enable fast and reliable instruction (during cross training and in the orientation of new staff).
Responsible party and timing	*Leslie Hancock, Administrator - Long Term Care – Dearness Home* *March 2021*

DHPA 3.0 – Process digitization	
Medium Priority	**DHPA 3.01 – Digitization of manual processes and documents**
Observation	There is reliance on manual, paper-driven processes and documentation within the Administration unit. Specifically for administrative and clerical tasks where private and confidential resident information is not handled, such as admissions package compilation, admissions metrics tracking, nursing call-in logging and guest sign-in logging. The output from these tasks is recorded on paper and stored in binders.
Implication	A reliance on manual, paper-driven processes leads to inefficiencies in the performance of tasks, increased time and effort required to draft and locate information, an increased risk of data loss and an increased risk for a privacy breach if paper documentation is misplaced or not secure.
Recommendation	Management should identify key administrative and clerical tasks that are manual and/or paper-based and digitize these using technology that is currently available in the Dearness Home. Management should consider the following: • Compiling admissions packages electronically via PDF; • Tracking admissions metrics via excel and saving the results locally in an access controlled folder on a shared network; • Converting nursing call-in logs to electronic documents and saving them locally in an access controlled folder on a shared network; • Daily scanning of guest sign-in logs and storing these locally in an access controlled folder on a shared network; and • Utilization of extended features in PointClickCare such as, admissions process automation, performance insight tracking and analytics.
Management comments	Management agrees with the observation and will work to realize the opportunities identified in the recommendation. Building on recent success in using continuous improvement methodology to deploy text based scheduling, Dearness Home will continue to increase the use of technology. Opportunities to use technology to enhance efficiency and optimize service will be identified through stakeholder input, data collection and recommendations from the consultants. Management will ensure these process improvements are aligned with the goals of Dearness Home and the City.
Responsible party and timing	*Leslie Hancock, Administrator - Long Term Care – Dearness Home* *March 2021*

Appendix 1: Internal Audit detailed scope

Specifically, the internal audit addressed the following areas:

A review and assessment of the operational framework for administration/clerical roles at Dearness Home:
- ✓ Reviewed the existing structure of administration/clerical roles at Dearness Home and assessed the delegation of responsibilities for optimal workflow and service delivery;
- ✓ Assessed whether roles, responsibilities, and reporting lines are documented, maintained and adequately understood by administrative staff;
- ✓ Reviewed and assessed procedures to maintain adequately skilled administrative staff through training, development coaching, and cross-training;
- ✓ Evaluated administrative service delivery strategies including service delivery metrics and quality improvement initiatives; and
- ✓ Reviewed and assessed existing administrative policy management practices for effectiveness and determined whether policies are designed in an effective and standardized format.

A review and assessment of the efficiency and effectiveness of Dearness Home admissions processes and internal controls:
- ✓ Assessed operational procedures and internal controls related to resident intake and discharge, services enrolment, and waitlist management to ensure procedures and internal controls are designed effectively, efficiently and are outcome driven; and
- ✓ Reviewed and assessed the Dearness Home admissions processes, such as facility tours, file management and other general client administration.

Appendix 2: Internal Audit rating scale

Individual observation prioritization

Internal Audit has prioritized each observation and recommendation within this report using a four point rating scale. The four point rating scale is as follows:

Description		Definition
	High	Observation is high priority and should be given immediate attention due to the existence of either significant internal control risk or a potential significant operational improvement opportunity.
	Medium	Observation is a moderate priority risk or operational improvement opportunity and should be addressed in the near term.
	Low	Observation does not present a significant or medium control risk but should be addressed to improve either internal controls or process efficiency.
	Leading Practice	Consideration should be given to implementing recommendations in order to improve the maturity of the process and align with leading practices.

Appendix 3: Stakeholder involvement

In conducting this assessment, the following management and staff were interviewed to gain an understanding of Dearness Home's processes and practices.

Stakeholder	Position	Division
Leslie Hancock	Administrator	Long Term Care – Dearness Home
Jason Westbrook	Manager, Business Planning Process	Long Term Care – Dearness Home
Janice Brown	Financial Business Administrator	Financial Business Support

Various – Deloitte met with various administrative/clerical staff to gather an in-depth understanding of the operational framework for administration/clerical roles at Dearness Home and performed audit procedures.

Appendix 4: Audit procedures performed

As part of the Dearness Home Process Assessment, the following procedures were performed:
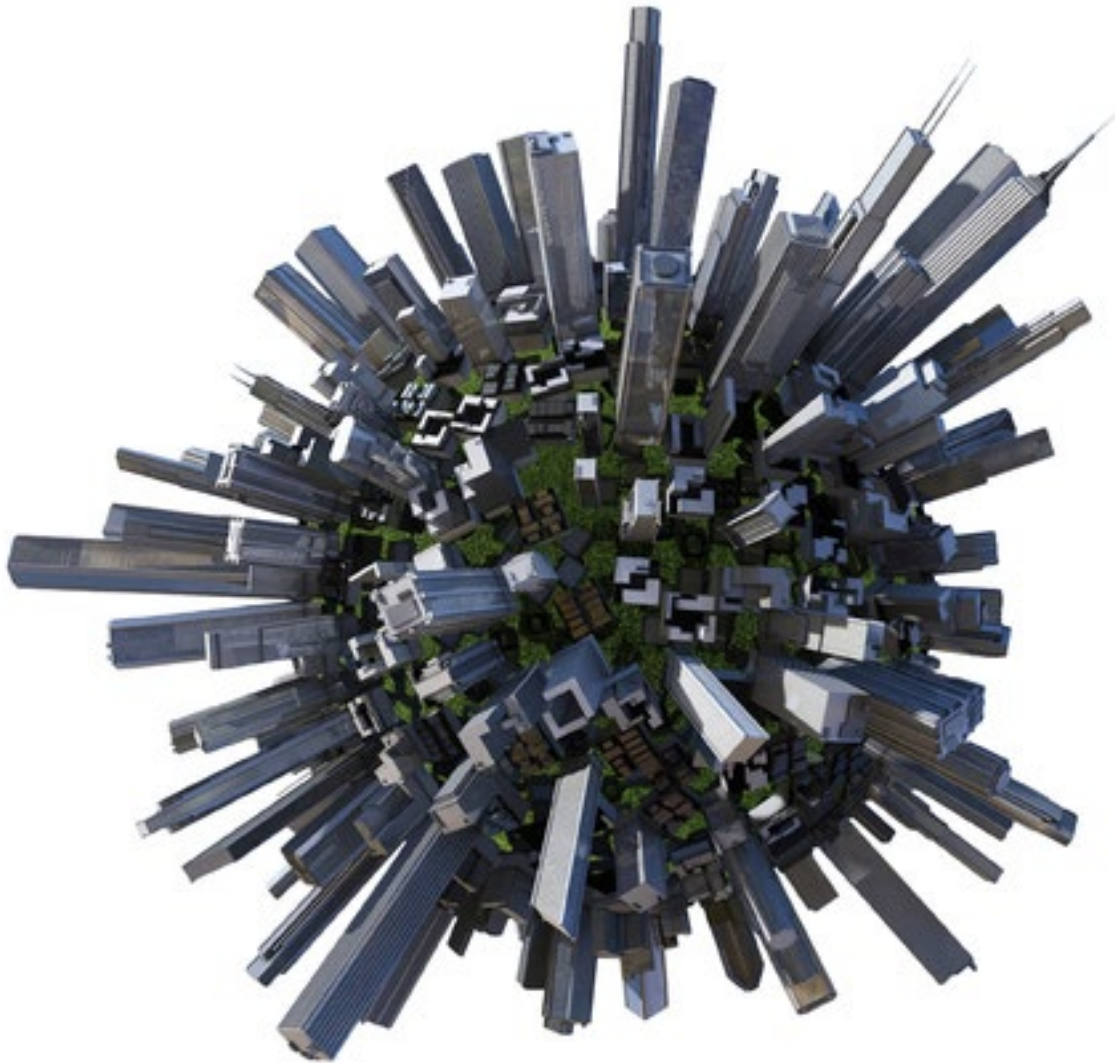
- ✓ Conducted a planning meeting with the Administrator;
- ✓ Updated and issued a finalized Project Charter and request for information;
- ✓ Conducted meetings and interviews with City management and staff to obtain an understanding of Administrative and Admissions staff duties, processes and controls within Dearness Home;
- ✓ Obtained documentation regarding relevant procedures and controls to perform an inspection of:
  - Existing structure and delegation of duties within administration/clerical roles;
  - Administrative, orientation, training, admissions and corporate policies and procedures;
  - Current business plan; and
  - Management materials and communications.
- ✓ Conducted sample testing activities related to admissions activities;
- ✓ Drafted preliminary observations and verified observations with management;
- ✓ Conducted a closing meeting with key management stakeholders to validate and communicate our findings; and
- ✓ Issued this internal audit report with our detailed observations.

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The Corporation of the City of London

2020 - 2022 Internal Audit plan

Approved by Audit Committee: November 6, 2019

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Background

Overview

The City of London ("City") continues to focus its efforts on creating a City that is connected to the world as a leader in commerce, culture and innovation. The City of London continues to build a respected and inspired public service partnership with the following initiatives:

- Strengthening the City of London community
- Building a sustainable City
- Growing the City economy
- Creating a Safe London for women and girls
- Leading in public service

As result of these priorities for the City, the Internal Audit Plan focuses on assessing the impact of these and other changes on the control frameworks for the City. The enclosed Audit Plan is for the period January 2020 - December 2022 and was developed using a combination of critical end-to-end business process coverage, understanding of the City of London environment, understanding of key industry risks, discussions with the Senior Leadership Team (SLT) and members of the Audit Committee, and past audit coverage and results.

The 2020 budget for the proposed plan is $250,000.00. The plan includes utilizing core business process and IT auditor resources, supplemented by Deloitte subject matter advisors for certain audits to assist with providing value-added recommendations to the Audit Committee and management.

Objectives

Our overall objectives in executing the proposed 2020 internal audit plan include the following:

- Assist the City Audit Committee and SLT in fulfilling their oversight responsibilities; and
- Provide independent, objective audit and advisory services designed to add value and improve the effectiveness of the City's control, compliance and governance processes

This will be achieved through the execution of the internal audit plan, which could include a variety of projects covering areas such as:

- Validating that the tone of leadership as set by SLT reflects appropriate risk and control consciousness and accountability, consistent with the City's values

- Monitoring and evaluating the effectiveness of the City's control activities

- Validating that management in each division provides effective monitoring and oversight of processes and activities while balancing risk, cost and benefit

- Reviewing the reliability and integrity of financial and operating information, and the means used to identify, measure, classify and report such information

- Reviewing the systems and processes established to ensure compliance with those policies, plans, procedures, laws and regulations which could have a significant impact on City of London operations

- Assessing whether resources and assets are adequately protected against loss or misappropriation

- Reporting on observations raised during the course of our audits and reviews and on any identified incidents of internal and/or management fraud; and

- Facilitating the proper level of coordination between Internal Audit, the Audit Committee, external auditors, service reviews and Lean Six Sigma reviews

Role of Internal Audit

As defined by the Institute of Internal Auditors (IIA), "Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes."

It is management's responsibility to establish, maintain and provide primary assurance to the Committee that appropriate internal control, risk management and governance practices have been put in place within the organization, to reduce business risks to an acceptable level and to ensure that programs are delivered and transactions are executed in accordance with applicable acts, legislation and corporate policies. Internal Audit's role is to provide independent assessment that the practices have been designed appropriately and are operating effectively.

The Institute of Internal Auditors notes that the internal audit function can conduct both assurance services as well as advisory services. Assurance services involve the provision of an objective assessment of internal control, risk management and/or governance practices, often involving the assessment of compliance with policies, procedures and standard operating practices. Advisory services typically involve the conduct of broader business process and efficiency reviews as well as providing support to management in executing its strategies and initiatives, and improving business process performance. When performing advisory services, the internal audit function must maintain objectivity and not assume management responsibility for decision-making.

Internal Audit plan methodology and risk framework

Internal Audit plan methodology

The Internal Audit plan methodology and approach draws upon the results of the risk assessment activities and audit risk universe development activities. As part of our approach, we have inquired through discussion about the current priorities at the City to determine the higher risk audit universe areas and developed a prioritized audit plan to address those risks. Our Internal Audit approach also supports a risk-based approach.

Risk framework

The Internal Audit program is designed to provide a more systematic means for determining whether risks are effectively assessed, measured, managed, aggregated, and reported. Below is the risk framework developed by Internal Audit based on our industry knowledge and information gained through the risk assessment process, built to identify the key risks to the City. Based on the internal audit planning process the bolded risks are the highest priority for the City.

Please see Appendix A: Risk framework for risk definitions of the risks depicted below.

Environment risk

Stakeholder wants	**Technological innovation**	Government Policy
Regulatory	**Capital availability**	Catastrophic loss

Process risk

Operations	**Empowerment**	**Financial**
Citizen satisfaction	Leadership	Liquidity
Citizen fraud	Authority	
Human resources	Change readiness	
Capacity	Accountability	
Partnering	Culture	
Compliance	**Integrity**	**Information processing/ technology**
Business interruption		
Health and safety	Illegal acts	Relevance
Security	**Reputation**	**Integrity**
Legal		**Access/Security breach**
		Infrastructure
		Cyber

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Information for decision-making risk

Process/operational	Organizational reporting	Environment/strategic
Contract commitment	**Budget and planning**	Environmental scan
Performance measurement	Accounting information	Performance measurement
Organizational alignment	Taxation	Planning
	Regulatory reporting	
	Compensation and benefits	

Audit universe

Internal Audit performs audits and reviews from a process and departmental standpoint. In order to organize and better report on results of internal audits, we have prepared an Internal Audit Universe with an initial mapping of the Universe to the key risks in the risk framework for the City.

This universe is also meant to depict the full scope of areas that could be audited by Internal Audit. Going forward, this universe can be used to demonstrate the coverage provided by the Internal Audit function over time.

Please see Appendix A: Risk framework for risk definitions.

	Internal Audit Universe Areas		Risks
Corporate Services	**Solicitor**	• Regulatory • Government Policy • Reputation	• Compliance • Illegal Acts • Catastrophic loss
	Human Resources	• Human Resources • Health and Safety • Reputation • Accountability • Security	• Compensation and Benefits • Illegal Acts • Capacity • Leadership • Organizational alignment
	Finance and Treasury	• Liquidity • Taxation • Capital Availability • Reputation	• Budgeting and Planning • Accounting Information • Regulatory Reporting
	Information Technology	• Relevance • Integrity • Change Readiness • Reputation • Cyber	• Access/Security Breach • Infrastructure • Technological Innovation • Business interruption
	Corporate Communication	• Partnering • Reputation	• Contract Commitment
	Economic Innovation	• Partnering • Reputation	• Change Readiness • Revenue Generation
	Emergency Planning	• Partnering • Reputation	• Change Readiness • Health and Safety
Administration	**Planning**	• Planning	• Environmental Scan
	Development and Compliance Services	• Regulatory • Government Policy • Reputation	• Compliance • Partnering • Contract Commitment
	Engineering	• Planning • Environmental scan	• Regulatory • Reputation

	Internal Audit Universe Areas		Risks
Services	**Housing**	• Health and Safety • Stakeholder wants • Reputation	• Government Policy • Infrastructure
	Environmental	• Regulatory • Government Policy	• Government Policy • Reputation
	Social Services	• Health and Safety • Reputation	• Government Policy
	Dearness Home	• Health and Safety • Reputation	• Stakeholder wants
	Neighbourhood & Children services	• Health and Safety • Reputation	• Stakeholder wants
	Fire	• Health and Safety • Reputation	• Citizen Satisfaction • Partnering
	Service London	• Reputation	• Citizen Satisfaction
Parks & Recreation	**Parks & Recreation**	• Health and Safety • Reputation	• Stakeholder wants • Citizen satisfaction
Agencies, Boards, Commissions and Corporations	**Argyle Business Improvement Area Board of Management**	• Health and Safety • Reputation	• Citizen Satisfaction • Organizational alignment
	Covent Garden Market Corporation		
	Eldon House Corporation		
	Hamilton Road Business Improvement Area		
	Housing Development Corporation		
	Hyde Park Business Improvement Area		
	London Convention Centre Corporation		
	Downtown London Business Improvement Area		
	London Hydro Inc.		
	London & Middlesex Community Housing		
	London Police Services Board		
	London Public Library Board		
	London Transit Commission		
	Middlesex-London Health Unit		
	Museum London		

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Internal Audit Universe Areas	Risks
Old East Village Business Improvement Area	
Elgin Area Water Primary Water Supply System	
Lake Huron Primary Water Supply System	

Summary 2020-2022 Audit Plan by audit universe area

The following table outlines the audit plan summary by Audit Universe area for each of the three years. A full scoping exercise will be performed and documented at the planning stage for each Internal Audit project that will prioritize risk areas to be audited within the allocated budget. Furthermore; the list of projects identified in FY 2021 and FY 2022 is not final and is meant to be a repository of potential projects that internal audit could undertake. This listing will be revisited with the Senior Leadership Team and Audit Committee in late 2020 to select internal audit projects in accordance with the internal audit budget.

Internal Audit Universe Areas		FY 2020 Jan 1 2020 to Dec 31 2020	FY 2021 Jan 1 2021 to Dec 31 2021	FY 2022 Jan 1 2022 to Dec 31 2022
Corporate Services	**Solicitor**	**Clerks Office Assessment:** Assess the effectiveness and efficiency, and as required value for money, of selected processes. The review will also look at operational and management oversight controls within the Clerks Office.		
	Human Resources		**Recruitment Process Assessment:** Assess the recruiting and hiring processes for the City with emphasis on controls, adherence to government requirements, the timeliness and effectiveness of the hiring process.	**HRIS Project Post-implementation Review:** Should the City decide to implement a new HRIS system Internal Audit would evaluate and assess the scope, user requirements and the design of the proposed controls to be established.
	Finance and Treasury		**Environment and Asset Retirement Obligations Assessment:** Assess the processes and controls in place related to the identification, monitoring and reporting of environmental and financial asset retirement obligations,	

Internal Audit Universe Areas	FY 2020 Jan 1 2020 to Dec 31 2020	FY 2021 Jan 1 2021 to Dec 31 2021	FY 2022 Jan 1 2022 to Dec 31 2022
		including compliance with requirements under Section PS 3280.	
Information Technology		**IT Risk Identification Process Assessment:** Evaluate and assess the IT risk identification and assessment process to understand how risks are mitigated and reported.	
Emergency Planning			**Emergency Planning Process Review:** Assess the procedures and controls in place related to the City's emergency planning process. Elements of business continuity and disaster recovery will be considered including the evaluation of end-user requirements.
Administration — **Planning**	***Ongoing project:* Smart City Strategy Implementation:** In accordance with the Smart City Strategy, work with Staff and the IBI Group to develop an approach for creating a strong smart city culture within the Corporation. Help develop a governance model for advancing the strategy in the community.		**Industrial Community Improvement Plan Incentives:** Review Industrial Community Improvement Plan incentives to review best practices, assess value for money generated by these incentives and reviewing the potential for reducing or eliminating these incentives.
Development and Compliance Services		**Assumption and Securities Assessment:** Assess the control framework and processes currently in place for new development and securities.	**Permit of Approved Works Program Review:** Assess the permit of approved works process and control framework in place for issuing permits. Including booking grants for eligible development projects in the permit reporting system.
Engineering	**Traffic Management Project Review:** Evaluate and assess the proposed scope, user requirements and controls established for the Traffic Management system.		**Public Works Process Assessment:** Assess the effectiveness and efficiency of processes and controls in place for

Internal Audit Universe Areas		FY 2020 Jan 1 2020 to Dec 31 2020	FY 2021 Jan 1 2021 to Dec 31 2021	FY 2022 Jan 1 2022 to Dec 31 2022
Services		***Ongoing Project:* Computerised Maintenance Management System (CMMS) Pre-implementation Review:** Evaluate and assess the controls framework proposed and being established.		operational and financial processes within public works.
	Housing			
	Environmental			
	Social Services			**Social Services Process Assessment:** Assess the effectiveness of processes and controls in place for operational and financial processes within social services.
	Dearness Home			
	Neighbourhood and Children services			
	Fire	**Fire Process Assessment:** Assess the processes and controls in place for operational and financial processes within fire services. This audit will evaluate the effectiveness of data reporting and monitoring of key performance indicators.		
	Service London	**Service London Process Assessment:** Review the effectiveness of processes and controls in place for operational and financial processes within Service London.		
Parks &	**Parks & Recreation**	***Ongoing Project*: Class Replacement Project Pre-implementation Review:** Evaluate		

Internal Audit Universe Areas	FY 2020 Jan 1 2020 to Dec 31 2020	FY 2021 Jan 1 2021 to Dec 31 2021	FY 2022 Jan 1 2022 to Dec 31 2022
	and assess the controls framework established for the Class system.		
Agencies, Boards, Commissions and Corporations* — **Argyle Business Improvement Area Board of Management**			
Covent Garden Market Corporation			
Eldon House Corporation			
Hamilton Road Business Improvement Area			
Housing Development Corporation			
Hyde Park Business Improvement Area			
London Convention Centre Corporation			
Downtown London Business Improvement Association			
London Hydro Inc.			
London & Middlesex			

Internal Audit Universe Areas	FY 2020 Jan 1 2020 to Dec 31 2020	FY 2021 Jan 1 2021 to Dec 31 2021	FY 2022 Jan 1 2022 to Dec 31 2022
Community Housing			
London Police Services Board			
London Public Library Board			
London Transit Commission			
Middlesex-London Health Unit			
Museum London			
Old East Village Business Improvement Area			
Tourism London			
Elgin Area Water Primary Water Supply System			
Lake Huron Primary Water Supply System			

* - Agencies Boards, Commissions and Corporations are not within Internal Audit's scope with the Corporation of the City of London. Internal audits of Agencies, Boards, Commissions and Corporations would be recommended separate from this Internal Audit Plan and approved by Audit Committee.

Summary January to December 2020

The Audit Plan has been developed with a view of addressing the highest areas of risk for the City based on our understanding of risks from discussions with the Audit Committee members, Senior Leadership and past audit results and our understanding of industry. Internal Audit will review the results of the risk assessment when reviewing the plan on a quarterly basis to determine if changes are required to the plan to address higher priority risks and any changes to the plan will be presented to the Audit Committee for approval. The following table outlines the audit projects for January to December 2020 with associated budgets.

Internal Audit Plan January 2020 to December 2020	
Projects	**Budget**
Clerks Office Assessment	$45,000
Traffic Management Project Review	40,000
Fire Process Assessment	45,000
Service London Process Assessment	45,000
Ongoing Class Replacement	25,000
Project Management, management meetings and Audit Committee reporting and attendance	35,000
Follow-up of outstanding observations *	15,000
Annual Internal Audit Plan	Nil
Total 2020 Internal Audit Budget	**$250,000**
Actual incurred expenses will be billed in accordance with the engagement letter terms	

* Internal Audit Follow-ups for 2017 to present will be performed in advance of each Audit Committee meeting for outstanding observations that are due and will include verbal updates, validation of status and summary reporting on results of the follow-up.

Appendix A – Risk framework

The following details the risk definitions by risk type that have been mapped in the Audit Universe.

Environmental

Environment risk arises when there are external forces that could affect the viability of the City, including the fundamentals that drive the overall objectives and strategies.

Stakeholder wants risk. Pervasive stakeholder needs and wants change and the City is not aware (e.g., citizens, employees, government, regulatory bodies, etc.).
Technological innovation risk. The City is not leveraging advancements in technology in organizational activities to achieve advantages
Capital availability risk. Insufficient access to government capital threatens the City's capacity to grow and execute on strategic priorities.
Regulatory risk. Changing regulations threaten the City's position and its capacity to efficiently offer programs and services.
Catastrophic loss risk. A major disaster threatens the City's ability to sustain operations.
Government policy risk. Changes in government policy threaten the City's position and its capacity to efficiently offer programs and services.

Process Risks

Process risk is the risk that the City processes are not effectively providing programs and services; are not clearly defined; are poorly aligned with the City strategies and are not performing effectively and efficiently in satisfying citizen needs.

Operations risk

Citizen satisfaction risk. A lack of focus on citizens threatens the City's capacity to meet expectations.
Citizen fraud risk. Fraudulent activities perpetrated by citizens expose the City to financial loss.
Human resources risk. The risk that we do not have the right people or that our people do not have the necessary skills, knowledge and expertise to allow the City to successfully achieve objectives.
Capacity risk. Insufficient capacity threatens the City's ability to meet demands, or excess capacity threatens the City's ability to offer programs and services.
Partnering risk. Inefficient or ineffective alliance, outsourcing, affiliate and other external relationships affect the City's capability to deliver; these uncertainties arise due to choosing the wrong partner, poor execution and failing to capitalize on partnering opportunities.

Compliance risk. Non-compliance with prescribed policies and procedures or laws and regulations may result in lost reputation, penalties, fines, etc.

Business interruption risk. Business interruptions stemming from the unavailability of labour, information technologies or other resources threaten the City's capacity to continue operations.

Health and safety risk. The risk that the City's infrastructure is not safe for citizens, employees and other stakeholders thereby interrupting the operation of the City or threatening the delivery of programs and services.

Security. The City's security measures fail to prevent damage, injury or loss.

Legal risk. Actions of City employees increase exposure to lawsuits or other legal action.

Empowerment risk

Leadership risk. The risk that the City's staff are not being effectively led, which may result in a lack of direction, focus, motivation to perform, executive credibility and trust throughout the organization.

Authority/limit risk. Failure to establish or enforce limits on personnel actions may cause employees to commit unauthorized or unethical acts, or to assume unauthorized or unacceptable risks.

Change readiness risk. Staff are unable or unwilling to implement process and program or service improvements to keep pace with changes.

Accountability risk. Management and front-line staff are not held directly accountable for their actions and/or the results of their performance.

Culture risk. Created when there is misalignment between the City's values and leader actions, employee behaviours, or organizational systems.

Integrity risk

Illegal acts risk. Illegal acts committed by management and front-line staff expose the City to fines, and sanctions.

Reputation risk. Damage to the City's reputation exposes it to citizen dissatisfaction and unnecessary media attention.

Financial risk

Liquidity risk. Liquidity risk is the exposure to loss as a result of the inability to meet cash flow obligations in a timely and cost-effective manner.

Information processing/technology risk

Relevance risk. Irrelevant information created or summarized by an application system may adversely affect users' decisions.

Integrity risk. All of the risks associated with the authorization, completeness and accuracy of transactions as they are entered into, processed by, summarized by and reported by the various application systems deployed by the City.

Access risk/ breach of security. Failure to adequately restrict access to information (data or programs) may result in unauthorized knowledge and use of confidential information, or overly restrictive access to information may preclude personnel from performing their assigned responsibilities effectively and efficiently.

Infrastructure risk. The risk that the City does not have the information technology infrastructure (e.g., hardware, networks, software, people and processes) it needs to effectively support the current and future information requirements of the City in an efficient, cost-effective and well-controlled fashion.

Cyber risk. The risk of financial loss, disruption or damage to the reputation of an organization from some sort of failure of its information technology systems.

Information for decision-making risk

Information for decision-making risk is the risk that information used to support the execution of the operating model, the internal and external reporting on performance and the continuous evaluation of the effectiveness of the City is not relevant or reliable.

Process/operational information for decision-making risk

Contract commitment risk. The risk that contract commitments are not captured and documented exposing the City to multiple or duplicate contracts or commitments.

Performance measurement risk. Performance is not measured or performance measures are not aligned with City strategies and business objectives.

Organizational alignment risk. Failure to align process objectives and performance measures with objectives and strategies may result in conflicting, uncoordinated activities throughout the City.

Reporting information for decision making risk

Budget and planning risk. Non-existent, unrealistic, irrelevant or unreliable budget and planning information may cause inappropriate financial conclusions and decisions.

Accounting information risk. Overemphasis on financial accounting information to manage the City may result in the manipulation of outcomes to achieve financial targets at the expense of not meeting satisfaction, quality and efficiency objectives.

Taxation risk. Failure to accumulate and consider relevant tax information may result in non-compliance with tax regulations or adverse tax consequences that could have been avoided had transactions been structured differently.

Regulatory reporting risk. Incomplete, inaccurate and/or untimely reporting of required financial and operating information to regulatory agencies may expose Davis + Henderson to fines, penalties and sanctions.

Compensation and benefits risk. Incomplete and/or inaccurate information pertaining to compensation and benefits (i.e., pension plans, deferred compensation plans, benefit plans, etc.) may preclude the City from meeting its defined obligations to employees on a timely basis and result in a loss of morale and reputation, work stoppages, litigation and additional funding requirements*.*

Environment/strategic information for decision-making risk

Environmental scan risk. Failure to monitor the external environment or formulation of unrealistic or erroneous assumptions about environment risks may cause the City to retain strategies long after they have become obsolete.

Performance measurement risk. Non-existent, irrelevant or unreliable performance measures that are inconsistent with established business objectives threaten the City's ability to execute its business objectives.

Planning risk. An unimaginative and cumbersome strategic planning process may result in irrelevant information that threatens the City's capacity to formulate viable strategies.

Appendix B – 2020 Audit plan rationale

The following table outlines the specific audit projects and rationale for inclusion in the 2020 Internal Audit plan scheduled for execution from January to December 2020.

Projects	Project description	Rationale for inclusion in plan				
		Key inherent business risk	**Suggested by Audit Committee**	**Suggested by Management**	**Aligned with key Initiatives**	**Not audited recently**
Solicitor						
Clerks Office Assessment:	Assess the effectiveness and efficiency, and as required value for money, of selected processes. The review will also look at operational and management oversight controls within the Clerks Office.	X		X		X

Projects	Project description	Rationale for inclusion in plan				
		Key inherent business risk	**Suggested by Audit Committee**	**Suggested by Management**	**Aligned with key Initiatives**	**Not audited recently**
Engineering						
Traffic Management Project Review:	Evaluate and assess the proposed scope, user requirements and controls established for the Traffic Management system.	X	X	X	X	X

Projects	Project description	Rationale for inclusion in plan				
		Key inherent business risk	Suggested by Audit Committee	Suggested by Management	Aligned with key Initiatives	Not audited recently
Fire						
Fire Process Assessment:	Assess the processes and controls in place for operational and financial processes within fire services. This audit will evaluate the effectiveness of data reporting and monitoring of key performance indicators.	X	X	X	X	X

Projects	Project description	Rationale for inclusion in plan				
		Key inherent business risk	Suggested by Audit Committee	Suggested by Management	Aligned with key Initiatives	Not audited recently
Service London						
Service London Process Assessment:	Review the effectiveness of processes and controls in place for operational and financial processes within Service London.	X		X	X	X

Appendix C – Multi-Year Budget Coverage

The following table outlines the coverage by 2016-2019 Multi-Year Budget Service Area since 2017, the start of Deloitte Outsourced IA Function, including the planned coverage from 2020-2022.

Service	Deloitte Outsourced IA Function					
	FY 2017 **June 2017 to December 2017**	**FY 2018** **January 2018 to December 2018**	**FY 2019** **January 2019 to December 2019**	**FY 2020** **January 2020 to December 2020**	**FY 2021** **January 2021 to December 2021**	**FY 2022** **January 2022 to December 2022**
Culture						
Economic Prosperity						
Environmental Services						Public Works Process Assessment
Parks, Recreation & Neighbourhood Services	Cash Handling Process Review	Class Replacement Project Post-implementation Review				
Planning & Development Services	Building Permit Process Assessment				Assumption and Securities Assessment	Industrial Community Improvement Plan Incentives Permit of Approved Works Program Review
Protective Services				Fire Process Assessment		Emergency Planning Process Review
Social & Health Services	Homelessness Prevention Management Process Assessment	Housing Process Assessment	Dearness Home Process Assessment			Social Services Process Assessment
Transportation Services		Parking Revenue Generation Assessment Construction Procurement Process Assessment	Parking Enforcement Assessment	Traffic Management Project Review		
Corporate, Operational & Council Services	Freedom of Information process Assessment Management Compensation Process Assessment IT Cyber Risk Workshop IT Project Portfolio and Project Management Assessment	Health and Safety Assessment Procurement Process Assessment	Electronic Fund Transfer Compliance Assessment IT Cyber Risk Workshop IT Security Assessment	Clerks Office Assessment	Recruitment Process Assessment Environment and Asset Retirement Obligations Assessment IT Risk Identification Process Assessment	HRIS Project Post-implementation Review

	Deloitte Outsourced IA Function					
Service	**FY 2017** **June 2017 to December 2017**	**FY 2018** **January 2018 to December 2018**	**FY 2019** **January 2019 to December 2019**	**FY 2020** **January 2020 to December 2020**	**FY 2021** **January 2021 to December 2021**	**FY 2022** **January 2022 to December 2022**
Financial Management						
Strategic Area of Focus			**Computerised Maintenance Management System (CMMS) Pre-implementation Review**	**Service London Process Assessment**		

Appendix D – Summary of changes from FY2019 IA plan to FY2020 IA plan

The following table summarizes changes to planned internal audit projects by Audit Universe from the approved FY 2019 Internal Audit plan to the plan presented for FY 2020 as shown above in the "Summary 2020-2022 Audit Plan by audit universe area."

Internal Audit Universe Areas	FY 2020 Jan 1 2020 to Dec 31 2020	FY 2021 Jan 1 2021 to Dec 31 2021
Corporate Services / **Solicitor**	**[No change]** **Clerks Office Assessment:** Assess the effectiveness and efficiency, and as required value for money, of selected processes. The review will also look at operational and management oversight controls within the Clerks Office.	
Human Resources	**[Deferred to 2021]** **Recruitment Process Assessment:** Assess the recruiting and hiring processes for the City with emphasis on controls, adherence to government requirements, the timeliness and effectiveness of the hiring process. *Rationale: Deferred by management as currently conducting an HR function review which may result in changes to recruitment process. Review deferred to FY2021 once changes are implemented.*	**[Deferred to 2022]** **HRIS Project Post-implementation Review:** Should the City decide to implement a new HRIS system Internal Audit would evaluate and assess the scope, user requirements and the design of the proposed controls to be established. *Rationale: Deferred by management as a result of deferral of Recruitment Process Assessment.*
Finance and Treasury		**[No change]** **Environment and Asset Retirement Obligations Assessment:** Assess the processes and controls in place related to the identification, monitoring and reporting of environmental and financial asset retirement obligations, including compliance with requirements under Section PS 3280.

Internal Audit Universe Areas		FY 2020 Jan 1 2020 to Dec 31 2020	FY 2021 Jan 1 2021 to Dec 31 2021
	Information Technology		**[No change] IT Risk Identification Process Assessment:** Evaluate and assess the IT risk identification and assessment process to understand how risks are mitigated and reported.
	Emergency Planning		**[Deferred to 2022] Emergency Planning Process Review:** Assess the procedures and controls in place related to the City's emergency planning process. Elements of business continuity and disaster recovery will be considered including the evaluation of end-user requirements. *Rationale: Deferred by management based on prioritization of other projects on the FY 2020 IA plan.*
Administration	**Planning**	**[No change - ongoing]** *Ongoing project:* **Smart City Strategy Implementation:** In accordance with the Smart City Strategy, work with Staff and the IBI Group to develop an approach for creating a strong smart city culture within the Corporation. Help develop a governance model for advancing the strategy in the community. **[Removed] Resiliency Planning Governance and Monitoring**: Work with Staff through the preparation of the City's Resiliency Strategy to develop a meaningful monitoring and measuring program. Work with staff to establish an appropriate governance model for implementation of the Strategy. *Rationale: Removed through discussion with senior leadership and prioritization of other projects on the FY 2020 IA plan.*	**[Deferred to 2022] Industrial Community Improvement Plan Incentives:** Review Industrial Community Improvement Plan incentives to review best practices, assess value for money generated by these incentives and reviewing the potential for reducing or eliminating these incentives. *Rationale: Deferred by management based on prioritization of other projects on the FY 2020 IA plan.*
	Development and Compliance Services	**[Deferred to 2021] Assumption and Securities Assessment:** Assess the control framework and processes currently in place for new development and securities.	**[Deferred to 2022] Permit of Approved Works Program Review:** Assess the permit of approved works process and control framework in place for issuing permits. Including booking grants for eligible development projects in the permit reporting system.

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Internal Audit Universe Areas		FY 2020 Jan 1 2020 to Dec 31 2020	FY 2021 Jan 1 2021 to Dec 31 2021
		Rationale: Deferred by management in consideration of expected legislative changes that may impact the assessment and resulting implementation of system/process changes.	*Rationale: Deferred by management as a result of deferral of Assumption and Securities Assessment.*
	Engineering	**[No change] Traffic Management Project Review:** Evaluate and assess the proposed scope, user requirements and controls established for the Traffic Management system. **[No change - ongoing]** *Ongoing Project:* **Computerised Maintenance Management System (CMMS) Pre-implementation Review:** Evaluate and assess the controls framework proposed and being established.	**[Removed] Strategic Investment Project:** Assess a facet of the strategic investment project based on the milestones reached within the project. Possible assessment areas of focus include project management controls and effectiveness, an assessment of the tendering, awarding and procurement process, construction auditing, and contract compliance auditing and communications assessment. *Rationale: Removed as coverage of strategic project is included in Traffic Management Project Review*
Services	**Housing**		
	Environmental	**[Deferred to 2022] Public Works Process Assessment:** Assess the effectiveness and efficiency of processes and controls in place for operational and financial processes within public works. *Rationale: Deferred by management based on prioritization of other projects on the FY 2020 IA plan.*	
	Social Services	**[Deferred to 2022] Social Services Process Assessment:** Assess the effectiveness of processes and controls in place for operational and financial processes within social services. *Rationale: Deferred by management in consideration of expected legislative changes that may impact the assessment and resulting implementation of system/process changes.*	
	Dearness Home		
	Neighbourhood and Children services		
	Fire	**[No change] Fire Process Assessment:** Assess the processes and controls in place for operational and financial processes within fire services. This audit	

Internal Audit Universe Areas	FY 2020 Jan 1 2020 to Dec 31 2020	FY 2021 Jan 1 2021 to Dec 31 2021
	will evaluate the effectiveness of data reporting and monitoring of key performance indicators.	
Service London	**[No change] Service London Process Assessment:** Review the effectiveness of processes and controls in place for operational and financial processes within Service London.	
Parks & Recreation *(Parks & Recreation)*	**[No change - ongoing]** *Ongoing Project*: **Class Replacement Project Pre-implementation Review:** Evaluate and assess the controls framework established for the Class system.	
Argyle Business Improvement Area Board of Management *(Agencies, Boards, Commissions and Corporations*)*		
Covent Garden Market Corporation		
Eldon House Corporation		
Hamilton Road Business Improvement Area		
Housing Development Corporation		
Hyde Park Business Improvement Area		
London Convention Centre Corporation		
Downtown London Business Improvement Association		
London Hydro Inc.		

Internal Audit Universe Areas	FY 2020 Jan 1 2020 to Dec 31 2020	FY 2021 Jan 1 2021 to Dec 31 2021
London & Middlesex Community Housing		
London Police Services Board		
London Public Library Board		
London Transit Commission		
Middlesex-London Health Unit		
Museum London		
Old East Village Business Improvement Area		
Tourism London		
Elgin Area Water Primary Water Supply System		
Lake Huron Primary Water Supply System		

* - Agencies Boards, Commissions and Corporations are not within Internal Audit's scope with the Corporation of the City of London. Internal audits of Agencies, Boards, Commissions and Corporations would be recommended separate from this Internal Audit Plan and approved by Audit Committee.

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The Corporation of the City of London
IT Security Assessment : Agencies, Boards,
Commissions and Corporations

Audit Performed: July 2019 – August 2019
Report Issued: November 2019

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Executive summary

Introduction

As part of the 2019 Internal Audit Plan, Information Technology Services leadership requested that an Information Technology Security Assessment be conducted for the City of London's Agencies, Boards, Commissions and Corporations, as well as certain Divisions that manage interconnected IT systems. This review considered the use of technology at the City of London related agencies, boards, commissions and corporations that provide specific and/or specialized services to the London community. The agencies, boards, commissions, and corporations included in this review are as follows:

- London Convention Centre Corporation;
- Corporate Security Division;
- Roadways, Lighting, and Traffic Control Division;
- Housing Development Corporation;
- London Economic Development Corporation;
- London Tourism;
- Museum London;
- Regional Water Supply;
- Centennial Hall;
- Eldon House Corporation;
- London Arts Council;
- London Heritage Council;
- London Hydro Inc.;
- London Transit Commission;
- South London Neighbourhood Resource Centre;
- W12A Landfill Site.

The purpose and objective of this review was to assess the information technology processes and controls surrounding the agencies, boards, commissions and corporations in order to determine whether the processes and controls have been designed and implemented appropriately, and are operating effectively; and are in compliance with City of London policy and procedures.

Scope

Based on the objectives of our review, our scope and procedures focused on the following areas:

o Reviewed and assessed the compliance to the City of London's Use of Technology Policy;
o Reviewed and assessed the general computer controls currently implemented; and
o Reviewed and assessed the training and education provided to staff with respect to IT Security procedures.

The detailed internal audit scope can be found in **Appendix 1** of this report.

Key strengths

Administrative Practice and Procedures: The City's policies and procedural documents are available on City of London's portal – CityHub, and readily accessible to staff and personnel of the Agencies, Boards, Commissions and Corporations. Additionally, relevant polices like Use of Technology policy provides guidance on the acceptable use of corporate technology which includes but not limited to software, network, hardware, etc. provided by or accessed through the City of London services.

2

ITS Service Portal: The Information Technology Services [ITS] service portal is a central hub managed by the City of London ITS that is readily available to most Agencies, Boards, Commissions and Corporations of the City of London to initiate and track different categories of request including user maintenance (access request / modification / removal) on City of London services; software and hardware implementation etc.

Key observations

Deloitte's review of the IT Security practices identified one observation in the following area.

Priority	High	Medium	Low	Leading Practice
Observations	0	1	0	0

Observation item	Observation description	Priority	Responsible Party	Timing
ITSA 1.0	Little or no awareness of the **Use of Technology Policy (UoT)** and its requirements at some of the Agencies, Boards, Corporation and Commissions of the City of London.	Medium	ITS coordinating ABC implementation	09 -2020

Priority heat map

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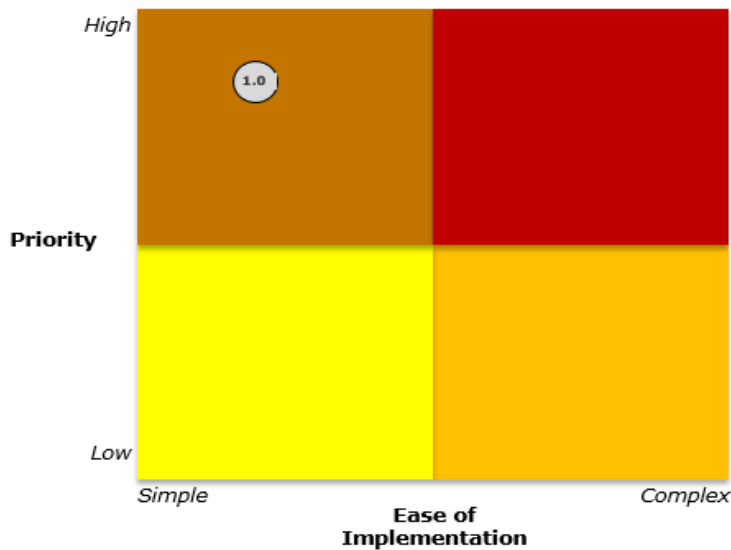
Conclusion

Based on our assessment of the City's IT Security procedures and practices, we noted one medium priority issue with the potential to impair the effectiveness of current processes. The issue noted in the report should be addressed in a timely manner to enhance current controls and mitigate relevant risks.

Management is in agreement with the finding and have developed a detailed action plan noted in the 'Detailed observations and recommendations' section.

The following scale depicts our overall process conclusion as it relates to the scope of areas audited as outlined above:

A	B	C	D
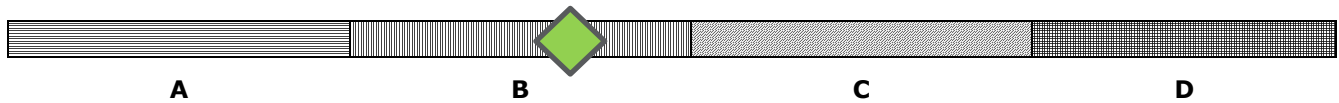
Description	Definition
A	No or insignificant process control or efficiency weaknesses identified
B	Minor process control or efficiency weaknesses identified
C	Moderate process control or efficiency weaknesses identified
D	Significant control process or efficiency weaknesses identified Impairing the effectiveness of the process

3

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Detailed observations and recommendations

Observation ITSA 1.0 – Use of Technology Policy (UoT)

Observation	Implication	Recommendation	Management comments and action plan	Responsible party and timing
ITSA 1.0 Use of Technology Policy City of London has documented a Use of Technology (UoT) policy to address the acceptable use, restrictions on use, and usage procedures for users of Corporate Technology of City of London. The policy is accessible on the CityHub portal to staff, agencies, boards, commissions and corporations. However, we noted that some of the staff of agencies, boards, commissions and corporations have little or no awareness of this policy and its requirements e.g. on access security, operations.	**ITSA 1.0 Use of Technology Policy** Risk of misuse of the Corporate Technology of City of London is increased, when users do not know or have clarity on the security and operation requirements of the technology services. This misuse may be targeted by malicious individuals to create reputational damage to City of London	**ITSA 1.0 Use of Technology Policy** Management should ensure more involvement in the IT Governance process of agencies, boards, commissions and corporations (ABCs) to ensure that the requirements of the Use of Technology policy are communicated and clarified to ABC management and staff in order to assess compliance.	**ITSA 1.0** ITS to coordinate a communication around UoT and related policies for ABCs by June 2020, with communication and follow-ups occurring by Sept 2020 with the support of the City Senior Leadership Team (SLT) and ABC leadership.	**ITSA 1.0** Mat Daley, Director of ITS (Communication by June 2020) ABC Leadership (Implementation by Sept 2020)

Appendix 1: Internal Audit detailed scope

Specifically, the internal audit addressed the following areas:

Reviewed and assessed the compliance to the City of London's Use of Technology Policy:

• Gained an understanding of the agencies, boards, commissions and corporations' familiarity with the Use of Technology policy, and assess its implementation at the agency, board, commission or corporation, including in the onboard and off-board of individuals;

• Reviewed and assessed the compliance of procedures outlined in the Use of Technology Policy, specifically mobile equipment, software licenses and copyrights, social media, passwords, screensavers, storage of files on local drives, storage of personal files, internet, and emails and other messaging systems; and

• Reviewed and assessed monitoring activities established to determine whether policies and procedures are achieving desired outcomes of reducing risk in Information Technology.

Review and assess the general computer controls currently implemented:

• Reviewed and assessed the process to grant access to new users, to ensure that only the authorized individuals have the access required to complete their day-to-day activities;

• Reviewed and assessed the process to remove access from terminated users, to ensure that only the authorized individuals have the access required to complete their day-to-day activities;

• Reviewed and assessed the physical security of telecommunications closets to ensure access is protected from unauthorized users;

• Reviewed to ensure access security and operations policies are outlined; and

• Reviewed and assess the processes in place to procure and/or append new technologies to the network.

**Reviewed and assessed the training and education provided to staff with respect to IT security procedures:**

• Reviewed and assessed the training activities to familiarize the staff at the agency, board commission or corporation with the policies and procedures required by the City's ITS department; and

• Reviewed and assessed the method to communicate changes related to Use of Technology Policy.

Appendix 2: Internal Audit rating scale

Individual observation prioritization

Internal Audit has prioritized each observation and recommendation within this report using a four point rating scale. The four point rating scale is as follows:

Description	Definition
High	Observation is high priority and should be given immediate attention due to the existence of either significant internal control risk or a potential significant operational improvement opportunity.
Medium	Observation is a moderate priority risk or operational improvement opportunity and should be addressed in the near term.
Low	Observation does not present a significant or medium control risk but should be addressed to either improve internal controls or process efficiency.
Leading Practice	Consideration should be given to implementing recommendations in order to improve the maturity of the process and align with leading practices.

Appendix 3: Stakeholder involvement

In conducting this review, the following management and staff were interviewed to gain an understanding of the City's consultant selection/engagement and construction procurement processes and practices.

Stakeholder	Position	Division
Mat Daley	Director, Information Technology Services	Central ITS
James McCloskey	Manager, Network & Information Security	Central ITS
Stefan Loker	Director of Corporate Services	London Convention Centre Corporation
Mike Bessegato	Manager, Corporate Security	Corporate Security Division
Shane Maguire	Division Manager	Roadways, Lighting, and Traffic Control Division
Stephen Giustizia	CEO	Housing Development Corporation
Kapil Lakhotia	President	London Economic Development Corporation
Melissa Deluca	Director of Communication, Research & Membership	London Tourism
Brian Meehan	Executive Director and Chief Curator	Museum London
Andrew J. Henry	Director, Regional Water Supply	Regional Water Supply
Greg Jones	Office Manager	Centennial Hall
Tara Wittmann	Curator Director	Eldon House Corporation
Robin Armistead	Manager, Culture Office	London Arts Council
Andrea McNaughton	Executive Director	London Heritage Council
Jelena Kosarac	Director, IT Infrastructure	London Hydro Inc.
Patrick Cormier	Manager of Information Services	London Transit Commission
Jim Yanch	Technical Services Specialist	South London Neighborhood Resource Centre
John Whitworth	Manager, Solid Waste Facilities	W12A Landfill Site

Appendix 4: Audit procedures performed

As part of the IT Security Assessment the following procedures were performed:

Phase 1 : Planning

- Conducted a planning meeting with the Director, Information Technology Services and Manager, Network and Information Security;
- Developed and validated project methodology, milestone and reporting methods;
- Reviewed background documentation for the Agencies, Boards, Commissions and Corporations practices, policies and procedures;
- Created Interview Schedule and Request for Information document;
- Updated and issued a finalized Project Charter and request for information.
- Developed the testing template with relevant test procedures required for assessment of the relevant Project Charter Objectives.

Phase 2 : Execution

- Conducted interviews with relevant stakeholders to understand the activities, processes and practices, and the IT control environment of the Agencies, Boards, Commissions and Corporations;
- Performed an onsite walkthrough of selected Agencies, Boards, Commission and Corporations;
- Requested and obtained evidences for review from the agency, boards, commissions and corporations such as the Use of Technology policy (UoT), Procurement policy, screenshots of city hub and ITS portal, sample evidence of user provisioning and deprovisioning request etc.
- Tested relevant controls for agency, boards, commissions and corporations to assess design and implementation effectiveness as well as operating effectiveness;
- Documented results and identified areas of strengths and draft areas of improvement in the IT control environment;

Phase 3 : Reporting

- Drafted preliminary observations and verified observations with management;
- Received management comments and compiled final report.
- Conducted a closing meeting with key management stakeholders to validate and communicate our findings;
- Issued this internal audit report with our detailed observations.

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TO:	**CHAIR AND MEMBERS** **AUDIT COMMITTEE** **MEETING ON MARCH 11, 2020**
FROM:	**ANNA LISA BARBON** **MANAGING DIRECTOR, CORPORATE SERVICES** **AND CITY TREASURER, CHIEF FINANCIAL OFFICER**
SUBJECT:	**REQUEST FOR PROPOSAL INTERNAL AUDIT SERVICES**

RECOMMENDATION

That, on the recommendation of the Managing Director, Corporate Services and City Treasurer, Chief Financial Officer the following actions **BE TAKEN**:

a) The scope of work including expectations of the successful proponent, timelines, and general parameters described in this report for inclusion in the Request for Proposal (RFP) for internal audit services **BE ENDORSED**;

b) Civic Administration **BE DIRECTED** to proceed with the development and issuance of an RFP for internal audit services; and

c) The striking of an Internal Audit Services Evaluation Committee **BE APPROVED** consisting of: Audit Committee Chair; Audit Committee Vice Chair; a representative from the City Manager's office and from the Finance & Corporate Services area; Managing Director, Corporate Services and City Treasurer, Chief Financial Officer; with support by appropriate members of Civic Administration including Purchasing & Supply.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

2020-2022 Internal Audit Plan, November 6, 2019, meeting of Audit Committee, Item #4.4

Internal Audit Services, May 30, 2016, meeting of Audit Committee, Item #2

RFP Process for Internal and External Audit Services, April 13, 2016, meeting of Audit Committee, Item #2

RFP Process Internal and External Audit Services, Sept 25, 2014, meeting of Audit Committee, Item #2

BACKGROUND

In 2016, the City issued two (2) RPFs; one (1) for external audit services RFP 16-31, and one (1) for internal audit services RFP 16-36. The external audit had a term of five (5) years, and the internal audit had a term of four (4) years, with the option to renew for one (1) additional year.

In late 2016, Council appointed Deloitte LPP (Deloitte) as the preferred firm for the provision of internal audit services for a four-year term beginning January 1, 2017, with the option to renew for one (1) additional one-year term. Based on the last update to Audit Committee (November 6, 2019), consistent with internal audit plans approved,

Deloitte has issued 13 project reports with five (5) projects currently on the go and four (4) more projects anticipated for 2020. The observations provided to date have been very insightful to Civic Administration, identifying areas to address along with advising on best practice opportunities.

DISCUSSION

Based on the RFP processes undertaken in 2016, for both internal and external audit services, Civic Administration believes that it will be more advantageous to stagger the RFP processes for internal and external audit over two (2) years, rather than doing both in one (1) year.   It was experienced that, in carrying out the RFP process for both audit services virtually at the same time, it created a workload imbalance as both processes were virtually undertaken at the same time.

As 2020 is the fourth (4th) year of the contract with Deloitte for internal audit services, notwithstandinding that there is an option to renew for one (1) more year, this would be an opportune time to start the RFP process for internal audit services.

INTERNAL AUDIT REQUEST FOR PROPOSAL

The RFP would seek to continue a fully outsourced internal audit function, delivered by a firm that will offer, to the City, the full capacity of its organization in delivering specialized and emerging audit functions. The key parameters that will be included in the RFP are explained in the various sections that follow.

Scope of work

The scope of work for the internal audit provider shall extend to all aspects of the operations of the City of London, and by request, to the Agencies, Boards, Commissions or other entities that are accountable to City Council and/or controlled by the City of London. The duties may also include the performance of such other assignments as the Audit Committee may authorize from time to time.

The successful Proponent will be requested to provide a four (4) year-risk based audit plan, to be updated annually, with input from the Audit Committee and Administration, that will be approved by the Audit Committee and Council. The following tasks are expected to form part of the four (4) year-risk based Audit Plan:

a)   Examine and report on the adequacy and effectiveness of internal controls and recommend ways for their improvement.

b)   Examine the adequacy and effectiveness of the quality of performance in carrying out the assigned responsibilities and recommend ways for their improvement.

c)   Appraise the relevance, reliability and integrity of management, financial and operating data and reports.

d)   Review the systems established to ensure compliance with those policies, plans, procedures, statutory requirements and regulations which could have a significant impact on operations.

e)   Review the means of safeguarding assets and verifying the existence of these assets.

f)   Assess the adequacy of established systems and procedures.

g)   Review the planning, design and development, implementation and operation of major computer based systems to determine whether:

      i)   Adequate controls are incorporated in the system;
      ii)   A thorough system testing is performed at appropriate stages;
      iii)   System documentation is complete and accurate; and

iv) The needs of the users are met.

h) Review the operations or programs to ascertain whether they are consistent with the established objectives and goals and whether the operations or programs are being carried out as planned.

i) Undertake the performance of value for money audits in order to appraise the economy, efficiency and effectiveness with which resources are employed.

j) Follow up and provide recommendations on any findings of non-compliance with proper controls, including any findings of fraud.

k) Conduct special assignments and investigations (including fraud, forensic audits, review of lean six sigma projects, joint venture agreements etc.) on behalf of the Audit Committee into any matter or activity affecting the integrity, interests, reputation and operating efficiency of the City.

The scope of work to be included in the RFP will be written to include the maximum scope of work and deliverables possible for the internal audit function. The risk-based audit plan (developed and approved by year) sets out the narrowed scope and deliverables approved as the specific work-plan. Emphasis will be placed on workplans where, annually, there will be a balance between compliance audits and value for money audits.

The RFP document will also set out the submission requirement to include a sample Audit Plan that represents one (1) year of audit work for consideration as part of the evaluation. This will include the manner and methodology to complete a risk assessment and prioritization of audits for the City of London, including all significant assumptions as well as sample reporting to the Audit Committee.

Timelines

A tentative timeline for the Internal Audit Services RFP, prepared below, allows the Audit Committee and Council to appoint the outsourced internal audit firm.

Event	Date
RFP Issue Date	Week of June 1, 2020
RFP Closing Date	Thursday, August 13, 2020
Review & Evaluation of RFP Submissions	Weeks of August 17th thru September 25, 2020
Short List Selected by Evaluation Team	Tuesday, September 29, 2020
Interviews With Short Listed Firms	Starting week of October 5, 2020
Recommendation Audit Committee	Wednesday, November 4, 2020
Council Award	Tuesday, November 24, 2020

Audit Committee is required to endorse the timeline for the RFP and schedule dates for the interviews and presentations of the short listed Proponents starting the week of October 5, 2020. We require the interview dates to be established as they are included in the RFP document. The City reserves the right to alter the schedule at its sole discretion if required.

Evaluation Team and Process

An evaluation team, known as the Internal Audit Services Evaluation Committee, will be established for the purposes of reviewing and evaluating all responses against pre-determined evaluation criteria set. The Internal Audit Services Evaluation Committee will consist of the following:

- Audit Committee Chair;
- Audit Committee Vice Chair;
- Managing Director, Corporate Services and City Treasurer, Chief Financial Officer;
- A representative from City Manager's Office; and
- A representative from Finance & Corporate Services.

The proposal submission will be evaluated based on criteria developed by the City which includes, but are not limited to, the following:

- Demonstrated knowledge of municipal government operations and emerging issues;
- Demonstrated knowledge of legislation relating to auditing provisions, and Freedom of Information requirements;
- Proponent's reputations, qualifications and experience;
- Information obtained by references provided by the Proponent;
- Information obtained from third parties;
- Contents, completeness, clarity and responsiveness of the Proponent's proposal submission;
- Skill and experience of the Proponent's proposed staff;
- Information provided by the Proponent in response to any Request for Additional information; and,
- Any other information provided by the Proponent or obtained by the City during the RFP process.

The evaluation criteria will be based on, but not limited to, the following:

- Firm profile;
- Audit experience and references;
- Proposed personnel and staffing;
- Proposed audit approach and methodology;
- Proposed Base Audit Plan, balanced between compliance and value for money; and,
- Proposed Fees.

The order of the items listed in this Section should not be taken as an indication of the relative importance of any particular criteria in the evaluation process.

The team will be supported by appropriate members of Civic Administration including Purchasing & Supply.

The Internal Audit Services Evaluation Committee will recommend a short list of Respondents to the Audit Committee for an interview and presentation.

The Audit Committee will interview the short listed Respondents. Once the interview & presentations are complete, the Audit Committee shall recommend the chosen Proponent to Council. City Council makes the final decision on the appointment of an audit firm.

Financial Implications
The Multi Year Budget 2020 – 2023 contains an average annual budget of $300,000.

SUMMARY

In order to proceed with the RFP for Internal Audit Services, the Audit Committee is required to:

  a) endorse the scope of work including expectations of the successful proponent, timelines, and general parameters of the RFP;
  b) direct civic administration to develop and and issue an RFP for internal audit services; and
  c) approve the general composition of the evaluation committee and identify the additional Audit Committee member to participate in the Internal Audit Services Evaluation Committee.

PREPARED BY:	RECOMMENDED BY:
IAN COLLINS, CPA, CMA **DIRECTOR, FINANCIAL SERVICES**	**ANNA LISA BARBON, CPA, CGA** **MANAGING DIRECTOR, CORPORATE** **SERVICES AND CITY TREASURER,** **CHIEF FINANCIAL OFFICER**

cc.   Lynne Livingstone – Acting City Manager/ Deputy City Manager

The Corporation of the City of London

Audit Planning Report
for the year ending
December 31, 2019

KPMG LLP

Prepared as of February 3, 2020 for
our meeting on March 11, 2020

kpmg.ca/audit

KPMG

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Executive summary

Group audit scope

Our audit consists of 20 components over which we plan to perform:

— 17 full scope audits

See pages 3 – 4.

Audit and business risks

Our audit is risk-focused. In planning our audit we have taken into account key areas of focus for financial reporting. These include:

— Completeness of accruals
— Capital projects and acquisitions
— Payroll and employee future benefits
— Taxation, user charges and transfer payments revenue

See pages 5 – 10.

Audit materiality

Materiality has been determined based on total expenses. We have determined group materiality to be $17,200,000.

Materiality will be set at lower thresholds where necessary to meet standalone subsidiary financial statement audit requirements.

See page 11.

Executive summary

Independence and Quality Control

We are independent and have extensive quality control and conflict checking processes in place. We provide complete transparency on all services and follow Audit Committee approved protocols.

Proposal Fees

Proposed fees for the annual group audit are $91,400.

See page 18.

Current developments and Audit Trends

Please refer to page 19 and Appendix 5 for accounting and/or auditing changes relevant to The Corporation of the City of London ("the City") and relevant audit trends.

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This Audit Planning Report should not be used for any other purpose or by anyone other than the Audit Committee. KPMG shall have no responsibility or liability for loss or damages or claims, if any, to or by any third party as this Audit Planning Report has not been prepared for, and is not intended for, and should not be used by, any third party or for any other purpose.

Group Audit Scope
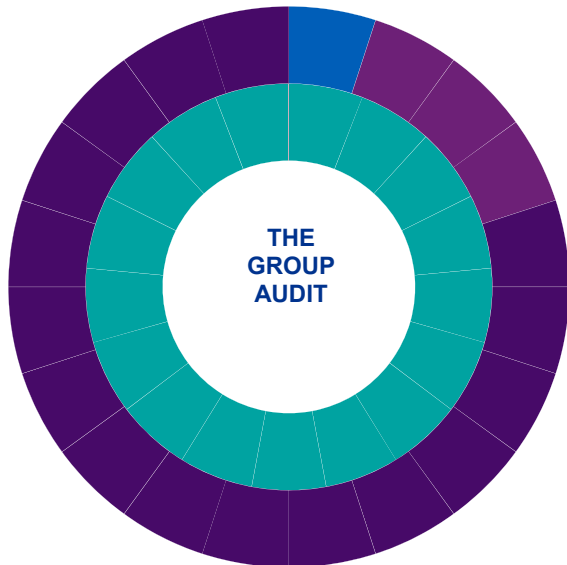
Type of work performed	# of components	Legend
Individually financially significant	1	
Significant due to risk	0	
In-scope not significant*	16	
Not significant – Untested	3	

*Components are not significant; however, separate statutory audits are required over these components on a stand-alone basis.

Procedures performed by	Legend
Group team – KPMG London	

Group Audit Scope

The components over which we plan to perform audit procedures are as follows:

Component	Why	Our Audit Approach	Managers
City of London	Individually financially significant	Audit of component financial information	[1] Melissa Redden [2] Dania Nabhani
Boards & Commissions	Non-significant components; however, necessary to issue separate statutory audit opinion	Audit of financial statements	[1] Deanna Baldwin [2] Dania Nabhani

Audit risks

Significant financial reporting risks	Why is it significant?
Completeness of accruals	The financial statements include certain accruals, such as legal and landfill liabilities and liabilities for contaminated sites, which involve a significant amount of management judgment and assumptions in developing.

Our audit approach

KPMG will perform the following procedures:

- Obtain an understanding of management's process and calculations for each of these areas and assess the adequacy of management's process for identifying critical accounting estimates.
- Obtain corroborative evidence to support management's assumptions and review subsequent payments where possible.
- Send legal letters to internal and external legal counsel, review Council minutes, severance agreements etc. to identify any potential unrecorded liabilities.

Audit risks

Professional requirements

Fraud risk from revenue recognition.

There is no risk resulting from revenue recognition.

Why is it significant?

This is a presumed fraud risk. There are generally pressures or incentives on management to commit fraudulent financial reporting through inappropriate revenue recognition when performed is measured in terms of year-over-year growth or profit.

The risk of fraud from revenue recognition has been rebutted.

Our audit approach

The audit team has rebutted this presumed risk as it is not applicable to the City where performance is not based on earnings.

Audit risks

Professional requirements

Fraud risk from management override of controls.

Why is it significant?

This is a presumed fraud risk. We have not identified any specific additional risks of management override relating to this audit.

Our audit approach

As the risk is not rebuttable, our audit methodology incorporates the required procedures in professional standards to address this risk. These procedures include testing of journal entries and other adjustments, performing a retrospective review of estimates and evaluating the business rationale of significant unusual transactions.

Audit risks

Other areas of focus	Why are we focusing here?
Capital projects and acquisitions	The City of London has a large balance of tangible capital assets and is continually spending on capital projects. There is judgment involved in determining the useful lives of capital and when the amortization period should begin.
Payroll and employee future benefits	The City of London provides defined retirement and other future benefits for some groups of its retirees and employees. As at December 31, 2018, the City of London had a liability for employee future benefits of $160 million.

Our audit approach

KPMG will perform the following procedures over capital projects and acquisitions:

- Substantive testing over capital additions and disposals, including the determination of when capital expenditures are transferred from assets under construction and amortization begins.
- Review management's determination of the useful lives of capital assets and the related amortization rates, as well as recalculate amortization expense.
- Perform data and analytical procedures as outlined on page 13.

KPMG will perform the following procedures over payroll and employee future benefits:

- Obtain the year-end WSIB statement and agree to management's accrual.
- Test the reasonableness of assumptions provided by management to the actuaries that are used in preparing the valuation and calculating the liability.
- Take a combined approach to testing payroll expense, which will include both substantive and control testing.

Audit risks

Other areas of focus	Why are we focusing here?
Taxation, user charges and transfer payments revenue	For the year ending December 31, 2018, these revenue streams amounted to more than $1.2 billion for the City of London.

Our audit approach

KPMG will perform the following procedures over taxation, user charges and transfer payments revenue:

- Substantive procedures over these revenue streams, including substantive analytical procedures over taxation revenue and vouching of significant transfer payments.

- Perform cut-off procedures around year-end.

Other Audit Matters

Other areas of focus	Why are we focusing here?
Debt issuances	Individual debt issuances at the City have historically been for significant amounts.
New Boards & Commissions	New entities will require audited financial statements and consolidation into the City's financial statements.

Our audit approach

KPMG will perform the following procedures over debt issuances:

- Debentures totaling $49.38 million were issued during 2019 with a 10 year term with an average all-in rate of 2.655%. KPMG will review the accounting for this transaction in detail during the audit.

KPMG will perform the following procedures over new Boards & Commissions:

- The Hamilton Road BIA is a new entity that was incorporated in fiscal 2018. In consideration of the limited activity in 2018, Management had decided that an audit would not be performed in the prior year. A 15 month audited financial statement will be prepared for the period ended December 31, 2019 and will be consolidated into the City's financial statements.

Materiality

Materiality determination	Comments	Group amount
Materiality	Determined to plan and perform the audit and to evaluate the effects of identified misstatements on the audit and of any uncorrected misstatements on the financial statements. The corresponding amount for the prior year's audit was $16,200,000.	$17,200,000
Benchmark	Based on total prior year expenses. This benchmark is consistent with the prior year.	$1,150,403,000
% of Benchmark	The corresponding percentage for the prior year's audit was 1.5%.	1.5%
Audit Misstatement Posting Threshold (AMPT)	Threshold used to accumulate misstatements identified during the audit. The corresponding amount for the previous year's audit was $810,000.	$860,000
	A higher threshold has been used for reclassification misstatements. The corresponding amount for the previous year's audit was $4,050,000.	$4,300,000

Materiality is used to scope the audit, identify risks of material misstatements and evaluate the level at which we think misstatements will reasonably influence users of the financial statements. It considers both quantitative and qualitative factors.

To respond to aggregation risk, we design our procedures to detect misstatements at a lower level of materiality.
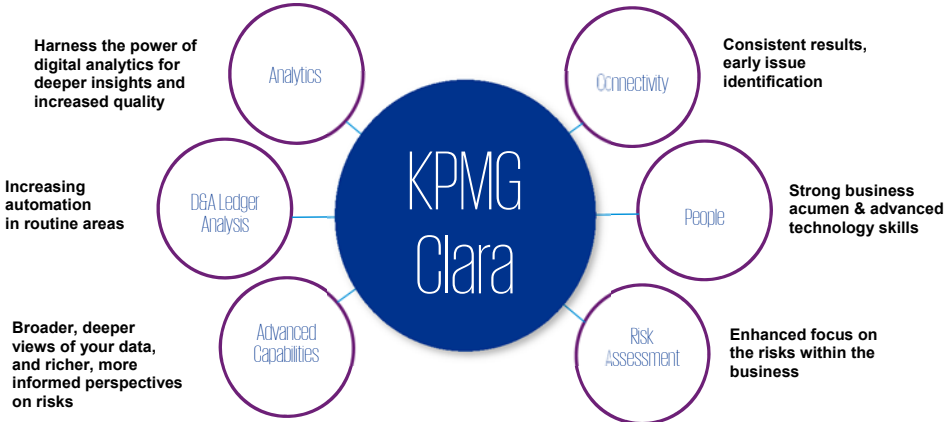
We will report to the Audit Committee:

Corrected audit misstatements

Uncorrected audit misstatements

The audit of today, tomorrow & the future

As part of KPMG's technology leadership, our audit practice has developed technologies and alliances to continuously enhance our capabilities and deliver an exceptional audit experience.

Technology empowers us with the ability to perform deep analysis over your financial information, focusing our effort and interactions on the areas of greatest risk and minimizing disruption to your business.

Harness the power of digital analytics for deeper insights and increased quality

Consistent results, early issue identification

Increasing automation in routine areas

Strong business acumen & advanced technology skills

Broader, deeper views of your data, and richer, more informed perspectives on risks

Enhanced focus on the risks within the business

Analytics · Connectivity · DGA Ledger Analysis · People · Advanced Capabilities · Risk Assessment

KPMG Clara

Technology we use today

Tool	Benefit to audit
KPMG Clara Client Collaboration	KCCC is our secure audit platform and a one-stop shop through which we plan, execute and manage the audit, providing you with real-time access to the process at every step, including exchange of information and access to the real-time reporting you need in one central location.
KPMG Clara Advanced Capabilities	KPMG Clara Advanced Capabilities leverage our data and analytics capabilities, enabling us to analyze 100% of your general ledger data in the planning and account analysis stage and adjust our planned audit approach accordingly to target the areas of greatest risk. It allows us to use automation in performing our audit procedures over accounts and journal entries.
Visualization Tool	Our Visualization tool is a powerful and flexible end-to-end analytics platform which we leverage to display dynamic visualization of your data. This enables us to provide valuable insights to your business throughout our audit process.
Account Analysis Tool	Our account analysis tool provides meaningful general ledger data insights during the planning phase of the audit that can be used to assist the engagement team in obtaining a more thorough understanding of the business processes and underlying flow of transactions through utilization of Account Analysis, Visual Ledger and Journal Entry Analysis functional features. Our tool enables a more precise risk assessment and development of a tailored audit approach.

Journal Entry Analysis	Our journal entry tool assists in the performance of detailed journal entry testing based on engagement-specific risk identification and circumstances. Our tool provides auto-generated journal entry population statistics and focusses our audit effort on journal entries that are riskier in nature.
Data & Analytics Routines	We will be integrating Data & Analytics procedures into our planned audit approach as follows: ▪ Tangible Capital Assets – WIP: Utilize CAATs to compare the WIP detail in fiscal 2019 to the WIP detail in fiscal 2018, testing any projects that did not incur costs in fiscal 2019 and still remain in WIP. This routine will obtain audit evidence over the completeness of tangible capital assets and amortization expense. ▪ Tangible Capital Assets – Disposals: Utilize CAATs to compare the disposal listing to the asset detail, testing assets that were recorded in both listings. This routine will obtain audit evidence over existence of tangible capital assets. ▪ Holdback accrual – Utilize CAATs to compare the tangible capital asset WIP listing to the holdbacks accrual listing, testing any significant WIP project that did not have a corresponding holdback accrual. This routine will obtain audit evidence over the completeness of holdback accruals.
Data Extraction & Analytics Tools	Our data extraction tools assist with risk assessment procedures and perform automated audit procedures in key cycles using data extracted directly from your ERP system.

The audit of today, tomorrow & the future

We continue to make significant investments in enhanced methodologies, new technologies and strategic alliances with leading technology companies that can have a transformative impact on auditing, and more broadly, financial reporting. KPMG is investing in the development of innovative audit technologies through both internal solutions and our alliances with technology firms including Finger Food, Microsoft, IBM Watson and others. We are committed to investing in cognitive technology to develop external auditing tools and technologies. Cognitive technology will enable us to teach a machine how to perceive, reason, and learn like a human being. This will be transformative to our profession, and will directly benefit the City in the future. We are developing intelligent automation to enable programmed reviews of unstructured data in source documents; freeing our professionals to focus their efforts on areas of greater risk. This may sound simple, but it's actually quite powerful, with complex underlying technologies.

Technology under development	
Tool	**Benefit to audit**
Advanced Analytics Asset Impairment Tool	The asset impairment tool delivers advanced analysis of goodwill impairment models (based on discounted cash flows) through the use of predictive analytics, enabling a more robust and independent challenge of managements assumptions. It has the ability to flex and vary assumptions in real time, bringing in external economic and peer group data, as well as the previous year's cash flow models. This will ensure we have timely and focused discussions on the most sensitive assumptions that form your estimates over long-lived assets and goodwill well in advance of yearend fieldwork. We are able to independently perform sensitivity analysis by changing assumptions and sharing these with management, reducing the time required by your team to run various scenarios for us.
Advanced Analytics Bad Debt Tool	The bad debt tool assists with our evaluation of management's estimate of the bad debt provision. This is accomplished through multiple features, including robust risk assessment and scenario analysis using different provisioning levels; comparing movements in total provision to macroeconomic data such as changes in CPI, GDP, private consumption growth, and employment rate; and providing insights on the accuracy of the bad debt provision rate by tracking amounts as it transitions between last aging buckets.
Business process mining (BPM)	BPM harnesses sub-ledger analytics and provides us with a deeper understanding of your processes. Our BPM tool is currently being piloted globally and will be coming soon to Canada. The tool provides immediate visualization of how 100% of your transactions are being processed to complement your process narratives and flow charts. A deeper understanding of your processes enhances our understanding of your business. This will ensure our team is focused on auditing the right risks and leveraging your team's resources efficiently. It also helps us identify inefficiencies or manual workarounds in a process and highlights where the process is under stress.
Artificial Intelligence Financial statement disclosure analysis Tool	Our artificial intelligence capability will compare the City's financial statement disclosures against existing, new, and modified accounting guidance and pronouncements, in addition to comparing them against peer companies. We'll be able to share with you not only how your disclosures compare to the requirements but also to your peer group.

The audit of today, tomorrow & the future

Technology under development	
Tool	**Benefit to audit**
Dynamic Risk Assessment	Dynamic Risk Assessment (DRA) gives us a more sophisticated, forward-looking and multi-dimensional approach to assessing audit risk. Using network theory, DRA considers not just the traditional, two-dimensional view of severity and likelihood but also how interconnected the risks are, how fast they may emerge and how systemic they are. It will provide a holistic enterprise-wide assessment of your risks, ensuring we have identified the relevant risk exposures that need to be incorporated into our audit approach.
Optical Contract Reader & Analysis Tool	Our Optical Contract Reader & Analysis Tool provides us with capabilities to improve the effectiveness and efficiency of the contract review process. This works by automating the ingestion of contracts and related source documents and extracting and summarizing key terms for the audit engagement team's consideration, in turn providing increased coverage of the population and resulting in greater audit quality. The tool can also be used to read unstructured source documents in PDF format, extracting certain data such as invoice date, invoice number, account number, order number and total amount. This data is then compiled and compared to structured data from the general ledger. Time savings generated from this intelligent automation solution will allow our team to focus their efforts on areas of greater risk.
Robotic Process Automation (RPA)	This application of cognitive computing technology allows our team to configure computer software—or a "robot"—to capture and interpret existing applications for processing a transaction, manipulating data, triggering responses, and communicating with other digital systems.

Your KPMG team

Team member	Background / Experience	Discussion of role
Katie denBok **Lead Audit Engagement Partner** kdenbok@kpmg.ca 519-660-2115	Katie has over 14 years of public auditing, accounting and reporting experience and has been involved with the audit of not-for-profit and public sector organizations, and a number of local private company clients. She proficiently assists clients with process improvement, accounting and financial reporting matters.	– Katie will lead our audit for the City and be responsible for the quality and timeliness of everything we do. – She will often be onsite with the team and will always be available and accessible to you.
Diane Wood **Tax Partner** dianejwood@kpmg.ca 519-660-2123	Diane is a member of the Financial Planners Standards Council and the Society of Trust and Estate Practitioners. Her principal activities are in not-for-profit taxation planning and compliance, personal income tax planning and compliance, estate planning, international executive taxation and providing financial planning and taxation assistance to individuals facing early retirement or severance packages.	– Diane will assist with any tax related matters that arise.
Melissa Redden **Audit Senior Manager** mredden@kpmg.ca 519-660-2124	Melissa has over 9 years of public auditing, accounting and reporting experience and has been involved with the audit of not-for-profit and public sector organizations, as well as a number of local private and public company clients. She proficiently assists clients with process improvement, accounting and financial reporting matters.	– Melissa will work very closely with Katie on all aspects of our audit for the City. – She will be on site and directly oversee and manage our audit field team and work closely with your management team.
Dania Nabhani **Audit Manager** dnabhani@kpmg.ca 519-660-2120	Dania has over 5 years of experience in public accounting serving a broad range of clientele, including public sector entities and private companies.	– Dania will work closely with Katie and Melissa and provide assistance to the main City audit. She will also manage select Boards and Commissions. – She will be on site and directly oversee and manage the audit field team for these entities, as well as work closely with the management teams.
Deanna Baldwin **Audit Senior Manager** deannabaldwin@kpmg.ca 519-660-2156	Deanna has over 8 years of experience in public accounting serving a broad range of clientele, including public sector entities and private companies.	– Deanna will work closely with Katie on select Boards and Commissions. – She will be on site and directly oversee and manage the audit field team for these entities, as well as work closely with the management teams.

Key deliverables and milestones

Offsite year-end planning

Year-end fieldwork

January 9, 2020 **January/February 2020** **March 11, 2020** **April 6, 2020 – June 12, 2020** **June 24, 2020**

Planning meeting with management

Audit Plan Discussion

Audit Findings Discussion

Proposed fees

In determining the fees for our services, we have considered the nature, extent and timing of our planned audit procedures as described above.

Our fee analysis has been reviewed with and agreed upon by management.

Our fees are estimated as follows:

	Current period (budget)	Prior period (actual)
Audit of the financial statements	$91,400	$97,500*

Matters that could impact our fee

The proposed fees outlined above are based on the assumptions described in the engagement letter.

The critical assumptions, and factors that cause a change in our fees, include:

− Significant changes in the nature or size of the operations of the Company beyond those contemplated in our planning processes

− Changes in professional standards or requirements arising as a result of changes in professional standards or the interpretation thereof

− Changes in the timing of our work

*Includes $7,500 for one-time fee relating to work over assumed asset valuations.

Current developments and audit trends

The following is a summary of the current developments that are relevant to the City:

Standard	Summary and implications	Reference
None for fiscal 2019	There are no new standards effective for fiscal 2019; however, there are several standards upcoming over the next several years. A summary of these standards has been included in Appendix 5.	See Appendix 5.

Our discussions with you, our audit opinion and what KPMG is seeing in the marketplace—both from an audit and industry perspective—indicate the following is specific information that will be of particular interest to you. We would, of course, be happy to further discuss this information with you at your convenience.

Thought Leadership	Overview	Links
Accelerate	Accelerate is a KPMG audit trends report and video series that includes the perspective of subject matter leaders from across KPMG in Canada on seven key issues impacting organizations today that are disrupting the audit committee mandate.	Link to report
The Blockchain shift will be seismic	Blockchain technology is a focused disruptor of the very foundations of external and internal audit: financial recordkeeping and reporting. This Audit Point of View article offers insight on how blockchain technology is impacting business and what audit committees should be thinking about to prepare for certain risks.	Link to report
2018 Audit Quality and Transparency Report	Learn about KPMG's ongoing commitment to continuous audit quality improvement. We are investing in new innovative technologies and building strategic alliances with leading technology companies that will have a transformative impact on the auditing process and profession. How do we seek to make an impact on society through the work that we do?	Link to report

Appendices

Appendix 1: Audit quality and risk management

Appendix 2: KPMG's audit approach and methodology

Appendix 3: Lean in Audit™

Appendix 4: Required Communications

Appendix 5: Current Developments

Appendix 6: Financial Indicators

Appendix 1: Audit quality and risk management

KPMG maintains a system of quality control designed to reflect our drive and determination to deliver independent, unbiased advice and opinions, and also meet the requirements of Canadian professional standards. Quality control is fundamental to our business and is the responsibility of every partner and employee. The following diagram summarises the six key elements of our quality control systems. Visit our Audit Quality Resources page for more information including access to our most recent Audit Quality and Transparency Report.

We conduct regular reviews of engagements and partners. Review teams are independent and the work of every audit partner is reviewed at least once every three years.

We have policies and guidance to ensure that work performed by engagement personnel meets applicable professional standards, regulatory requirements and the firm's standards of quality. We do not offer services that would impair our independence.

All KPMG partners and staff are required to act with integrity and objectivity and comply with applicable laws, regulations and professional standards at all times.

The processes we employ to help retain and develop people include:

– Assignment based on skills and experience
– Rotation of partners
– Performance evaluation
– Development and training
– Appropriate supervision and coaching

We have policies and procedures for deciding whether to accept or continue a client relationship or to perform a specific engagement for that client.

Existing audit relationships are reviewed annually and evaluated to identify instances where we should discontinue our professional association with the client.

Other controls include:

Before the firm issues its audit report, Engagement Quality Control Reviewer reviews the appropriateness of key elements of publicly listed client audits

Technical department and specialist resources provide real-time support to audit teams in the field

Independence, integrity, ethics and objectivity

Other risk management quality controls

Personnel management

KPMG Audit quality and risk management

Acceptance & continuance of clients / engagements

Independent monitoring

Engagement performance standards

Appendix 2: KPMG's audit approach and methodology

This year we will expand our use of technology in our audit through our new smart audit platform, KPMG Clara.

Collaboration in the audit

A dedicated KPMG Audit home page gives you real-time access to information, insights and alerts from your engagement team

Issue identification

Continuous updates on audit progress, risks and findings before issues become events

Data-driven risk assessment

Automated identification of transactions with unexpected or unusual account combinations – helping focus on higher risk transactions and outliers

Deep industry insights

Bringing intelligence and clarity to complex issues, regulations and standards

Analysis of complete populations

Powerful analysis to quickly screen, sort and filter 100% of your journal entries based on high-risk attributes

Reporting

Interactive reporting of unusual patterns and trends with the ability to drill down to individual transactions

Appendix 3: Lean in Audit™

An innovative approach leading to enhanced value and quality

Our innovative audit approach, Lean in Audit, further improves audit value and productivity to help deliver real insight to you. Lean in Audit is process oriented, directly engaging organizational stakeholders and employing hands-on tools, such as walkthroughs and flowcharts of actual financial processes.

By embedding Lean techniques into our core audit delivery process, our teams are able to enhance their understanding of the business processes and control environment within your organization – allowing us to provide actionable quality and productivity improvement observations.

Any insights gathered through the course of the audit will be available to both engagement teams and management. For example, we may identify control gaps and potential process improvement areas, while management has the opportunity to apply such insights to streamline processes, inform business decisions, improve compliance, lower costs, increase productivity, strengthen customer service and satisfaction and drive overall performance.

How it works

Lean in Audit employs three key Lean techniques:

1. Lean training

Provide basic Lean training and equip our teams with a new Lean mindset to improve quality, value and productivity.

2. Interactive workshops

Perform interactive workshops to conduct walkthroughs of selected financial processes providing end-to-end transparency and understanding of process and control quality and effectiveness.

3. Insight reporting

Quick and pragmatic insight report including immediate quick win actions and prioritized opportunities to realize benefit.

Appendix 4: Required communications

In accordance with professional standards, there are a number of communications that are required during the course of and upon completion of our audit. These include:

Engagement letter

The objectives of the audit, our responsibilities in carrying out our audit, as well as management's responsibilities, are set out in the engagement letter and any subsequent amendment letters as provided by management.

Management representation letter

We will obtain from management certain representations at the completion of the annual audit. In accordance with professional standards, copies of the representation letter will be provided to the Audit Committee.

Audit planning report

This report.

Audit findings report

At the completion of our audit, we will provide our audit findings to the Audit Committee.

Required inquiries

Professional standards require that during the planning of our audit we obtain your views on risk of fraud and other matters. We make similar inquiries of management as part of our planning process; responses to these will assist us in planning our overall audit strategy and audit approach accordingly.

Annual independence letter

At the completion of our audit, we will provide our independence letter to the Audit Committee.

CPAB Audit Quality Insights Report (October 2019) (formerly the "Big Four Firm Public Report")
CPAB Annual Inspections Results (March 2019)

Appendix 5: Current Developments

Public Sector Accounting Standards

Overview of Current Changes to the Public Sector Accounting Standards - New Standards and Application Date

Topic	Effective Date years commencing on or after
Financial instruments (PS 3450)* Foreign Currency Translation (PS 2601)* Financial Statement Presentation (PS 1201)* Portfolio Investments (PS 3041)* (*must be adopted together)	April 1, 2021 For entities who previously applied Part V of CICA Handbook, Accounting - April 1, 2012
Asset Retirement Obligations (PS 3280)	April 1, 2021
Revenues (PS 3400)	April 1, 2022

Public Sector Accounting Standard Changes
Financial Instruments / Foreign Currency / Financial Statement Presentation

- Financial Instruments / Foreign Currency Translation / Financial Statement Presentation
  - Must be applied at the same time
  - Financial Statement Presentation changes related to the statement of remeasurement gains and losses to be presented in a separate statement

- Effective Date
  - Effective for years commencing on or after April 1, 2021, extended from April 1, 2019 in March 2018, for all other organizations including municipal governments
  - PSAB is considering certain narrow scope amendments for PS3450, including : (1) accounting treatment of a bond repurchase; (2) scope exclusion of certain activities by the federal government; and (3) improvements to transitional provisions. A final pronouncement has not been issued approving these amendments.
  - Early adoption is permitted

Public Sector Accounting Standard Changes Financial Instruments PS 3450 (1/5)

- Measurement/Recognition Principles

  - New Section PS 3450 Financial Instruments

  - Investments in equities that are traded in an active market are measured at fair value, with changes recognized in operations

  - All other financial instruments are carried at cost or amortized cost

  - Option to record any financial instrument at fair value – Irrevocable election on initial recognition

  - Any investments where managing and reporting performance for a group of financial assets, financial liabilities, or both on a fair value basis

Public Sector Accounting Standard Changes Financial Instruments PS 3450 (2/5)

- Measurement/Recognition Principles – derivatives

  - Derivatives continue to be measured at fair value

  - Hedge accounting is not permitted

  - Contracts must be reviewed for embedded derivatives

  - Option to value full contract with embedded derivative at fair value rather than separately account for the derivative features

Public Sector Accounting Standard Changes Financial Instruments PS 3450 (3/5)

- Transaction costs

  - Capitalize transaction costs for instruments carried at cost or amortized cost

  - Expense transaction costs for instruments carried at fair value

- Effective Interest method

  - Interest should be measured using the effective interest method

- Timing of recognition

  - Purchase and sale of investments should be recorded using the trade-date; not the settlement date

Public Sector Accounting Standard Changes
Financial Instruments PS 3450 (4/5)

- **Disclosure**

  - Disclose information that enables users of the financial statements to evaluate the significance of financial instruments

  - Disclose carrying amounts, either on the statement of financial position or notes for:

    a) Financial assets / liabilities measured at amortized cost

    b) Financial assets / liabilities measured at fair value

    c) Investments in equities measured at cost less impairment

Public Sector Accounting Standard Changes Financial Instruments PS 3450 (5/5)

- Disclosure (cont'd):
  - Items of income include:
    a) Net gains or net losses recognized on financial instruments
    b) Total interest income
    c) Total interest expense
  - Risks and uncertainties: for each significant risk arising from financial instruments, disclose the exposures to risk, how they arise and any change in risk exposures from the previous period

Public Sector Accounting Standard Change Financial Statement Presentation PS 1201 (1/2)

- Statement of Remeasurement Gains and Losses

  – Exchange gains/losses yet to be settled

  – Fair value remeasurements on investments and derivatives

Public Sector Accounting Standard Change Financial Instruments – Financial Statement Presentation (2/2)

Statement of Remeasurement Gains and Losses

For the year ended December 31	20X1	20X0
Accumulated remeasurement gains and losses at beginning of year	$ xx	$ xx
Unrealized gains (losses) attributable to:		
Derivatives	xx	xx
Portfolio investments	xx	xx
Foreign exchange	xx	xx
Amounts reclassified to the statement of operations:		
Derivatives	xx	xx
Portfolio investments	xx	xx
Foreign exchange	xx	xx
Net remeasurement gains and losses for the year	xx	xx
Accumulated remeasurement gains and losses at the end of the year	$ xx	$ xx

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Public Sector Accounting Standard Changes Foreign Currency PS 2601

- PS 2601

  - Current rate would be used

  - Gains/losses yet to be settled (i.e. remeasurement gains and losses) presented in a separate statement

Asset Retirement Obligations ("ARO") (1/6)

- A formal standard on ARO's was approved by PSAB at its March 2018 session, covering:

  - Retirement obligations associated with tangible capital assets controlled by a public sector entity (assumption of responsibility not a requirement)

  - Legal obligations, including an obligation created by promissory estoppel

  - Includes solid waste landfill closure and post-closure liability (has resulted in the proposed amendment to withdraw Section PS 3270)

  - Asset retirement obligations associated with tangible capital assets that are in productive use and those that are no longer in productive use

  - Three transitional provision options: Prospective; Retroactive; Modified retroactive application

- Effective date April 1, 2021. Earlier adoption is permitted.

- Webcast available from KPMG and CPA Canada

ARO - Recognition/Allocation (2/6)

- A liability should be recognized when, as at the financial reporting date:

  - there is a legal obligation to incur retirement costs in relation to a tangible capital asset;

  - the past transaction or event giving rise to the liability has occurred;

  - it is expected that future economic benefits will be given up; and

  - a reasonable estimate of the amount can be made.

- A liability for an asset retirement obligation cannot be recognized <u>unless all of the criteria above</u> are satisfied.

ARO - Recognition/Allocation (3/6)

Recognition and allocation guidelines:

- Capitalize asset retirement obligation and allocate the cost in a rational and systematic manner.

- Capitalize vs. expense:

    - Capitalize asset retirement obligations associated with fully amortized tangible capital assets.

    - Expense asset retirement obligations associated with unrecognized tangible capital assets.

    - Expense asset retirement obligations associated with tangible capital assets no longer in productive use

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ARO – Measurement (4/6)

- The estimate of a liability should include costs directly attributable to asset retirement activities. Costs would include post-retirement operations, maintenance and monitoring that are an integral part of the retirement of the tangible capital asset. Includes costs of tangible capital assets acquired as part of asset retirement activities to the extent those assets have no alternative use.

ARO – flow chart (5/6)

Is there an existing obligation associated with the asset retirement or remediation? — No →

↓ Yes

Does the obligation result from acquisition, construction, development or normal use of a tangible capital asset?

Yes ↓ ← → No

Is there a legal obligation to incur retirement costs associated with a tangible capital asset of the public sector entity? — No → **Environmental standard exists** — No →

↓ Yes (Environmental standard) → **Contamination exceeds environmental standard** — No →

↓ Yes → **The public sector entity is directly responsible or accepts responsibility** — No →

↓ Yes

Yes ↓

Section PS 3280 applies

See LIABILITY FOR CONTAMINATED SITES, Section PS 3260

See LIABILITIES, Section PS 3200

Do nothing

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ARO's – Other (6/6)

- PSAB has approved consequential amendments to paragraphs PS 3260.62-64, Contaminated Sites, with respect to recoveries. The consequential amendments note that a recovery should not be netted against the related contaminated site liability.

- The consequential amendment also notes that a contingent recovery should be disclosed in accordance with PS 3320, Contingent Assets,

- The consequential amendment has an effective date of April 1, 2021.

Revenues (1/2)

- PSAB approved the final Handbook Section PS 3400, *Revenue* in June 2018. This new Section will be effective for fiscal years beginning on or after April 1, 2022

- From the Exposure draft

  - Focused on two categories of revenues: exchange transactions; and unilateral (non-exchange) transactions

  - Excluded from this are:

    a) Reporting of contributions and appropriations *excluded* from scope.

    b) Accounting for government transfers, tax revenues, interest, dividends, and gains and restricted assets

  - Exchange transactions are distinguished based on the presence of performance obligations (enforceable promises to provide goods or services)

  - An exchange transaction is evaluated to identify which goods or services are distinct and accounted for as a separate performance obligation

  - Revenue from an exchange transaction is recognized as the public sector entity satisfies a performance obligation

  - Unilateral revenues (such as fines and penalties imposed by a government) are recognized when there is the authority and a past event that gives rise to a claim of economic resources

  - Revenue is not reduced upon initial recognition if collectability is uncertain

Revenues from the Statement of Principles (2/2)

APPENDIX — DECISION TREE

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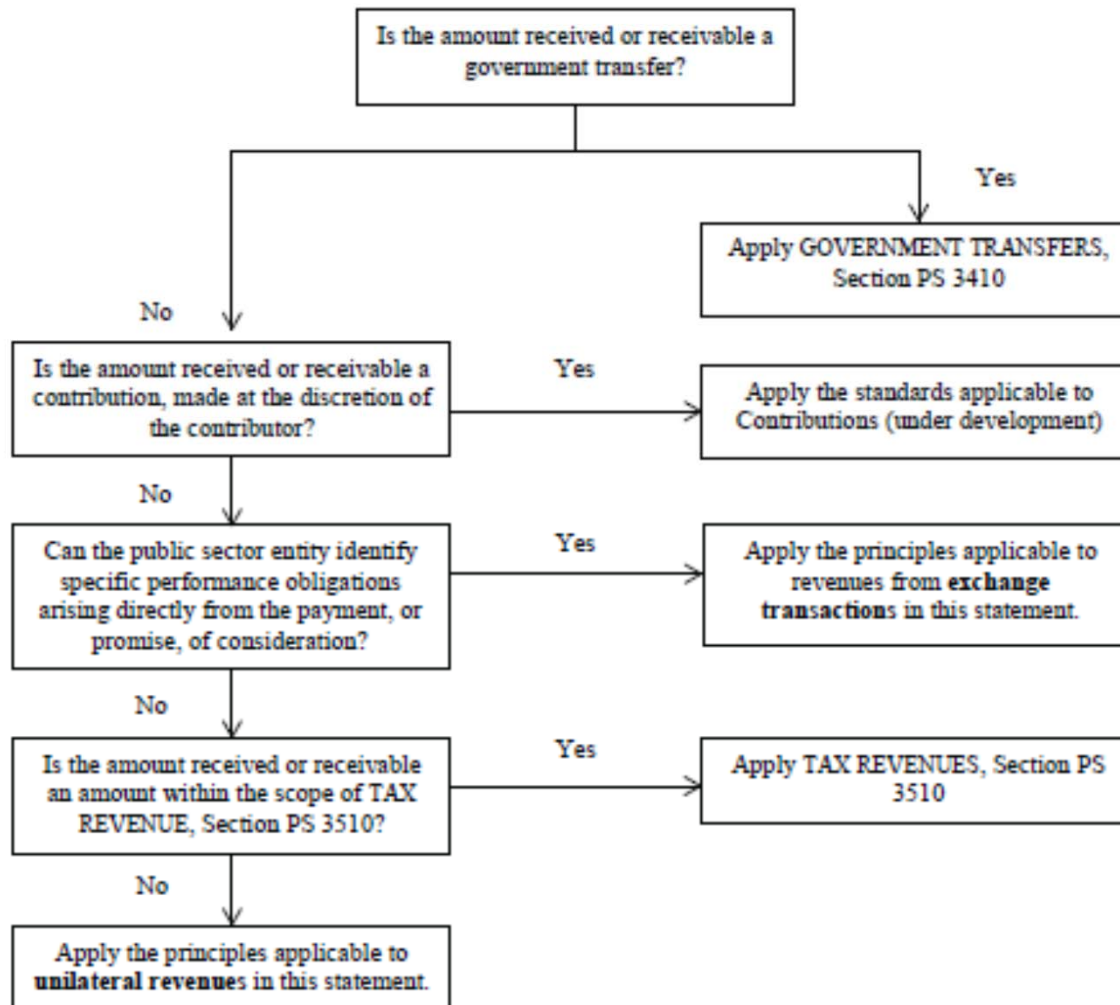
PSAS Active Projects

Topic	Next steps
Employment benefits	Third Invitation to Comment, "Employment Benefits: Non-traditional Pension Plans." issued October 2018. PSAB expects to move directly to Exposure Draft.
Public private partnerships	Exposure Draft expected to be approved by PSAB in September 2019.
Concepts Underlying Financial Performance	SoC and SoP released Q2 2018. Comments have been received and are under review by the Board.
PSAB's Approach to International Public Sector Accounting Standards	Second consultation paper, "Reviewing PSAB's Approach to International Public Sector Accounting Standards" issued for comment in May 2019.
Government Not for Profit Consultations	Consultation paper issued for comment in May 2019.

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Appendix 6: Financial Indicators

Indicators of Financial Performance

Financial Indicators

A. Reporting on financial condition

In Canada, the development and maintenance of principles for financial reporting fall under the responsibility of the Accounting Standards Oversight Council ('AcSOC'), a volunteer body established by the Canadian Institute of Chartered Accountants in 2000. In this role, AcSOC provides input to and monitors and evaluates the performance of the two boards that are tasked with establishing accounting standards for the private and public sector:

- The Public Sector Accounting Board ('PSAB') establishes accounting standards for the public sector, which includes municipal governments; and

- The Accounting Standards Board ('AcSB'), which is responsible for the establishment of accounting standards for Canadian entities outside of the public sector.

In May 2009, PSAB released a Statement of Recommended Practice that provided guidance on how public sector bodies should report on indicators of financial condition. As defined in the statement, financial condition is '*a government's financial health as assessed by its ability to meet its existing financial obligations both in respect of its service commitments to the public and financial commitments to creditors, employees and others*'. In reporting on financial condition, PSAB also recommended that three factors, at a minimum, need to be considered:

- **Sustainability**. 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. To the extent that the level of debt or tax burden grows at a rate that exceeds the growth in the City's assessment base, there is an increased risk that the City's current spending levels (and by association, its services, service levels and ability to meet creditor obligations) cannot be maintained.

- **Flexibility**. Flexibility reflects the City's ability to increase its available sources of funding (debt, taxes or user fees) to meet increasing costs. Municipalities with relatively high flexibility have the potential to absorb cost increases without adversely impacting affordability for local residents and other ratepayers. On the other hand, municipalities with low levels of flexibility have limited options with respect to generating new revenues, requiring an increased focus on expenditure reduction strategies.

- **Vulnerability**. Vulnerability represents the extent to which the City is dependent on sources of revenues, predominantly grants from senior levels of government, over which it has no discretion or control. The determination of vulnerability considers (i) unconditional operating grants such as OMPF; (ii) conditional operating grants such as Provincial Gas Tax for transit operations; and (iii) capital grant programs. Municipalities with relatively high indicators of vulnerability are at risk of expenditure reductions or taxation and user fee increases in the event that senior levels of funding are reduced. This is particularly relevant for municipalities that are vulnerable with respect to operating grants from senior levels of government, as the Municipal Act does not allow municipalities to issue long-term debt for operating purposes (Section 408(2.1)).

Financial Indicators

B. Selected financial indicators

As a means of reporting the City's financial condition, we have considered the following financial indicators (*denotes PSAB recommended financial indicator).

Financial Condition Category	Financial Indicators
Sustainability	1. Financial assets to financial liabilities* 2. Total reserves and reserve funds per household 3. Total operating expenses as a percentage of taxable assessment* 4. Capital additions as a percentage of amortization expense
Flexibility	5. Residential taxes per household 6. Total long-term debt per household 7. Residential taxation as a percentage of median household income 8. Total taxation as a percentage of total assessment* 9. Debt servicing costs (interest and principal) as a percentage of total revenues* 10. Net book value of tangible capital assets as a percentage of historical cost of tangible capital assets*
Vulnerability	11. Operating grants as a percentage of total revenues* 12. Capital grants as a percentage of total capital expenditures*

A detailed description of these financial indicators, as well as comparisons to selected municipalities, is included on the following pages.

Our analysis is based on Financial Information Return data. Given the timing of financial reporting for municipalities, the analysis is based on 2018 FIR data with comparative information provided based upon the 2014 – 2017 FIR data.

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Financial Indicators

C.   Selecting Comparator Municipalities

There are a number of factors that will influence the financial performance and position of municipalities, including but not limited to geographic size, number of households, delegation of responsibilities between upper and lower tier levels of government and services and service levels. Accordingly, there is no 'perfect' comparative municipality for the City. However, in order to provide some perspective as to the City's financial indicators, we have selected comparator municipalities that have comparable:

•   Governance structures (i.e. single-tier municipality);

•   Household levels; and

•   Geographic size.

Based on these considerations, the selected comparator municipalities are as follows:

Municipality	Population (2018)	Households (2018)	Area (square km)
London	393,167	176,859	423.43
Ottawa	934,243	422,327	2790.0
Hamilton	572,575	234,655	1117.29
Windsor	224,134	99,325	146.38
Kingston	123,973	53,970	451.19
Guelph	131,790	56,636	87.22

Financial Indicators

FINANCIAL ASSETS TO FINANCIAL LIABILITIES

This financial indicator provides an assessment of the City's solvency by comparing financial assets (including cash, investments and accounts receivable) to financial liabilities (accounts payable, deferred revenue and long-term debt). Low levels of financial assets to financial liabilities are indicative of limited financial resources available to meet cost increases or revenue losses.

TYPE OF INDICATOR

Sustainability ✓

Flexibility

Vulnerability

FORMULA

FIR Schedule 70, Line 9930, Column 1 divided by FIR Schedule 70, Line 9940, Column 1

POTENTIAL LIMITATIONS

- Financial assets may include investments in government business enterprises, which may not necessarily be converted to cash or yield cash dividends

- Financial liabilities may include liabilities for employee future benefits and future landfill closure and post-closure costs, which may (i) not be realized for a number of years; and/or (ii) may not be realized at once but rather over a number of years

Bar chart showing Financial Assets to Financial Liabilities for London, Ottawa, Hamilton, Windsor, Kingston, and Guelph for years 2014–2018.

2014 2015 2016 2017 2018

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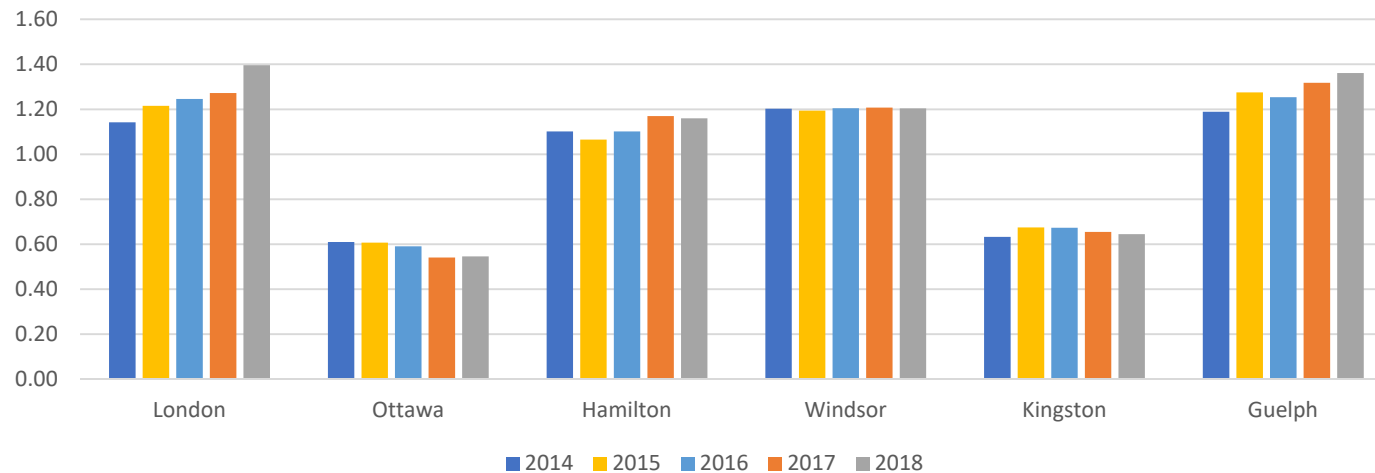
Financial Indicators

TOTAL RESERVES AND RESERVE FUNDS PER HOUSEHOLD

This financial indicator provides an assessment of the City's ability to absorb incremental expenses or revenue losses through the use of reserves and reserve funds as opposed to taxes, user fees or debt. Low reserve levels are indicative of limited capacity to deal with cost increases or revenue losses, requiring the City to revert to taxation or user fee increases or the issuance of debt.
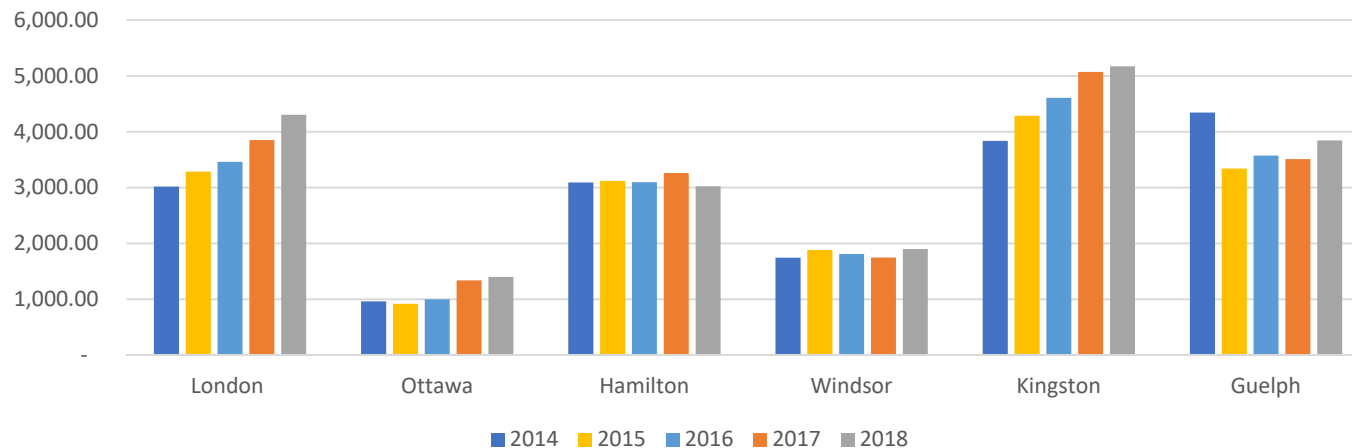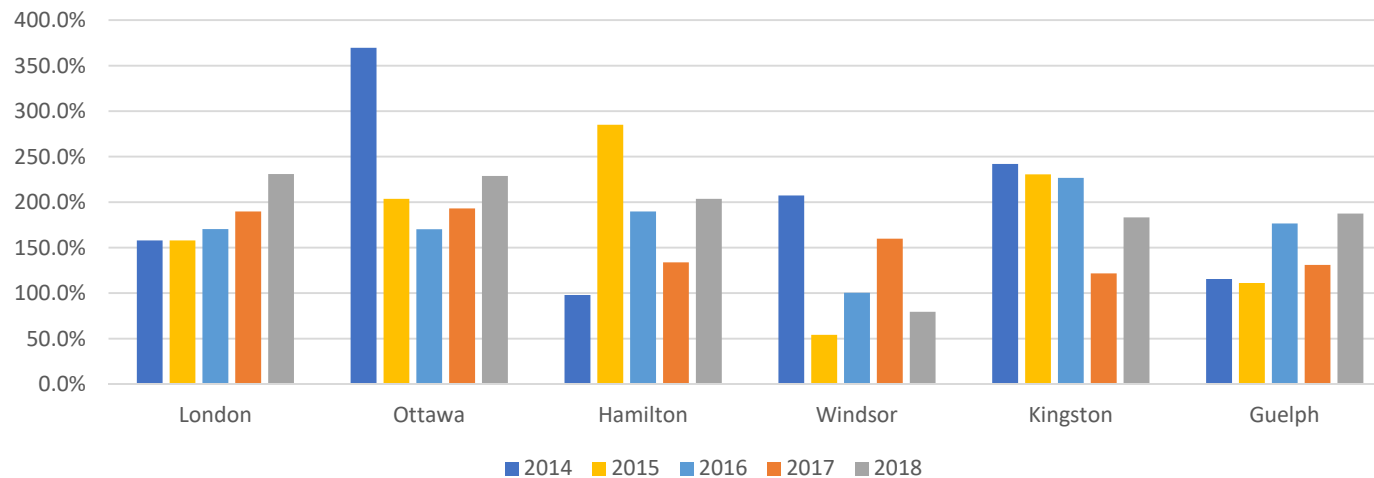
TYPE OF INDICATOR

Sustainability ✓

Flexibility

Vulnerability

FORMULA

FIR Schedule 70, Line 6420, Column 1 divided by FIR Schedule 2, Line 40, Column 1

POTENTIAL LIMITATIONS

- Reserves and reserve funds are often committed to specific projects or purposes and as such, may not necessarily be available to fund incremental costs or revenue losses

- As reserves are not funded, the City may not actually have access to financial assets to finance additional expenses or revenue losses

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Financial Indicators

TOTAL OPERATING EXPENSES AS A PERCENTAGE OF TAXABLE ASSESSMENT

This financial indicator provides an assessment of the City's solvency by determining the extent to which increases in operating expenses correspond with increases in taxable assessment. If increases correspond, the City can fund any increases in operating costs without raising taxation rates.

TYPE OF INDICATOR		FORMULA	POTENTIAL LIMITATIONS
Sustainability	✓	FIR Schedule 40, Line 9910, Column 7 less FIR Schedule 40, Line 9910, Column 16 divided by FIR Schedule 26, Column 17, Line 9199	• As operating expenses are funded by a variety of sources, the City's sustainability may be impacted by reductions in other funding sources that would not be identified by this indicator.
Flexibility			
Vulnerability			

Bar chart showing Total Operating Expenses as a Percentage of Taxable Assessment for London, Ottawa, Hamilton, Windsor, Kingston, and Guelph for years 2014, 2015, 2016, 2017, 2018.
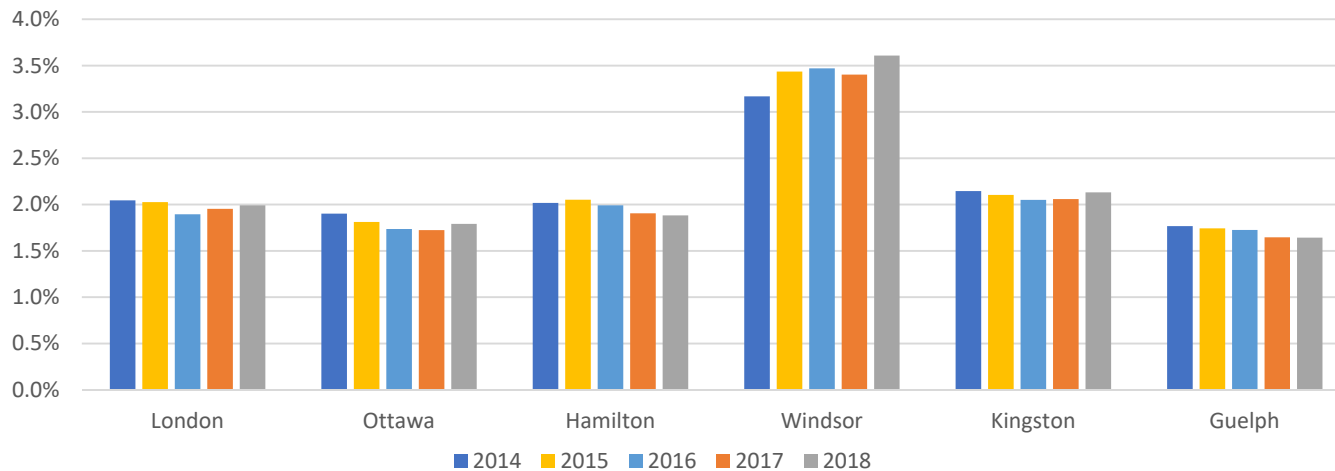
Financial Indicators

CAPITAL ADDITIONS AS A PERCENTAGE OF AMORTIZATION EXPENSE

This financial indicator provides an assessment of the City's solvency by assessing the extent to which it is sustaining its tangible capital assets. In the absence of meaningful reinvestment in tangible capital assets, the City's ability to continue to deliver services at the current levels may be compromised.
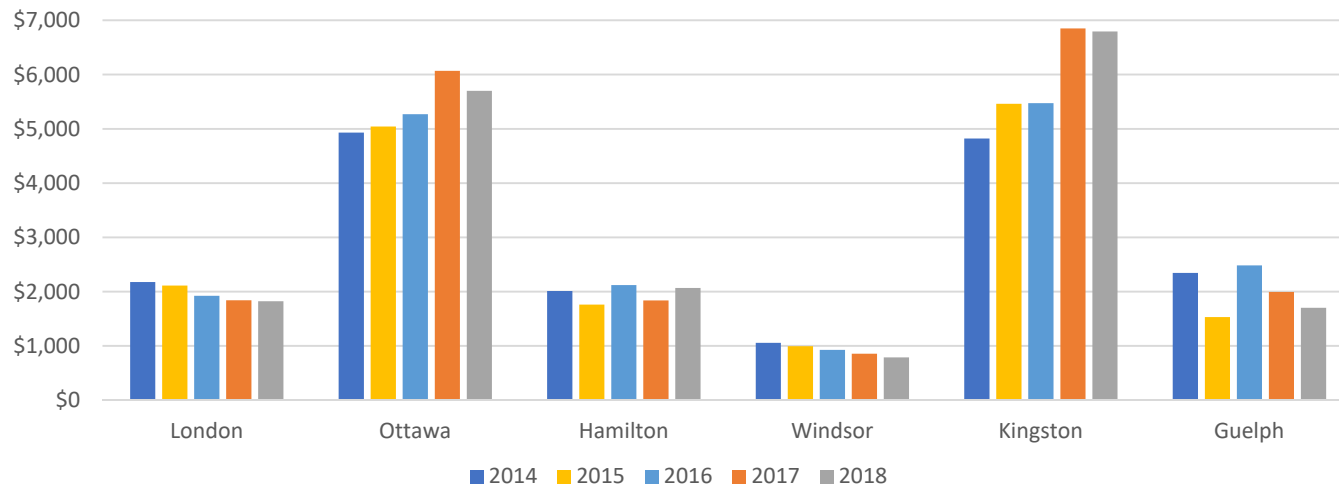
TYPE OF INDICATOR

Sustainability ✓

Flexibility

Vulnerability

FORMULA

FIR Schedule 51, Line 9910, Column 3 divided by FIR Schedule 40, Line 9910, Column 16

POTENTIAL LIMITATIONS

- This indicator considers amortization expense, which is based on historical as opposed to replacement cost. As a result, the City's capital reinvestment requirement will be higher than its reported amortization expense due to the effects of inflation.

- This indicator is calculated on a corporate-level basis and as such, will not identify potential concerns at the departmental level.

Financial Indicators

RESIDENTIAL TAXES PER HOUSEHOLD

This financial indicator provides an assessment of the City's ability to increase taxes as a means of funding incremental operating and capital expenditures.
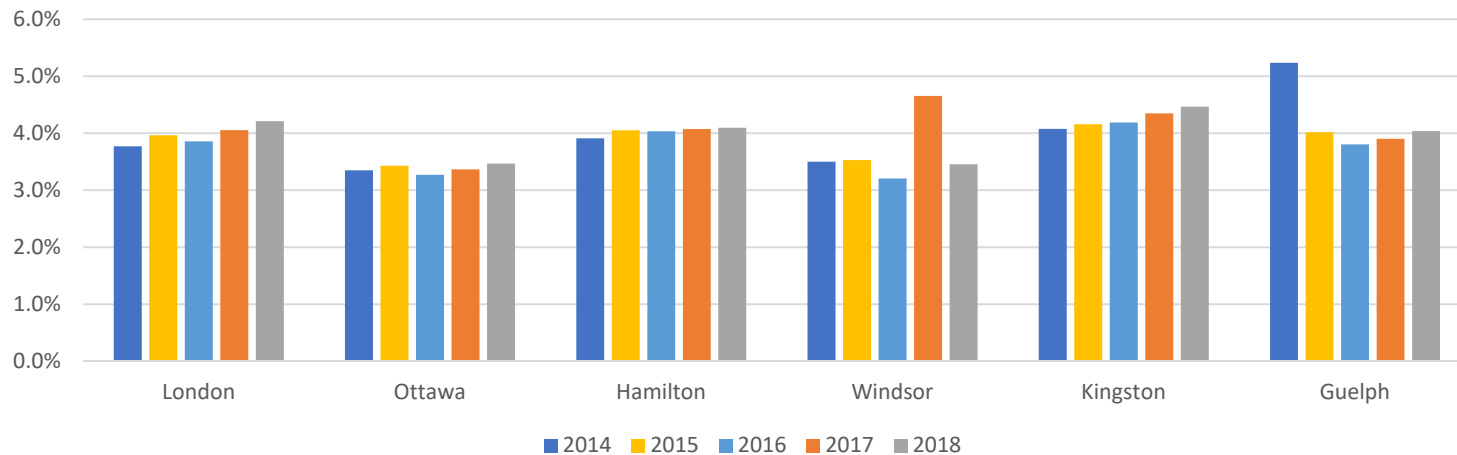
TYPE OF INDICATOR

Sustainability

Flexibility ✓

Vulnerability

FORMULA

FIR Schedule 26, Line 0010 and Line 1010, Column 4 divided by FIR Schedule 2, Line 0040, Column 1

POTENTIAL LIMITATIONS

- This indicator does not incorporate income levels for residents and as such, does not fully address affordability concerns.

- This indicator is calculated based on lower-tier taxation only and does not consider upper tier or education taxes.

- This indicator does not consider the level of service provided by each municipality.
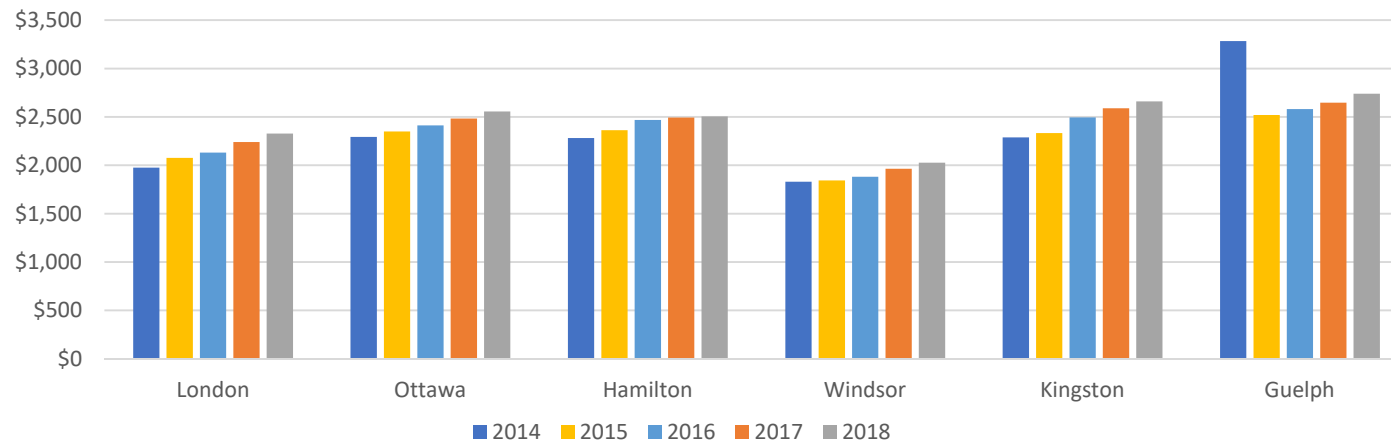
Financial Indicators

TOTAL LONG-TERM DEBT PER HOUSEHOLD

This financial indicator provides an assessment of the City's ability to issue more debt by considering the existing debt loan on a per household basis. High debt levels per household may preclude the issuance of additional debt.

TYPE OF INDICATOR		FORMULA	POTENTIAL LIMITATIONS
Sustainability		FIR Schedule 70, Line 2699, Column 1 divided by FIR Schedule 2, Line 0040, Column 1	• This indicator does not consider the Provincial limitations on debt servicing cost, which cannot exceed 25% of own-source revenues unless approved by the Ontario Municipal Board
Flexibility	✓		
Vulnerability			

Bar chart: Total long-term debt per household by city (London, Ottawa, Hamilton, Windsor, Kingston, Guelph) for years 2014, 2015, 2016, 2017, 2018.

Financial Indicators

RESIDENTIAL TAXATION AS A PERCENTAGE OF HOUSEHOLD INCOME

This financial indicator provides an indication of potential affordability concerns by calculating the percentage of median after tax household income used to pay municipal property taxes.

TYPE OF INDICATOR	
Sustainability	
Flexibility	✓
Vulnerability	

FORMULA

FIR Schedule 26, Line 0010 and Line 1010, Column 4 divided by FIR Schedule 2, Line 0040, Column 1 (to arrive at average residential tax per household). Median household income is derived from 2016 and 2011 census data.

POTENTIAL LIMITATIONS

- This indicator considers residential affordability only and does not address commercial or industrial affordability concerns.

- This indicator is calculated on a median household basis and does not provide an indication of affordability concerns for low income or fixed income households.

Legend: ■ 2014 ■ 2015 ■ 2016 ■ 2017 ■ 2018

Financial Indicators

TOTAL TAXATION AS A PERCENTAGE OF TOTAL ASSESSMENT

This financial indicator provides an indication of potential affordability concerns by calculating the City's overall rate of taxation. Relatively high tax rate percentages may limit the City's ability to general incremental revenues in the future.

TYPE OF INDICATOR		**FORMULA**	**POTENTIAL LIMITATIONS**
Sustainability		FIR Schedule 26, Line 9199 and Line 9299, Column 4 divided by FIR Schedule 26, Line 9199 and 9299, Column 17.	• This indicator considers the City's overall tax rate and will not address affordability issues that may apply to individual property classes (e.g. commercial).
Flexibility	✓		
Vulnerability			

Chart: Total taxation as a percentage of total assessment for London, Ottawa, Hamilton, Windsor, Kingston, and Guelph (years 2014, 2015, 2016, 2017, 2018).
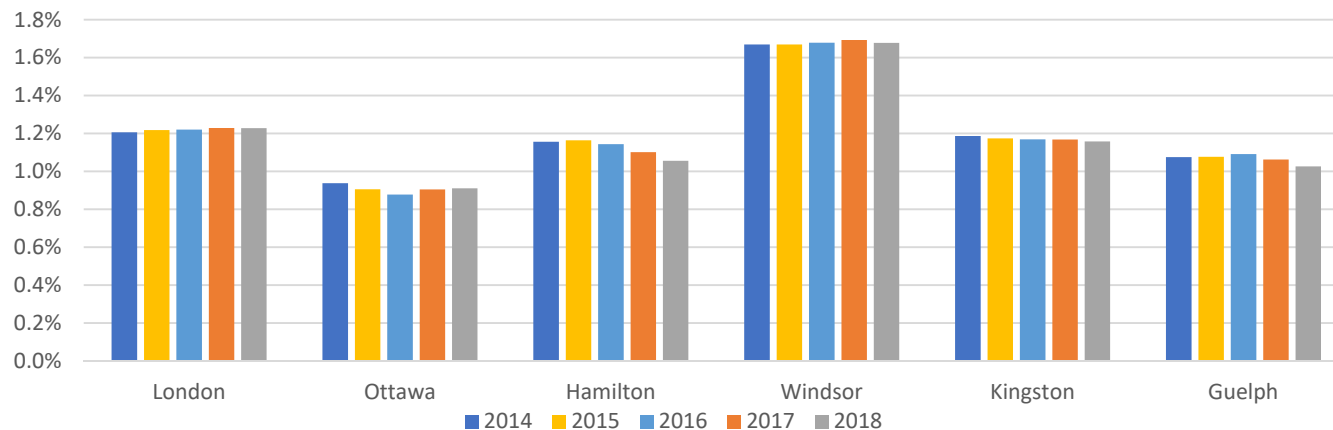
Financial Indicators

DEBT SERVICING COSTS (INTEREST AND PRINCIPAL) AS A PERCENTAGE OF TOTAL REVENUES

This financial indicator provides an indication as to the City's overall indebtedness by calculating the percentage of revenues used to fund long-term debt servicing costs. The City's ability to issue additional debt may be limited if debt servicing costs on existing debt are excessively high.

TYPE OF INDICATOR

Sustainability

Flexibility ✓

Vulnerability

FORMULA

FIR Schedule 74C, Line 3099, Column 1 and Column 2 divided by FIR Schedule 10, Line 9910, Column 1.

POTENTIAL LIMITATIONS

- No significant limitations have been identified in connection with this indicator

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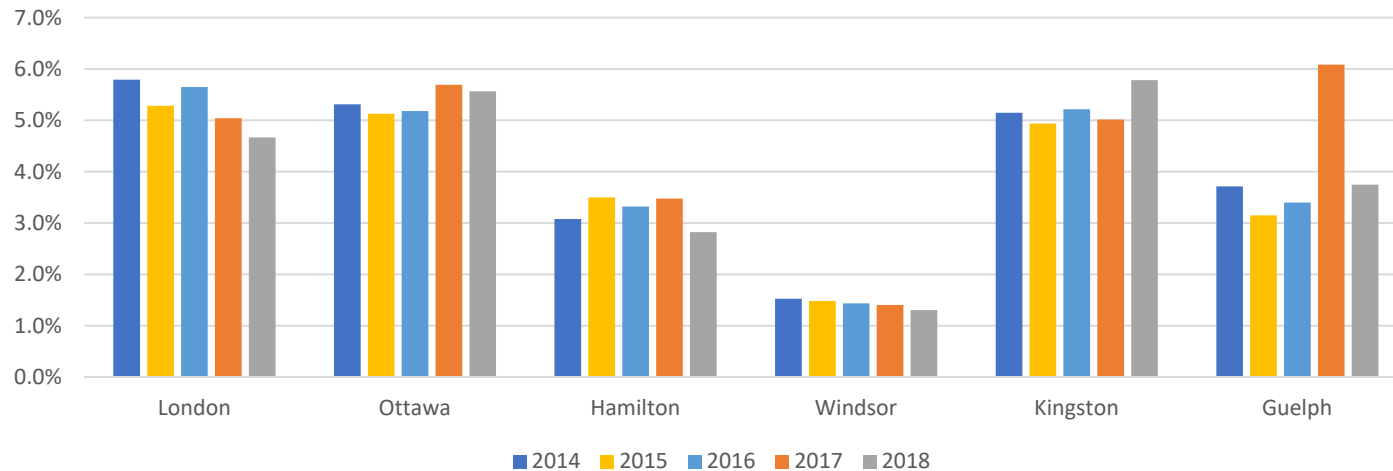
Financial Indicators

NET BOOK VALUE OF TANGIBLE CAPITAL ASSETS AS A PERCENTAGE OF HISTORICAL COST OF TANGIBLE CAPITAL ASSETS

This financial indicator provides an indication as to the extent to which the City is reinvesting in its capital assets as they reach the end of their useful lives. An indicator of 50% indicates that the City is, on average, investing in capital assets as they reach the end of useful life, with indicators of less than 50% indicating that the City's reinvestment is not keeping pace with the aging of its assets.

TYPE OF INDICATOR		FORMULA	POTENTIAL LIMITATIONS
Sustainability		FIR Schedule 51A, Line 9910, Column 11 divided by FIR Schedule 51A, Line 9910, Column 6.	• This indicator is based on the historical cost of the City's tangible capital assets, as opposed to replacement cost. As a result, the City's pace of reinvestment is likely lower than calculated by this indicator as replacement cost will exceed historical cost.
Flexibility	✓		
Vulnerability			• This indicator is calculated on a corporate-level basis and as such, will not identify potential concerns at the departmental level.
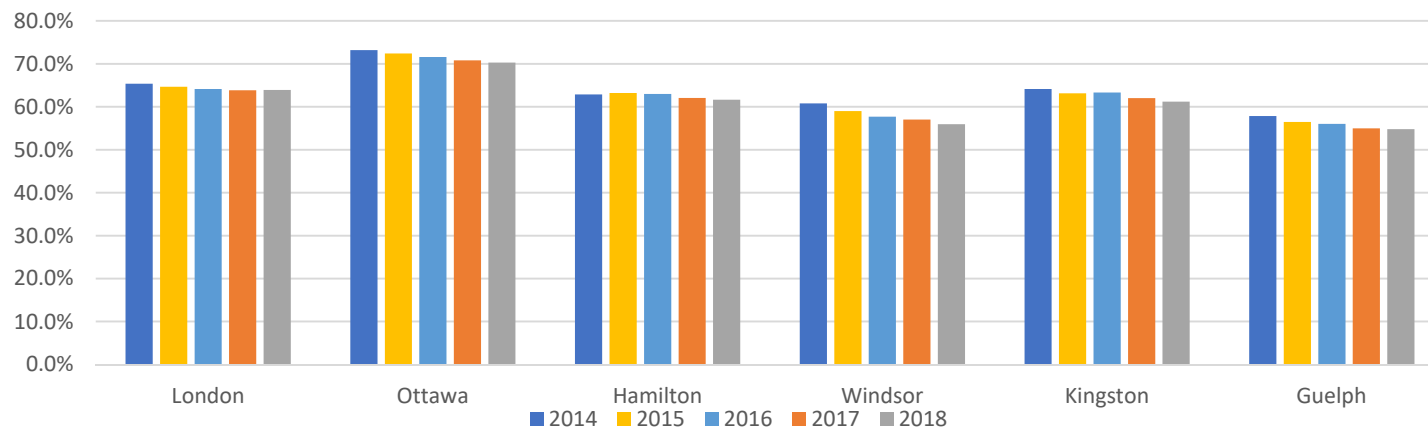
Financial Indicators

OPERATING GRANTS AS A PERCENTAGE OF TOTAL REVENUES

This financial indicator provides an indication as to the City's degree of reliance on senior government grants for the purposes of funding operating expenses. The level of operating grants as a percentage of total revenues is directly proportionate with the severity of the impact of a decrease in operating grants.
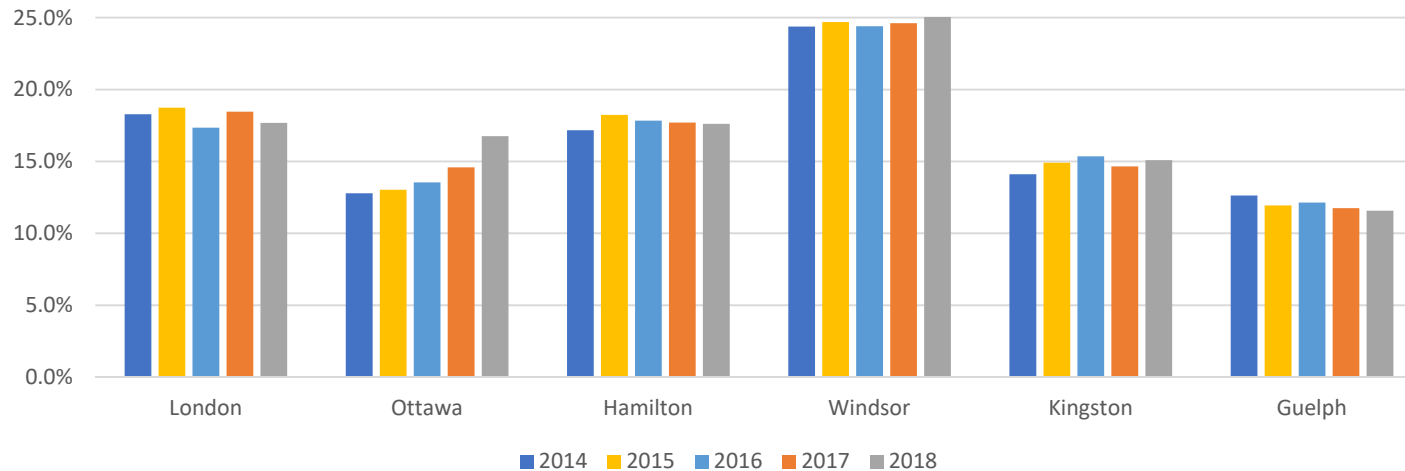
TYPE OF INDICATOR		FORMULA	POTENTIAL LIMITATIONS
Sustainability		FIR Schedule 10, Line 0699, Line 0810, Line 0820, Line 0830, Column 1 divided by FIR Schedule 10, Line 9910, Column 1.	• To the extent possible, the City should maximize its operating grant revenue. As such, there is arguably no maximum level associated with this financial indicator.
Flexibility			
Vulnerability	✔		

Bar chart: Operating grants as a percentage of total revenues for London, Ottawa, Hamilton, Windsor, Kingston, and Guelph for the years 2014, 2015, 2016, 2017, and 2018.

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Financial Indicators

CAPITAL GRANTS AS A PERCENTAGE OF TOTAL CAPITAL EXPENDITURES

This financial indicator provides an indication as to the City's degree of reliance on senior government grants for the purposes of funding capital expenditures. The level of capital grants as a percentage of total capital expenditures is directly proportionate with the severity of the impact of a decrease in capital grants.
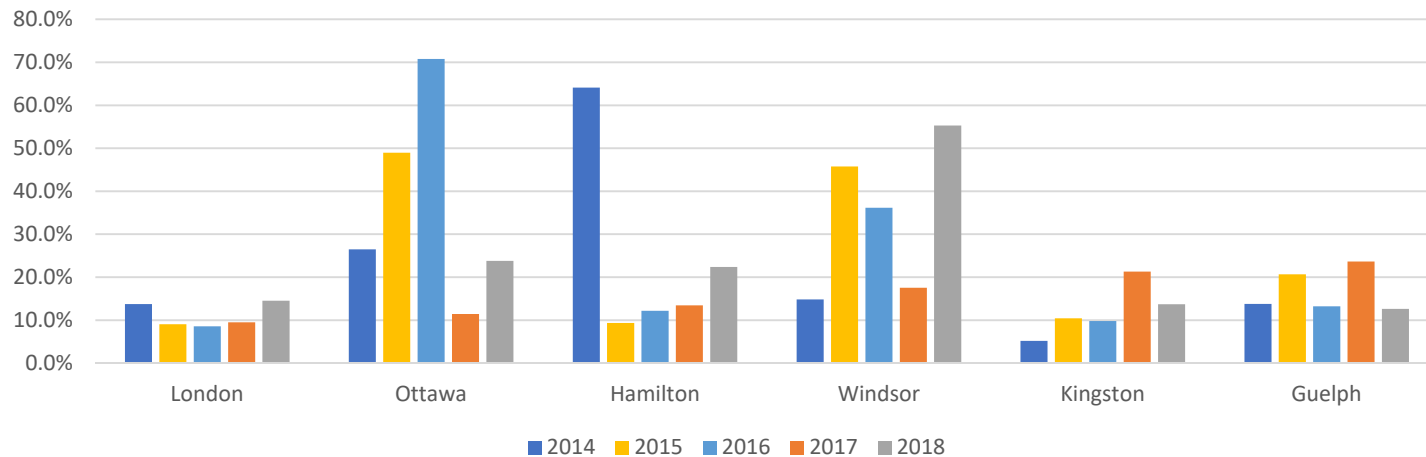
TYPE OF INDICATOR	**FORMULA**	**POTENTIAL LIMITATIONS**
Sustainability Flexibility Vulnerability ✓	FIR Schedule 10, Line 0815, Line 0825, Line 0831, Column 1 divided by FIR Schedule 51, Line 9910, Column 3.	• To the extent possible, the City should maximize its capital grant revenue. As such, there is arguably no maximum level associated with this financial indicator.

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The Corporation of the City of London
Computerized Maintenance
Management System (CMMS) Review

Audit Performed: October 2019 – November 2019
Report Issued: January 2020

Table of contents

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Executive summary

Background
The Computerized Maintenance Management System (CMMS) project's objective is to provide Water & Sewer departments a flexible and easy to use solution for staff to plan and schedule work activities and associated resources along with the ability to record and report on the association of these activities and resources to infrastructure assets. To help meet this objective the CMMS project is implementing the Cityworks software solution, purchased from ESRI Canada, who assisted with the Cityworks integration.

Objectives and scope
As part of the 2019 Internal Audit Plan, a pre-implementation review of the Corporation of the City of London's (the 'City') CMMS control framework was conducted. The purpose and objective of this review was to evaluate and assess the City's internal control framework that has been proposed and is currently being established for phase one of the CMMS implementation.

The detailed internal audit scope can be found in *Appendix 1: Internal audit detailed scope* of this report.

The scope of this audit is unchanged from the audit charter of July 31, 2019, however since that date changes have occurred to the scope of the Computerized Maintenance Management System (CMMS) project, and are summarized below.

- The objective of the CMMS project is the implementation of ESRI Canada's Cityworks application for planning, recording and reporting on operations and maintenance work done on City infrastructure.

- A phased implementation by department is planned with the Water and Sewer departments scheduled for Phase 1, Road Operations and Forestry for phase 2, and Parks and Solid Waste for Phase 3. The implementation date for Phase 1 (Water and Sewer) on the Cityworks application was Sept. 30, 2019.

- The Sept. 30 date was postponed, supported by a change request, due to not having defined business processes to support the Finance interfaces. The revised implementation date was Oct. 31. At this time the Finance interfaces were removed from scope, a date for their activation to be determined. In addition, the concept of a "soft launch" was proposed, which reduced the number of field functions to be implemented. The intent was to minimize impact to the field by rolling out field functions over a longer time period. The reduction in implementation scope for Oct. 31 was large, with one of sixteen Water filed functions going live and none of the sixteen Sewer field functions going live on Oct. 31.

- The Oct. 31 date was delayed by one week, supported by a change request, to accommodate additional end user training. The revised implementation date was Nov. 4.

- On Nov. 11 the implementation of Cityworks for Water was stopped, with no further activity to occur in the Cityworks application. Pre-Cityworks processes and tools are to remain in use while the project team re-plans activities and determines a new implementation date for Cityworks, which is not expected to occur in 2019.

While the CMMS scope has changed, the risks related to the project are not mitigated by the degree of functionality being implemented. The observations in this report are applicable regardless of the scope of the functionality being initially implemented.

Strengths
In completion of this assessment, we identified the following areas of strengths.

IT Operations

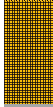Infrastructure Plan

Deployment Plan
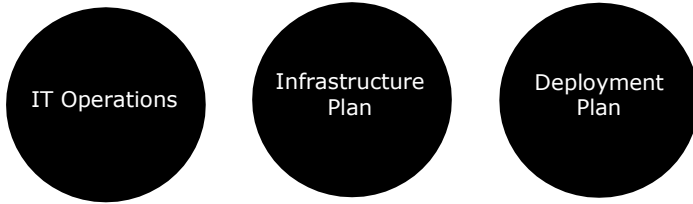
Areas for continued enhancement
Based on our review of the City's control framework for a Computerized Maintenance Management System (CMMS), we identified six high priority observations, four medium priority observations, one low priority observation and one leading practice recommendation that management should consider going forward. Please refer to *Appendix 2: Internal Audit rating scale* for definitions of the four-point scale.
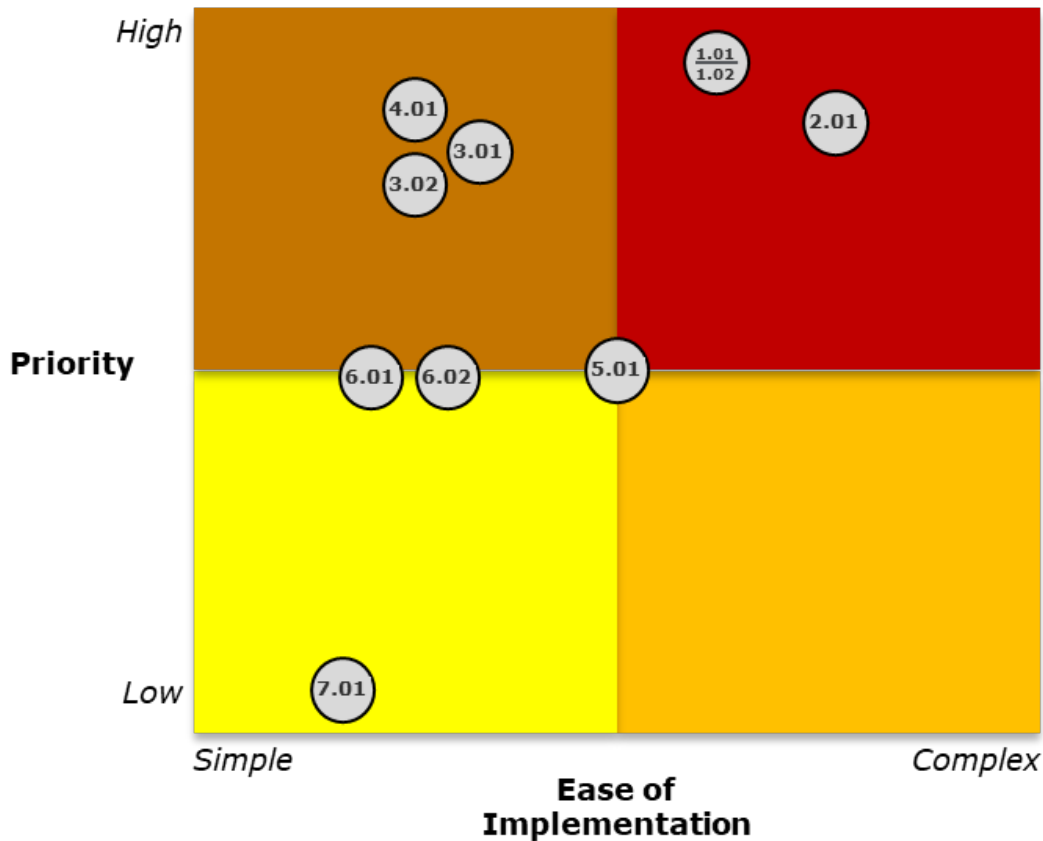
High priority	Medium priority	Low priority	Leading practice
6	3	0	1

Priority	Observation item	Observation description
High	CMMS 1.01	**Communication:** A high-level outline for a communications plan exists, but dates back to the previous project manager's tenure and has not been actioned.
High	CMMS 1.02	**Training:** CMMS project training for Cityworks is ad-hoc, and has been presented re-actively, one week prior to implementation.
High	CMMS 2.01	**Documentation and approval of business process controls**: Business process mapping sessions have not occurred within the various work streams to design the current business processes and associated controls for CMMS. In addition, approval processes and timelines have not been identified.
High	CMMS 3.01	**Interface strategies**: None of the interface strategies have a designated "final" version formally approved by the program leadership (Program Sponsor, Steering Committee).
High	CMMS 3.02	**Report strategy**: The CMMS project does not have a reports strategy as part of the implementation plans for the Cityworks application. Team members have minimal knowledge of the core reports delivered within the Cityworks application.
High	CMMS 4.01	**Segregation of access and change documentation:** There is a lack of segregation of duties in the change management process. In addition, testing and approval of changes prior to moving to production is not documented.
Medium	CMMS 5.01	**Key performance indicators (KPIs) and performance metrics:** Critical KPIs and performance metrics have not been established for CMMS.

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Medium	CMMS 6.01	**User access provisioning (de-provisioning):** There is no formalized process for management to approve access and segregate duties prior to provisioning.
Medium	CMMS 6.02	**Password configuration**: The Cityworks application password configuration does not comply with the City's Password Policy.
Leading Practice	CMMS 7.01	**Data conversion requirement:** There is no requirement for the conversion of legacy data into the Cityworks application. No formal documentation of this fact exists.

Priority heat map

Based on our assessment of the City's control framework for a Computerized Maintenance Management System (CMMS), the following image maps areas of continued enhancement based on priority and anticipated ease of implementation of our leading practice recommendations.

Conclusion

Based on our assessment of the City's control framework for a Computerized Maintenance Management System (CMMS), we have identified six high priority observations, four medium priority observations, one low priority observation and one leading practice recommendation that should be addressed to improve internal controls and process efficiency. The identified considerations and observation noted in this report should be addressed in a timely manner to enhance current controls and mitigate relevant risks.

Strengths

In the completion of this assessment, internal audit noted the following areas of strength:

IT Operations: There is a plan in place for the Cityworks application to backup data on a regular basis according to an established schedule and frequency. In addition, batch jobs have been appropriately configured to run as scheduled tasks to support the various interfaces to the system from Dynamics Customer Relationship Management (CRM) and JD Edwards financial system.

Infrastructure Plan: An infrastructure plan has been established by the Cityworks vendor, ESRI, and the City, including system specifications, system architecture review, and capability to maintain infrastructure in a state of good repair as well as cope with growing demand through capacity planning workshop.

Deployment Plan: A plan to deploy CMMS Phase 1 to production has been established and contains the steps for pre-deployment, deployment and post-deployment. Tasks of the plan are tracked and managed through the City's Team Foundation Server (TFS).

Areas for continued enhancement

In completing the procedures noted in *Appendix 4: Audit procedures performed*, internal audit identified the following areas for continued enhancement:

CMMS 1.0 – CMMS project governance		
	High Priority	**CMMS 1.01 – Communication**
Observation		The objective of a communications plan is to communicate project status to all stakeholder groups during the project lifecycle. It is normal for the scope of communications to evolve as the project progresses, from user awareness, to building consensus, to establishing commitment, to facilitating and supporting implementation activities. A key activity conducted early in the communications plan is a stakeholder analysis which identifies stakeholders; groups them according to their levels of participation, interest, and influence in the project; and determines how best to involve and communicate to each of these stakeholder groups throughout. Communications tasks are included in the project plan. At present a one page high level outline for a communications plan exists, however it dates back to the previous project manager's tenure, lacks the detail noted above, and has not been actioned. Formal communications are not occurring.
Implication		Without stakeholder alignment on the project's objectives and how those objectives are to be achieved, there is risk of varying expectations regarding what the project is to achieve, which will result in dissatisfaction with the end product, and the potential for rework leading to increased costs.
Recommendation		Management should perform the following activities: 1. Develop and execute a change management plan as defined above, to align stakeholders on project objectives and how those objectives are being achieve; and 2. Consider appointing a designated resource specializing in communication, for the CMMS program. This part time role would report directly to the CMMS project manager.
Management comments and action plan		*Management agrees and will take the following actions:* *Action Plan* 1. *Update the existing Communication Plan.* 2. *A resource has been identified to assist the PM with communication duties.* 3. *A new CMMS Office has been created at AJ Tyler (site of Phase 1 stakeholders) and the Cityworks Administrator will work from this office full-time and the Project Manager near full-time. This will allow more frequent communication with management as well as field staff.*

Responsible party and timing	*Gary Stronghill, Manager, Geospatial Information Systems*	*February, 2020*

    High Priority	**CMMS 1.02 – Training**

Observation	The objective of a training plan is to educate end users on the use of the new application, as well as any changes in their job function. A training plan identifies trainees, groups them according to role, defines a curriculum for each role, identifies the training methods and courses to be developed. Training tasks are included in the project plan. CMMS project training for Cityworks is ad-hoc, and has been presented re-actively, one week prior to implementation.
Implication	There is risk of work delays, re-work through correction of errors, the perception of project failure, and poor user adoption of the solution are risks resulting from: • Untrained, or poorly trained end-users who are unable to use the Cityworks application effectively, • Insufficient time to update/correct training materials based on feedback when training is delivered one week prior to implementation.
Recommendation	Management should perform the following activities: 1. Develop and execute a training plan as defined above, including the creation of training materials (e.g. electronic help functions, "cheat" sheets) to best equip end users for success when using the new Cityworks application. 2. Deliver training in a timely manner, as part of the UAT test cycle, and consider refresher training at implementation based on the roll out schedule of when functionality and impacted users is introduced. 3. Consider appointing a designated resource specializing in training, for the CMMS program. This part time role would report directly to the CMMS project manager. A specialized training resource (or function) adds value through their; independence from the core project team (non-biased approach), ability to leverage a range of training techniques (classroom, video, computer based training), and expertise in the creation of "help" functions. An independent training function would be available to all projects and departments within the City, providing a consistent approach to both materials and delivery methods.
Management comments and action plan	*Management agrees and will take the following actions:* *1. Develop and execute a training plan that includes sufficient scheduling to ensure staff are comfortable prior to launch.* *2. Create simple training materials such as one-page cheat sheets and presentation materials.*

	3. Identify a dedicated training coordinator.	
Responsible party and timing	*Gary Stronghill, Manager, Geospatial Information Systems*	*April 2020*

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CMMS 2.0 – Business process controls	
High Priority	**CMMS 2.01 – Documentation and approval of business process controls**
Observation	Business requirements and workflows for the various work streams have been documented in the CMMS Business Requirements Document (BRD). However, business process mapping sessions have not occurred within the various work streams to design the current business processes and associated controls for CMMS. In addition, approval processes and timelines have not been identified.
Implication	While it is realistic for certain items within the processes to be in flux until go-live, the risk exists that without formal and signed-off documentation being maintained, the City may be unable to affirm with confidence that: • Processes were designed after taking into account relevant considerations; • Feedback from relevant stakeholders was incorporated into the designed business processes; and • Robust controls were designed to mitigate identified risks.
Recommendation	Management should ensure that business processes and controls are designed and formally documented with appropriate signoffs being received by accountable parties at each stage of the CMMS implementation. In addition, the outputs generated from this documentation may be used as an input for training and change management purposes.
Management comments and action plan	*Management agrees and will take the following actions:* *1. Stakeholder workshops will be used to review the Business Processes and update the UAT scripts.* *2. Stakeholders will sign off on the contents of the UAT scripts to ensure business processes are being properly represented. Sign-off will also be sought following successful completion of the UAT phase.*
Responsible party and timing	*Gary Stronghill, Manager, Geospatial Information Systems* *April 2020*

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CMMS 3.0 – Data mapping and management	
High Priority	**CMMS 3.01 – Interface strategies**
Observation	Five interfaces from the JD Edwards financial application into Cityworks are defined; Data Broker, Work Orders, Costs, Material, and Employee Master. Each interface has a detailed development strategy, which include; scope, solution overview, use cases, and technical processes and elements - including data mapping. The interface strategies each include a table to track version changes by date, however none of the interface strategies has a designated "approved" version formally approved by the program leadership (Program Sponsor, Steering Committee).
Implication	Without approvals which formalize each interface strategy, there is risk of misinterpreting the interface design and delivering an incomplete solution. Multiple document versions leads to confusion on which version is current and should be tracked to.
Recommendation	Management should formalize the approval of the final interface strategy documents by the Project Manager, Sponsor and the Steering Committee.
Management comments and action plan	*Management agrees with the observation and will take the following actions:* 1. *Interface design documents known to be final (currently stored in a folder called Final) will be pulled and designated as final to avoid confusion going forward in the project.* 2. *Going forward Interface design documents will be presented to the steering committee for approval.*
Responsible party and timing	*Gary Stronghill, Manager, Geospatial Information Systems* *February, 2020*

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High Priority	CMMS 3.02 – Report strategy
Observation	As is typical of 3rd party software, Cityworks includes a series of delivered reports (and queries). Using the Cityworks delivered reports as a baseline, the standard approach to a reporting strategy is to: • Map the City's reporting requirements to the vendor's (Cityworks) delivered core reports. • Identify Cityworks delivered core reports which can be used unchanged. • Identify Cityworks delivered core reports which require modification. Include in project planning the development and testing of core report modifications. • Identify net new reports required not delivered by Cityworks. Include in project planning the development and testing of net new reports. • For all reports, identify recipients, mode of distribution (paper, electronic), and frequency of creation to enable reporting to begin immediately upon system implementation. The CMMS project does not have a reports strategy, and team members have minimal knowledge of the core reports delivered by the Cityworks. The current approach to reporting is to address post-implementation.
Implication	Not having core reports defined for implementation day is a critical gap in the delivery of the Cityworks application and limits the end users in their ability to provide management with meaningful information for informed decision-making.
Recommendation	Management should perform the following activities: 1. Develop and execute a reports strategy as defined above, for core reports, which will enable reporting to begin as part the Cityworks implementation. 2. As noted in prior observations, it is important that approvals surrounding the reports strategy and individual report designs are included in the process.
Management comments and action plan	*Management agrees with the observation and will take the following actions:* 1. *Develop a reports strategy for core reports. Strategy will include design elements of individual reports.* 2. *Report Strategy to follow appropriate approval process (e.g. user stakeholders → steering Committee)*
Responsible party and timing	*Gary Stronghill, Manager, Geospatial Information Systems* *May, 2020*

CMMS 4.0 – Change management of Cityworks application controls	
High Priority	**CMMS 4.01 – Segregation of access and change documentation**
Observation	There is a lack of segregation of duties in the change management process for Cityworks (e.g. users have access to the development environment and to promote changes to the production environment). Furthermore, it was noted that the Cityworks application does not have the functionality to generate system change listings. Hence, changes are currently only being logged manually and will be captured in the IT Service Portal service requests post go-live.
Implication	There is risk that inappropriate changes are made to application systems or programs that contain relevant controls (i.e., configurable settings, automated algorithms, automated calculations, and automated data extraction) and/or report logic.
Recommendation	Management should perform the following actions: 1. Segregate access to development and access to promote changes to production environment and/or implement management review of changes according to an established frequency (i.e. quarterly) where the following is reviewed by appropriate management: • Complete and accurate population of all application changes; • Whether changes followed the formal change management process (were tested and approved prior to implementation); • Segregation of duties was maintained between the developer and implementer of the changes; and, • Change management process were initiated in a timely manner for changes flagged as exceptions during the review. 2. The IT Service Portal service requests listing, as pertain to changes to Cityworks, should be reviewed by management according to an established frequency (i.e. quarterly) for completeness and accuracy.
Management comments and action plan	*Management agrees with the observation and will take the following actions:* 1. *We will create a group called "Cityworks" in the ITS Service Portal application. This will facilitate a single point of contact for users requesting access or application changes The Service Portal workflow with generate an email to the "Cityworks" group to alert the administrator of the request. Application access requests will be reviewed and approved by CityWorks Administrator.* 2. *Creation of the CityWorks Working Team consisting of Business and IT stakeholders and led by the Cityworks Project Manager. The CityWorks Working Team will provide updates to the CMMS Steering Committee. The Working Team will review application change requests and enhancements on a regular basis to ensure validity and prioritization for future upgrades/application releases.*

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Responsible party and timing	*Gary Stronghill, Manager, Geospatial Information Systems*	*March, 2020*

CMMS 5.0 – Performance metrics	
Medium Priority	**CMMS 5.01 – Key performance indicators (KPIs) and performance metrics**
Observation	It was noted that the designation of critical KPIs and performance metrics has not occurred for the Cityworks application. Hence, no KPI or performance metric reports have been drafted and discussed in meetings. Examples of performance KPI's include: application response times (by function), application availability targets (and actuals).
Implication	Without the designation of critical KPIs and performance metrics, there is the risk that minimum performance standards will not be enforced. Furthermore; performance will not be accurately and consistently tracked and documented.
Recommendation	The CMMS project in conjunction with key stakeholders should designate critical KPIs and performance metrics, approved by management, for the Cityworks application. Once Cityworks is live, management should formally track, discuss and report performance measurements against KPIs according to an established frequency.
Management comments and action plan	*Management agrees with the observation and will take the following actions:* 　1. *The PM will work with stakeholders to define the KPI and related reporting process.* 　2. *Resulting KPI report document will outline the KPI, its means of reporting, and frequency.*
Responsible party and timing	*Gary Stronghill, Manager, Geospatial Information Systems*　　*April, 2020*

CMMS 6.0 – Access security IBusiness controls	
Medium Priority	**CMMS 6.01 – User access provisioning (De-provisioning)**
Observation	The process for user provisioning (de-provisioning) to the Cityworks application consists of an application administrator granting (removing) access to a user after receiving a user provisioning (de-provisioning) request and approval through email. There is no formalized process whereby prior to provisioning (de-provisioning) appropriate management approves access to Cityworks, and confirms segregation of duties is maintained between the approver and the person granting (revoking) the access in the system.
Implication	There is risk that users may have access privileges beyond those necessary to perform their assigned duties.
Recommendation	A formalized process should be established whereby prior to provisioning (de-provisioning) appropriate management approves access to Cityworks and confirms segregation of duties is maintained between the approver and the person granting (revoking) the access in the system. Similar documentation is required when a user changes roles resulting in a change to their security profile.
Management comments and action plan	*Management agrees with the observation and will take the following actions:* 1. *City will start using the IT Service Portal to manage user access to Cityworks application in March 2020. Cityworks Configuration documents will be reviewed and improvements leading to clarification on roles and how they are assigned will be included.* 2. *The Cityworks administrator will maintain this document and consult operations stakeholders when questions arise over a particular user being added or removed.*
Responsible party and timing	*Gary Stronghill, Manager, Geospatial Information Systems* *March, 2020*

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Medium Priority	CMMS 6.02 – Password configuration
Observation	The Cityworks application password configuration does not comply with the City's Password Policy, as password parameters are not configured on the Cityworks application layer. It was noted that while desktop users authenticate through the City's Windows Active Directory (AD), field users authenticate through the Cityworks application's internal configuration.
Implication	There is a risk that systems are not adequately configured or updated to restrict system access to properly authorized and appropriate users. In addition, there is also a risk that the system password parameters are not in accordance with City's requirements.
Recommendation	Management should configure the password parameters on the Cityworks application layer to be in accordance with the City's password policy. As for technical system limitations within Cityworks for certain password parameters, management should communicate to field users that they should set their passwords in accordance with the City's password policy.

Management comments and action plan	*Management agrees with the observation and will take the following actions:*
	    1. *Replicating the corporate password policy as closely as Cityworks permits.*
	    2. *Follow the strategy which has already been developed. The Password Management Processes and Activities document.*

Responsible party and timing	*Gary Stronghill, Manager, Geospatial Information Systems* *March, 2020*

CMMS 7.0 – Data mapping and management		
Leading Practice	**CMMS 7.01 – Data conversion requirement**	
Observation	Through discussions with City management, Internal Audit noted that there is no requirement for the conversion of legacy data into the Cityworks application, nor does formal documentation of this fact exist.	
Implication	Insufficient documentation of management practices could lead to undesired process activities and may restrict new management from fully understanding relevant processes and controls when undertaking their responsibilities.	
Recommendation	Management should formalize documentation, with approvals, to reflect that there is no requirement for the conversion of legacy data.	

Appendix 1: Internal Audit detailed scope

Specifically, the internal audit addressed the following areas:

Reviewed and assessed the City's governance structure and change management plans for the new CMMS
- ✓ Reviewed the roles and responsibilities including job descriptions and assessed adequacy of the structure to effectively govern CMMS in production;
- ✓ Reviewed and assessed the City's change management plan and approach to identify and engage (e.g., communicate, coach, train, etc.) relevant management and staff; and
- ✓ Reviewed the CMMS strategy and assess its capability to maintain infrastructure in a state of good repair as well as cope with growing demand.

Reviewed and assessed the design of business processes and relevant controls surrounding the new CMMS
- ✓ Assessed the internal control framework currently designed for related business processes surrounding CMMS including IT general controls and user access controls;
- ✓ Evaluated the internal control framework to ensure an optimum mix of manual and automated controls will be implemented;
- ✓ Assessed related process documentation to demonstrate linkages to applicable laws and regulations as well as City expectations (i.e., City Policy); and
- ✓ Evaluated the design of oversight of operational activities including monitoring activities and criteria for follow-up.

Reviewed and assessed the requirements gathered by the City for the new CMMS
- ✓ Reviewed and assessed the procedure to gather, validate and approve requirements;
- ✓ Reviewed and assessed the mapping of approved requirements to delivered CMMS functionality; and
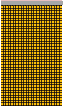- ✓ Reviewed and assessed the gap management process.

Assessed the approach for data mapping and data management for the new CMMS
- ✓ Reviewed the planned data mapping and data management controls and assessed its effectiveness to create, maintain, and protect complete and accurate information; and
- ✓ Reviewed plans for CMMS reporting and assured it is effectively designed to provide management with meaningful information for informed decision-making.

Appendix 2: Internal Audit rating scale

Individual observation prioritization

Internal Audit has prioritized each observation and recommendation within this report using a four point rating scale. The four point rating scale is as follows:

Description		Definition
	High	Observation is high priority and should be given immediate attention due to the existence of either significant internal control risk or a potential significant operational improvement opportunity.
	Medium	Observation is a moderate priority risk or operational improvement opportunity and should be addressed in the near term.
	Low	Observation does not present a significant or medium control risk but should be addressed to either improve internal controls or process efficiency.
	Leading Practice	Consideration should be given to implementing recommendations in order to improve the maturity of the process and align with leading practices.

Appendix 3: Stakeholder involvement

In conducting this assessment, the following management and staff were interviewed to gain an understanding of the City's Computerized Maintenance Management System (CMMS) processes and practices.

Stakeholder	Position	Division
Scott Mathers	Director	Water and Wastewater
Doug MacRae	Director	Roads and Transportation
Lori Kolodia	Division Manager	Information Technology Services
Gary Stronghill	Manager	Infrastructure Systems
Dean Thompson	Manager	Information Technology Services
Scott Koshowski	Engineer	Environmental Services

Appendix 4: Audit procedures performed

As part of the Computerized Maintenance Management System (CMMS) pre-implementation review, the following procedures were performed:

- ✓ Conducted a planning meeting (June 2019) with the Managing Director of Environmental & Engineering Services and City Engineer, Managing Director of Corporate Services and City Treasurer and Chief Financial Officer, Director of Information Technology Services, Director of Water and Wastewater, and Director of Roads & Transportation.
- ✓ Updated and issued a finalized Project Charter and request for information;
- ✓ Conducted meetings and interviews with City management and staff to obtain an understanding of the project management and control framework for the CMMS implementation;
- ✓ Obtained documentation regarding relevant procedures and controls to perform an inspection of:
  - Cityworks Infrastructure Review
  - Cityworks Deployment Plan
  - Team Foundation Server Requirements
  - IT Controls: Operations, Access Security and Change Management
  - Interface Strategy
  - Project management artefacts pertaining to requirements, interfaces, communications, training, change management, risk management, cutover planning, and status reporting
- ✓ Drafted preliminary observations and verified observations with management;
- ✓ Conducted a closing meeting with key management stakeholders to validate and communicate our findings; and
- ✓ Issued this internal audit report with our detailed observations.

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THE CORPORATION OF THE CITY OF LONDON

REPORT ON THE RESULTS OF APPLYING SPECIFIED AUDITING PROCEDURES FOR THE LONDON DOWNTOWN CLOSED CIRCUIT TELEVISION PROGRAM FOR THE YEAR ENDING DECEMBER 31, 2019

KPMG

REPORT ON SPECIFIED AUDITING PROCEDURES

To the Corporation of the City of London

As specifically agreed, we have performed the following specified auditing procedures set forth in the accompanying Schedule in connection with the Code of Practice related to the London Downtown Closed Circuit Television Program for the year ending December 31, 2019.

Our engagement was performed in accordance with the Canadian generally accepted standards for specified auditing procedures engagements.

We make no representation regarding the appropriateness and sufficiency of the specified auditing procedures. These specified auditing procedures do not constitute an audit or review and therefore we are unable to and do not provide any assurance on the financial information and related data assessed. Had we performed additional procedures, an audit or a review, other matters might have come to light that would have been reported. The attached findings relate only to the elements, accounts, items or financial information in the specified procedures and do not extend to any of the Corporation of the City of London's financial statements taken as a whole.

Our report is intended solely for the Management of the Corporation of the City of London and should not be distributed or used by parties other than the Corporation of the City of London.

Chartered Professional Accountants, Licensed Public Accountants

London, Canada

February 20, 2020

SCHEDULE

SPECIFIED AUDITING PROCEDURES AND FINDINGS

1   Obtain and read the "Code of Practice" dated December 13, 2004, related to the London Downtown Closed Circuit Television Program.

KPMG obtained and read the Code of Practice dated December 13, 2004. KPMG confirmed with Division Manager III, Corporate Security and Emergency Management that there have been no recent updates to the document.

2   Ensure that adequate camera monitoring staff are present at the time the specified audit procedures are being performed.

KPMG observed at least one camera monitoring staff was present in the camera room while the specified audit procedures were being performed, as required by the Code of Practice.

3   On a monthly basis, select a sample of four recordings, each for a 15 minute period, from 17 cameras located in the City of London downtown core. Review the recordings for compliance with Section 12 of the Code of Practice for camera use and ensure the recordings have not monitored individuals in any manner that would constitute a violation of the Code of Practice.

KPMG selected four recordings from each month of the year for a total sample selected of 48 recordings.

We have noted no instances in the reviewed recordings where segments of data are missing, other than the instance described below:
- *Tuesday March 5, 2019, - Camera 1, 12:00PM- 12:15pm, the camera view was pixelated at 12:02:33 and froze then jumped ahead to 12:02:51, this resulted in a slight time-lapse where 18 seconds of footage was missed. Management has indicated that this was as a result of the cold weather, where the camera froze and there was a short connection break.*

We have noted that all recordings that we were able to review are in compliance with Section 12 of the Code of Practice for camera use.

4   Obtain the camera monitoring logbook and review for the following information:

   a)   Reported incidents were properly recorded in accordance with Section 16 of the Code of Practice

   We have examined the camera monitoring logbook and noted that reported incidents were recorded in accordance with Section 16 of the Code of Practice.

   b)   Only authorized staff had access to the Security Office

   We have examined the camera monitoring logbook and noted that only authorized staff had access to the Security Office during the period of January 1, 2019 to December 31, 2019.

   c)   Recorded information was released according to the Code of Practice requirements for release of information contained in section 15 of the Code of Practice.

   We have examined the camera monitoring logbook and noted that recorded information was released according to the Code of Practice requirements for release of information.

Progress Memorandum

Date:	February 28, 2020
To:	Members of The Corporation of the City of London Audit Committee
From:	Internal Audit
Subject	Class Replacement Pre-implementation Project Review

Background

The City of London's Parks and Recreation Department elected to exercise a cooperative purchasing clause within the City of Brampton's request for proposal (RFP) award for a recreation activity management system solution. This clause enabled the City of London to also award Perfectmind Inc. as the successful proponent without incurring administrative costs to tender a solution; a decision made in accordance with clause 14.4(g) of the City's Procurement of Goods and Services Policy. The Parks and Recreation Department is currently in the process of implementing Perfectmind Inc.'s recreation activity management system solution (Perfectmind). Implementation of Perfectmind was expected to go-live in August 2019, with a revised target go-live of March 2020.

Internal Audit is conducting a review to assess the recreation activity management system's internal control framework and the approach surrounding operational workflow design, requirements and data migration. To date, Internal Audit has conducted the following review activities:

- Agreed on roles, responsibilities, logistics, timeframes, review milestones, team communication and reporting methods.
- Developed and validated the review approach with management and issued the Project Charter.
- Established an understanding of the current state system and controls through interviews and inspection of existing process documentation for the legacy system.
- Examined available project documentation.
- Issued this memorandum that includes observations based on the activities performed above.

Strengths

User Acceptance Testing (UAT): Test cases have been developed, defects are being risk ranked and logged and a verification checklist is utilized for data conversions.

End User Training: The training plan educates end users on the use of the new application, as well as any changes in their job function. It identifies trainees, groups them according to role, defines a curriculum for each role and identifies courses to be developed. Training tasks such as training setup, developing training materials and staff training are included in the project plan. A detailed checklist of materials for each program onboarding and day of training has been created. In addition, there is an extensive library of knowledge (i.e. FAQs) that end users can access.

Legislative and Internal Policy Review: Detailed documentation is being prepared to demonstrate compliance with applicable laws and regulations as well as City expectations.

Internal Audit's preliminary observations

Internal Audit's preliminary observations is summarized in the table below.

Priority	High	Medium	Low	Leading Practice
Number of Observations	2	2	1	1

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Areas of improvement were noted based on Internal Audit's review of project management activities to date for Perfectmind. Management should continue to monitor the overall project, timelines and progress to ensure that go-live for Perfectmind is achievable by the revised March 2020 targeted deadline. The following table outlines Internal Audit's observations:

Observation	Implication	Recommendation	Management comments and action plan	Responsible party and timing
CRPP 1.0 User provisioning and de-provisioning process The process for user provisioning (de-provisioning) to (from) the CLASS application consists of an application administrator granting (removing) access to (for) a user after receiving a user provisioning (de-provisioning) request and approval through IT service requests. There is no formalized process whereby prior to provisioning (de-provisioning) appropriate management will approve access to Perfectmind, and confirms segregation of duties is maintained between the approver and the person granting (revoking) the access in the system.	**CRPP 1.0 User provisioning and de-provisioning process** There is risk that users may have access privileges beyond those necessary to perform their assigned duties.and potentially create segregation of duties issues.	**CRPP 1.0 User provisioning and de-provisioning process** A formalized process should be established whereby prior to provisioning (de-provisioning), appropriate management approves access to Perfectmind and confirms segregation of duties is maintained between the approver and the person granting (revoking) access in the system. Similar evidence is required when a user changes roles resulting in a change to their security profile.	Access rights for functional groups (i.e. Cashiers) were created, reviewed, and approved as part of the application build which included the use of a segregation lens. Only two staff have rights to modify these groups. Management agrees that a formal process for adding and removing staff is required and are exploring options through our staff scheduling and management system.	Manager, Administration and Attractions Q2, 2020
CRPP 2.0 Unexpected outages No policy or procedure is documented for Perfectmind Inc. to notify the City of London of unexpected outages for Perfectmind. If such an outage were to occur, it is unclear how end users will be informed, nor is there a plan for the City of London to be able to conduct day-to-day business.	**CRPP 2.0 Unexpected Outages** There is reputational risk and risk of financial loss in that a City of London system could be unavailable to end users without their knowledge. There is also a risk that system outages lead to the inability for the City of London to conduct day-to-day business	**CRPP 2.0 Unexpected Outages** A procedure by which Perfectmind Inc. informs the City of London of unscheduled outages should be formalized in the service level agreement (SLA) between Perfectmind Inc. and the City of London. The City of London should develop a business continuity plan to enable conducting day-	Management agrees and are following up with Perfectmind Inc. to develop a formal notification process; currently, there is an informal notification in place. There is an established 'manual' process for admissions at recreation facilities, but the	Manager, Administration and Attractions Q2, 2020

		to-day business activities without the availability of the Perfectmind system. In addition, the City of London should develop a procedure to notify end users in the event of a system outage.	complexities and risk associated with other business functions would result in those operations ceasing until Perfectmind was re-established. In the event that Perfectmind experiences an outage management would follow our formal Notice of Service Disruption process.	
CRPP 3.0 Project Plan Timeline accuracy and utilization With regards to the Perfectmind Project Plan Timeline it was noted that it lacks certain key functions of a project plan, such as: - absence of a critical path making it difficult to assess the impact changing a specific task may have on the overall plan; - there is limited use of predecessor/successor indicators for tasks and activities to identify dependencies and sequence of work; and - task estimation uses date ranges, versus actual time estimates. Ideally actual estimates are linked with the resources allocated to the project to determine timing (when the work will be done). This allows greater visibility to the impact of both time estimates and resource commitment.	**CRPP 3.0 Project Plan Timeline accuracy and utilization** Not identifying the critical path, limited use of dependencies and date range task estimates, introduces the risk of inaccuracies within the project plan. It also makes it difficult to assess the impact of line item changes to the overall plan. This may result in schedule overruns, focusing on non-critical path activities and not meeting the project completion date.	**CRPP 3.0 Project Plan Timeline accuracy and utilization** Key functions such as critical path, predecessors/successor identification, and actual time estimates should be added to the project plan timelines for projects going forward.	There is a critical path for the overall project deliverables and timelines; however, given the fluid nature of the evolving platform and external timelines of Perfectmind Inc. beyond management's control it was impossible to determine many Project Management key functions such as dependencies. Recognizing this is a best practice, more attention will be paid to identifying key sequences and dependencies in future projects.	Manager, Administration and Attractions Timing N/A

CRPP 4.0 Database (DB) and Operating System (OS) – Information Technology (IT) Controls Audit was unable to conclude on the effectiveness of the IT controls (Access Security, Change Management and IT Operations) at the operating system (OS) and database (DB) levels for the Perfectmind application as the vendor, Perfectmind Inc., did not provide the SOC (System and Organization Controls) report for the Perfectmind system. It is understood that the hosting vendor, Amazon Web Services (AWS), has a SOC 2 Type II report available for the hosting platform. The risk of this finding is partially mitigated by the following wording in the Cloud Services Agreement between the City and Perfectmind Inc.: "Vendor confirms that its Hosting Service Provider engages an independent third party to conduct a SOC 2 Type II audit and such audit shall be conducted on an annual basis and in accordance with industry standards such as the attestation standards established by the American Institute of Certified Public Accountants (AICPA) and assurance standards established by the Chartered Professional Accountants of Canada(CPA Canada) and the Trust Services Principles and Criteria for Security, Availability, and Confidentiality. If, at any time, Vendor is notified or becomes	**CRPP 4.0 Database (DB) and Operating System (OS) – Information Technology (IT) Controls** There is risk that users have access privileges beyond those necessary to perform their assigned duties, which may create improper segregation of duties. There is risk that systems are not adequately configured or updated to restrict system access to properly authorized and appropriate users. There is risk that inappropriate changes are made to systems or programs that contain relevant automated controls (i.e., configurable settings, automated algorithms, automated calculations, and automated data extraction) and/or report logic. There is risk that production systems, programs, and/or jobs result in inaccurate, incomplete, or unauthorized processing of data.	**CRPP 4.0 Database (DB) and Operating System (OS) – Information Technology (IT) Controls** Perfectmind Inc. should provide the City of London with the SOC report for the Perfectmind system.	Management concurs and will continue to pursue the provision of this report.	Manager, Administration and Attractions Q2, 2020

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	aware of any instances of control failures in connection with its hosting service provider, then Vendor shall immediately notify the City."			
LP	**CRPP 5.0 Key Performance Indicators (KPIs) and performance metrics** Performance measurements are not formally tracked, discussed and reported against critical key performance indicators (KPIs) and the performance metrics outlined in Schedule A of the SLA between Perfectmind Inc. and the City of London.	**CRPP 5.0 Key Performance Indicators (KPIs) and performance metrics** Minimum performance standards cannot be enforced if they are not accurately and consistently tracked and documented**.**	**CRPP 5.0 Key Performance Indicators (KPIs) and performance metrics** Management should formally track, discuss and report performance measurements against critical KPIs and performance metrics according . These performance measurements should be formally reported to Perfectmind Inc. according to a scheduled frequency, such as quarterly.	Management agrees and will implement a formal process for tracking and reporting post go-live.	Manager, Administration and Attractions Q3, 2020

Leading practices

Observation	Implication	Recommendation
CRPP 6.0 Training effectiveness There is no follow-up procedure conducted to provide that end users have understood the training.	**CRPP 6.0 Training effectiveness** There are risks of work delays, re-work through correction of errors, and poor user adoption of the solution.	**CRPP 6.0 Training effectiveness** Management should develop a way to measure knowledge retention for training recipients and maintain their knowledge. This could include mandatory refresher training and self-declaration that they have understood the training for new or higher-risk transactions.

Appendix 1: Internal Audit detailed scope:

Specifically, the internal audit consists of the following:

Review and assess the design of business processes and relevant controls surrounding the Perfectmind system

- Assess the internal control framework currently designed for related business processes surrounding the Perfectmind system; including IT general controls;
- Evaluate the internal control framework to ensure an optimum mix of manual and automated controls will be implemented;
- Assess documentation to demonstrate compliance with applicable laws and regulations as well as City expectations; and
- Evaluate the design of oversight of operational activities including monitoring activities and criteria for follow-up.

Review and assess the requirements gathered by the City for a Recreation Activity Management system

- Review and assess the procedure to gather, validate and approve requirements;
- Review and assess the mapping of approved requirements to the Perfectmind application.

Assess the approach for data migration (conversion) from the legacy Class system to the new Perfectmind system

- Review and assess the procedure for data migration design activities for completeness, inclusion of stakeholders, sign-offs;
- Review and assess the requirements, and data mapping for the Extract / Translate / Load (ETL) of data to ensure completeness, inclusion of stakeholders, sign-offs; and
- Review and assess the data migration test strategy to ensure completeness, inclusion of stakeholders, and sign-offs.

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Appendix 2: Internal Audit rating scale

Individual observation prioritization

Internal Audit has prioritized each observation and recommendation within this report using a three point rating scale. The three point rating scale is as follows:

Description	Definition
High	Observation is high priority and should be given immediate attention due to the existence of either significant internal control risk or a potential significant operational improvement opportunity.
Medium	Observation is a moderate priority risk or operational improvement opportunity and should be addressed in the near term.
Low	Observation does not present a significant or medium control risk but should be addressed to either improve internal controls or process efficiency.
Leading Practice	Consideration should be given to implementing recommendations in order to improve the maturity of the process and align with leading practices.

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