



City Auditor's Office

**City Auditor's Office**  
**2017/18 Annual Audit Plan**

**November 10, 2016**

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The City Auditor's Office completes all projects in conformance with the *International Standards for the Professional Practice of Internal Auditing*.

## Overview

The City Auditor's Office provides objective assurance and insight on the effectiveness and efficiency of governance, risk management and internal control processes. This assurance helps The City of Calgary (The City) achieve its strategic, operational, financial, and compliance objectives. Overall the audit and advisory work provided by the City Auditor's Office (CAO) is intended to act as a catalyst for improving an organization's effectiveness and efficiency by providing insight and recommendations based on analysis and assessments of data and business processes. The annual presentation of our Annual Audit Plan (the plan) outlines where those audits and assurance activities will take place.

The CAO Charter requires the City Auditor to prepare annually a risk based Internal Audit Plan for approval by Audit Committee and for information to Council. The CAO Charter is aligned with The Institute of Internal Auditors' International Standards for the Professional Practice of Internal Auditing which require the establishment of a risk-based plan to determine the priorities of the internal audit activity, consistent with the organization's goals.

The 2017/18 Audit Plan consists of 25 formal audits (five reflecting audits well underway in 2016) on services and processes within City operations and third-party organizations that have an operating agreement with The City. Additional resource time has been reserved to allow the CAO the flexibility to respond and provide advice, insight and formal audit assurance on new risk priorities and/or City initiatives. The plan also includes time to administer five key CAO activities which support Bylaw directed and professional responsibilities of an internal auditor, and well as providing resources to support value-added advisory work. This plan has been designed to support our audit mission to provide independent and objective assurance, advisory and investigative services to add value to The City and enhance public trust.

## 1.0 Annual Audit Planning Process

The CAO utilizes a two year rolling Annual Audit Plan, which is updated annually and presented to Audit Committee for approval and to Council for information. The intent of presenting a two year plan is to provide additional transparency on future audits and provide greater agility for the City Auditor's Office to utilize available resources to support earlier initiation of 2018 audits where efficiency gains have been realized through early completion of 2017 audits. The CAO utilizes a risk based planning approach, and as such, projects in 2017 have more certainty than those listed in 2018. The intent of the audit planning process is to focus audit resources on those higher risks that could impact the achievement of 2015-2018 Council Priorities.

The annual update process involves:

- For audits planned in the up-coming year (2017) – additional refinement of audit scope and anticipated delivery of the audit report.
- For audits planned in the second year (2018) – determining the audit topics.

### 1.1 2017 Audits

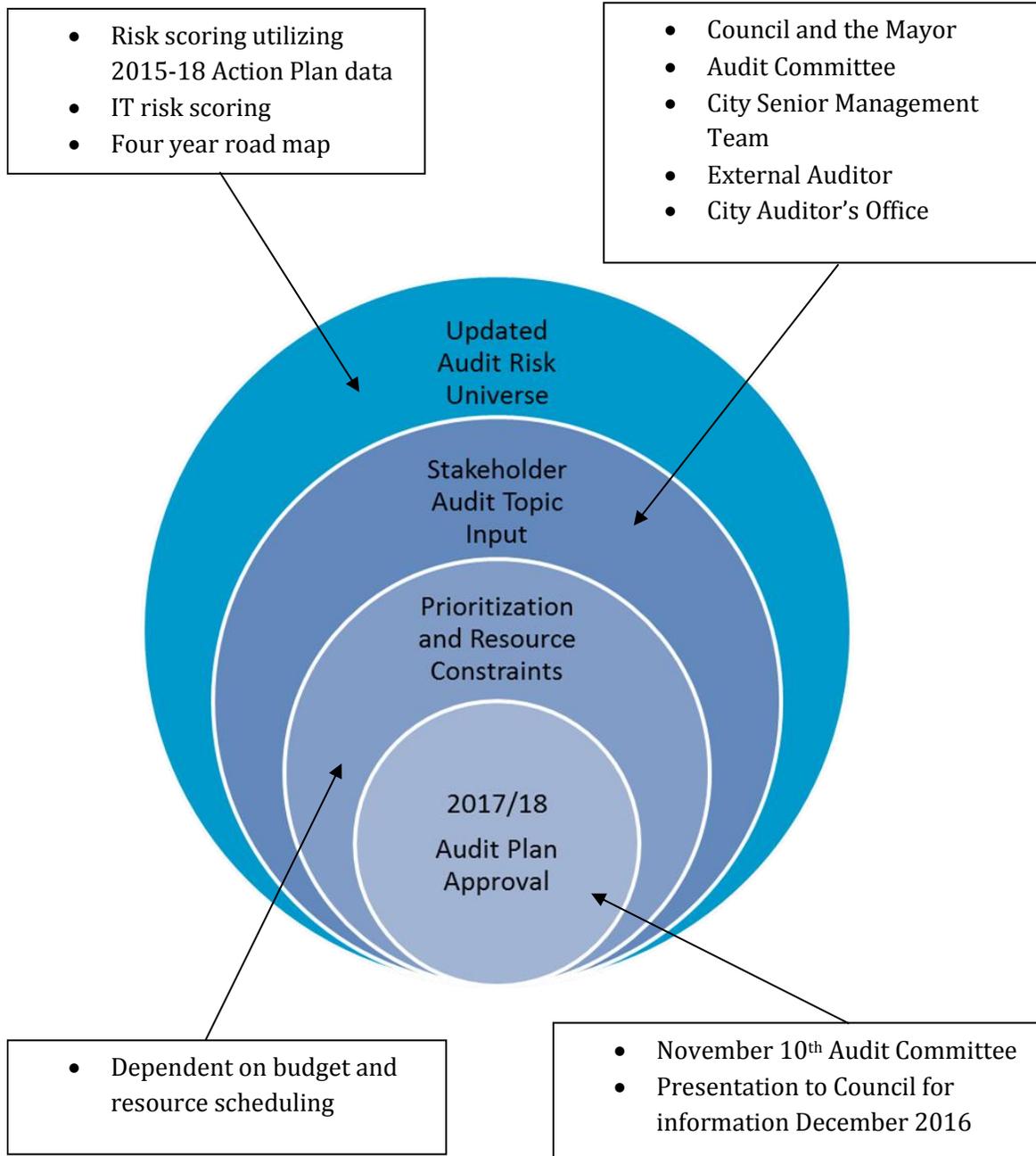
Audit topics included as 2017 Risk Assessed Priority in the 2016/17 Annual Audit Plan were reassessed to confirm that the topic is still relevant and critical to the City of Calgary. Scope and timing of the audits were defined and confirmed utilizing:

- Stakeholder input, including City of Calgary Senior Management;
- City of Calgary data such as project budgets; and
- Availability of City Auditor's Office staff.

### 1.2 2018 Audits

The process of determining the audit topics that form the 2018 segment of the Annual Audit Plan is set out in the diagram below.

The CAO creates a provisional list of audit topics by reviewing the four year (2015-2018) road map of audit activity, 2015-2018 Action Plan data, and IT risk information gathered by the CAO, as well as stakeholder input on potential audit topics solicited through surveys, forums and one-on-one meetings.



The provisional list of audit topics is then assessed to determine the resource and skill requirements for each project, as well as the anticipated budget and cycle time required to complete each audit. Total anticipated audit hours are reconciled against a resource calculation of available and appropriate internal resources and calendar availability. The CAO also assess budget availability to contract external resources. The resource calculation is based on the assumed CAO approved Council budget for 2017 and 2018. A significant portion of the CAO approved budget supports a dedicated audit staff plan of eight professionals (auditor, two-year internal secondment, and senior auditors) to conduct the audits, as well

employing an audit manager IT to support data analytics initiatives and supervision of IT audits, and two Deputy City Auditors to support audit supervision and advisory functions.

During the assessment of provisional audits compared to resource constraints it was recognized that the audits originally approved for 2017 were based on an anticipated increase in CAO budget which was not realistic given current economic situation of The City. As a result two audits originally scheduled in 2017 have been reallocated to 2018 along with the priority audit topics that can be resourced (refer to 4.0 Appendix: 2017/2018 Annual Audit Plan).

The CAO shares the draft plan with other assurance groups operating within The City including the City team overseeing the Zero Based Reviews (ZBRs), the internal audit function of Calgary Police Service and the External Auditor. We openly share our plan with these supporting groups to reduce the potential of duplication of resourced effort and, where possible, minimize the level of business interruption to a particular business area during a given year.

### **1.3 2017/18 Audit Plan Approval**

The 2017/18 Audit Plan (Appendix) is presented for Audit Committee approval, and to Council for information.

The CAO considers all audits performed to be classified as performance audits. Under this broad title, audits in the 2017/18 Audit Plan are further classified as:

- Compliance Audits  
Review the systems established to ensure compliance with policies, plans, procedures, ethical and business norms, as well as laws, regulations, and contracts which can have a significant impact on operations and reports and determining whether the organization is in compliance.
- Follow-up Audits  
Review the effectiveness of the corrective action implemented in response to previous audit recommendations to ensure the underlying risk was mitigated as intended to support achievement of the objective. This type of audit is generally more limited in scope, but may still identify efficiency opportunities resulting from operational changes and/or redundant control structures.
- IT Audits  
Review and evaluation of automated information processing systems, related non-automated processes and the interfaces among them to ensure business risks are minimized appropriately.
- Operational Audits  
Utilizing a risk-based approach, review operations, services, processes and/or systems to determine whether they are effective and implemented as planned to achieve their objectives. This type of audit may include assessing the efficiency with which resources are utilized.

## **2.0 Annual Audit Plan Execution**

The CAO audit process continues to utilize a risk-based approach throughout all phases of the audit. In particular, the planning phase utilized in the majority of audit projects includes a detailed risk identification and assessment phase. The purpose of this phase is to identify the most significant risks within the area and focus the allocated audit resources on those areas. The result is an audit project that does not address all risks, but focuses on the most significant risks that could impact the achievement of City objectives. In line with the Institute of Internal Auditors' Standards, the planning of an audit considers (dependent on the audit topic) the risks to achievement of the organization's strategic objectives; reliability and integrity of financial and operational information; effectiveness and efficiency of operations and programs; safeguarding of assets; and compliance with laws, regulations, policies, procedures, and contracts.

The City Auditor continuously monitors progress against the approved 2017/18 Audit Plan and makes decisions pertaining to individual project scope and emerging issue requests within the approved plan.

In accordance with Bylaw 48M2012, the City Auditor communicates progress towards completion of the approved plan to the Audit Committee as part of the CAO's quarterly reports. Audit Committee reviews and forwards these reports to Council for information.

## **3.0 2018 Annual Audit Plan Reconfirmation**

The City Auditor is presenting a two year Audit Plan for approval, covering 2017 and 2018. The audit risk-based planning cycle will continue annually to ensure the plan is relevant, with a presentation of the 2018/19 Audit Plan in accordance with the approved Audit Committee Work Plan.

#### 4.0 Appendix: 2017/18 Annual Audit Plan

2017/18 Annual Audit Plan			
#	Title	Description	Report Target
<b>2016 In-Progress</b>			
1	Landfill	An operational audit assessing the effectiveness of processes established to meet business objectives.	Q1
2	POSSE System	An IT audit focusing on the data integrity and sustainability of the business application.	Q1
3	New Central Library	An operational audit to provide assurance the project is on track and will meet business objectives of time, cost and quality.	Q1
4	Community Associations	An operational audit on the service delivery provided by Community Associations.	Q1
5	Human Resources – Succession Planning	An operational audit assessing the effectiveness of succession planning strategies conducted across the organization.	Q2
<b>Risk Assessed Priority: 2017</b>			
6	Transit Fare Revenue (previously reflected as Transit Fleet Management)	An operational audit assessing the effectiveness of controls over the safe keeping of fare revenue.	Q2
7	IT Security	A follow-up audit focused on management actions in response to previous CAO audit recommendations raised over the last 5 years.	Q2
8	911 Call Centre	An operational audit evaluating the efficiency of tools and resources employed in the emergency call handling processes.	Q3
9	Green Line LRT	An operational audit on the effective utilization of citizen engagement to support the objectives of the capital project. This is the first in a series of audits on Green Line LRT to be conducted over the lifespan of the project.	Q3

<b>Risk Assessed Priority: 2017</b>			
10	Utility Billing	A follow-up audit focused on management actions in response to control improvement recommendations raised in a 2012 CAO advisory activity.	Q3
11	Corporate Facilities/Asset Management	An operational audit which continues an original CAO audit conducted in 2013.	Q4
12	Treasury Management	An operational audit of treasury (debt and cash) management.	Q4
13	Procurement	A follow-up audit which will focus on management actions to address recommendations raised in previous CAO audits (from 2009 to current).	Q4
14	Cyber Security Incident Response	An IT audit assessing the effectiveness of response processes established to support and protect critical data from cyber-attacks.	Q1, 2018
15	New Central Library Project	An operational audit on the readiness of Calgary Public Library and The City of Calgary to assume hand-off from the Calgary Municipal Land Corporation of the New Calgary Central Library.	Q1, 2018
<b>Risk Assessed Priority: 2018</b>			
16	Data Access	An operational audit of the process and governance within the Open Data program.	TBD
17	Community Planning	An operational audit of Community Planning.	TBD
18	Finance System	An IT audit assessing the efficiency and effectiveness of the finance system to manage budget and costs.	TBD
19	Calgary Community Standards – Livery Transport Services	An operational audit assessing the efficiency and effectiveness of Livery Transport Services.	TBD
20	Green Line LRT	An operational audit assessing the real estate acquisitions related to the Green Line LRT.	TBD
21	Calgary Parking Authority	An operational audit of Calgary Parking Authority’s internal control processes.	TBD

<b>Risk Assessed Priority: 2018</b>			
22	Employee Expenses	A compliance audit of employee expenses utilizing data analytics.	TBD
23	Annual Control Environment Assessment	An operational audit assessing the operating effectiveness of selected controls as reported to the Audit Committee through the annual Control Environment Assessment and Management Representations.	TBD
24	Water Resources and Water Services	An operational audit of wastewater treatment capital projects.	TBD
25	Calgary Emergency Management Agency (CEMA)	An operational audit of Administration's business continuity plans which continues an original CAO audit conducted in 2013.	TBD
	Advisory Services	A contingency block of time allocated (5% of available audit resources) to provide flexibility for the City Auditor's Office to respond to emerging risks across the City via advisory projects. Updates on the utilization of this time will be provided through Quarterly Reports to Audit Committee.	As determined
<b>Key City Auditor's Office Activities</b>			
1	Recommendation Follow-up	Ongoing follow-up on the status of management's action plans to address City Auditor recommendations. Results reported as part of City Auditor's Quarterly Status Report.	
2	Quality Assurance and Improvement Program	In accordance with the Institute of Internal Auditors International Standards for the Professional Practice of Internal Auditing, periodic self-assessments of the City Auditor's Office conformance with Standards and identification of opportunities for improvement will be conducted. In addition a scheduled external assessment will take place in Q2 2017.	

Key City Auditor's Office Activities		
3	Assurance Mapping	A continuation of an initiative started in 2016 to document the mandate and scope of providers (internal and external) that deliver assurance and/or assessments of City and administrative services. In accordance with the the Institute of Internal Auditors International Standards for the Professional Practice of Internal Auditing, audit activities should be coordinated with other internal and external providers of assurance and consulting services to ensure proper coverage and minimize duplication of efforts and impact to business units.
4	Data Analytics	Continue to expand utilization of data analytics to enhance the effectiveness and efficiencies of audits conducted.
5	Annual Audit Plan	City Auditor's Office Charter requires the City Auditor to prepare an Annual Risk Based Audit Plan for approval by Audit Committee. A 2018/19 Plan will be presented to Audit Committee which will reconfirm 2018 audits as well as audits proposed for 2019 using a risk-based approach.