Calgary

City Auditor's Office

2024 Audit Plan

November 9, 2023

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Audit Plan Governance

The mandate of the City Auditor's Office is to provide independent and objective assurance, advisory, and investigative services to add value to The City of Calgary (The City) and enhance public trust. The audits delivered by the City Auditor's Office as part of this assurance service are intended to assist Council, through Audit Committee, in its oversight of the Chief Administrative Officer's administration and accountability over public funds and achievement of value for money in City operations. Audits are intended to support The City in achieving objectives by supporting mitigation of Principal Corporate Risks, and act as a catalyst for improving The City's effectiveness and efficiency.

Bylaw 30M2004 (as amended) established the position of City Auditor and the powers, duties, and functions of the position. Schedule A of Bylaw 30M2004 (as amended) requires the City Auditor to utilize a risk-based approach and communicate audit assurance activities to Audit Committee for approval through the development of an annual Audit Plan. The annual presentation of the City Auditor's Office Audit Plan outlines the details of the planned audit activities, which could include:

- 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.

- 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.

- 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.

Bylaw 30M2004 (as amended) is aligned with The Institute of Internal Auditors' International Standards for the Professional Practice of Internal Auditing (IIA Standards), which require the establishment of a risk-based planning approach to determine the priorities of the internal audit activity, consistent with the organization's goals. The intent of the audit planning approach is to ensure that available audit resources are directed to areas where an audit will provide greatest value based on risk and level of coverage objectives.

Audit Plan Development

The City Auditor's Office created a road map to guide future audit activity aligned to The City's Principal Corporate Risks with the intent of providing assurance over

mitigating activities related to an aspect of each Principal Corporate Risk on at least an annual basis.

The City Auditor's Office follows IIA Standards taking a risk-based approach to the development of the Audit Plan, incorporating input from key contacts across The City, The City's ERM analysis, and information on emerging risks from across the audit profession. The process followed to develop the 2024 Audit Plan from this road map is as follows:
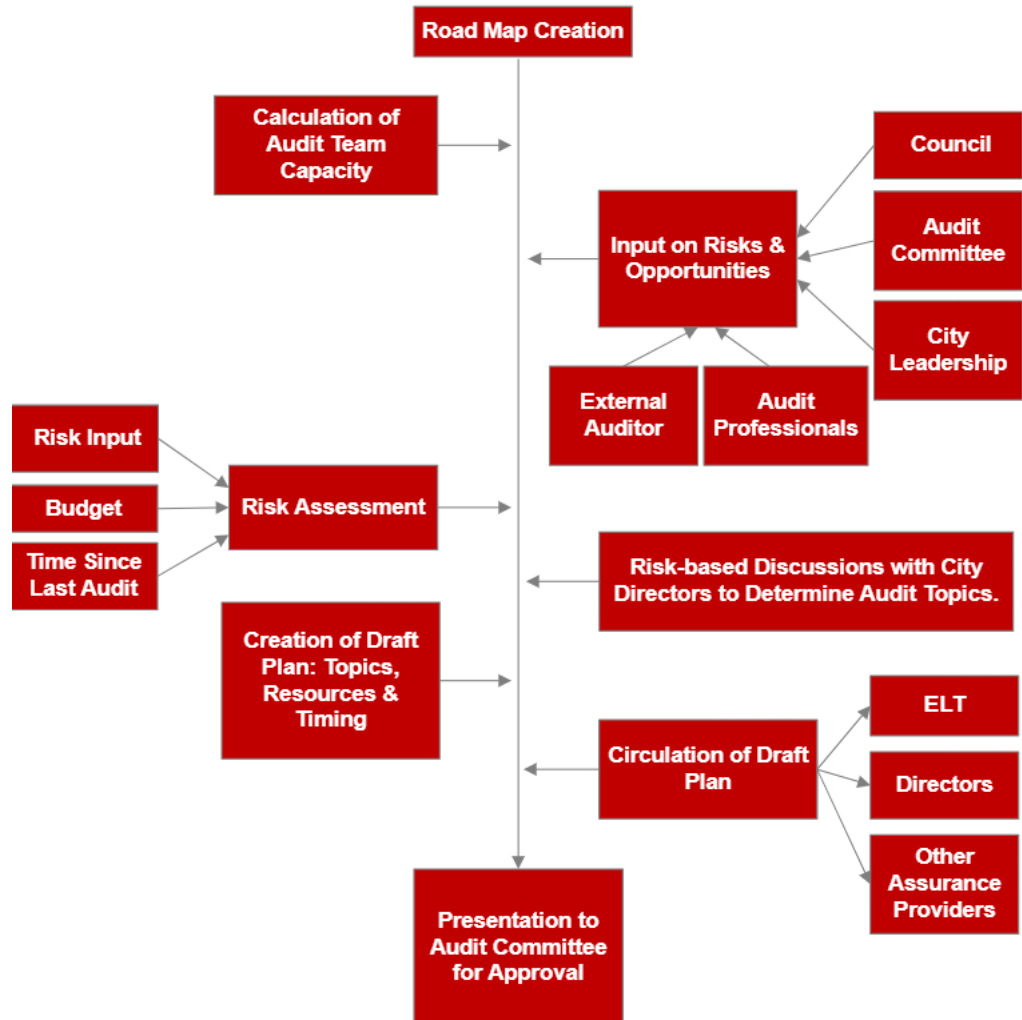
The City Auditor's Office prioritizes providing timely and value add assurance in the development of the Audit Plan. Timely assurance equates to conducting an audit at a point in time where any recommendations will add value. For example, our practice is to conduct audits of capital projects where the project is in planning and/or early execution to support this principle. In our 2024 Audit Plan we have included an audit focused on the governance of the Events Centre while this project is in planning and early execution to maximize the value of any recommendations. Value add assurance equates to conducting our audit work with

sufficient depth such that we not only provide assurance to Council, via Audit Committee, but additionally any recommendations support The City's Administration with tangible improvement opportunities. Cyber security is an example of a risk where we have aligned our approach to the NIST CyberSecurity Framework to provide greater depth of assurance over a series of audits rather than a single high-level audit. More details of the NIST Framework and related audits are in Appendix 2.

Audit Plan Execution and Monitoring	The City Auditor's Office audit process utilizes a risk-based approach throughout all phases of the audit. In particular, the planning phase 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 IIA 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.

In delivering the audits in the Audit Plan, the City Auditor considers the technical skills available within the team and utilizes external subject matter expertise where required to ensure that appropriate assurance is provided.

The City Auditor will monitor progress against the approved 2024 Audit Plan and re-assess risk pertaining to individual project scope and emerging issue requests within the approved Audit Plan. The City Auditor is committed to supporting an agile team that can re-prioritize assurance activities.

In accordance with Schedule A of Bylaw 30M2004 (as amended), the City Auditor provides a quarterly report to Audit Committee that includes the status of deliverables against the approved annual plan. Under Bylaw 33M2020, Audit Committee reviews and forwards these reports to Council for information.

The 2024 Plan is based on full staffing complement of eight senior auditors conducting the audits, with an Audit Manager IT supervising IT audits, and two Deputy City Auditors supervising the remaining audits. In addition, a Data Strategist and a Senior Data Analytics Auditor will provide data analytics support on audits where data collection and analysis are required. Contract audit resources will be utilized where appropriate to support gaps in staffing due to vacancies. The ability of the City Auditor's Office to deliver the 2024 Audit Plan could be impacted by a number of risks including Administration's capacity, vacant audit positions, and any future direction from Audit Committee to complete additional projects in response to emerging risks.

Appendix 1 - 2024 Audit Plan

#	Title	Description	Report Target
City Auditor's Office 2024 Audit Plan			
			Report Target
2023 In-progress Audits			
1	Streetlights	An operational audit of streetlights maintenance and repair.	Q1 2024
2	Financial Reserves	An operational audit of the effectiveness of the management of City of Calgary financial reserves.	Q1 2024
3	Downtown Calgary Development Incentive Program	An operational audit of the Downtown Calgary Development Incentive Program's grant administration.	Q1 2024
4	Safety Management	An operational audit of the effectiveness of the Occupational Health & Safety Business Unit's monitoring and mitigation of safety incidents.	Q2 2024
5	Project and Portfolio Management Tool (P2M)	An operational audit of the Utilities Delivery Business Unit's utilization of P2M.	Q2 2024
2024 Audit Plan			
1	Climate & Environment - Clean Energy Improvement Program	An operational audit of the Clean Energy Improvement Program. *Principal Corporate Risk: Sustainable City*	Q2 2024
2	Water Services - Water Metering	An operational audit of the effectiveness of The City's water metering processes and policies. *Principal Corporate Risk: Service Delivery*	Q2 2024
3	Parks & Open Spaces - Mowing Services	An operational audit to assess the effectiveness and efficiency of Parks & Open Spaces' mowing services. *Principal Corporate Risk: Financial Sustainability*	Q3 2024
4	Partnerships - Neighbourhood Partnership	An operational audit of the Neighbourhood Partnership Coordinator Team's Community Association support. *Principal Corporate Risk: Service Delivery*	Q3 2024
5	Events Centre	An operational audit of The City's governance of the Events Centre project. *Principal Corporate Risk: Capital Infrastructure*	Q4 2024

City Auditor's Office 2024 Audit Plan			
#	Title	Description	Report Target
6	IT - Disaster Recovery	An IT audit of disaster recovery processes to provide assurance essential systems are identified and appropriate recovery procedures and infrastructure are in place. *Principal Corporate Risk: Service Delivery*	Q4 2024
7	Corporate Security – Cyber Security	An IT audit to assess the effectiveness of activities to detect the occurrence of cyber security events within The City's IT environment. *Principal Corporate Risk: Technological Disruption*	Q1 2025
8	Community Planning - Local Area Plan Process	An operational audit to assess the effectiveness of engagement in the Local Area Plan Process. *Principal Corporate Risk: Reputational*	Q1 2025
9	Utilities Delivery - Project Management	An operational audit assessing the effectiveness of the project management of the Inglewood Sanitary Trunk project. *Principal Corporate Risk: Capital Infrastructure*	Q1 2025
10	Supply Management - Corporate Supply Chain Resilience Strategy	An operational audit of Supply Management's processes that support the Corporate Supply Chain Resilience Strategy. *Principal Corporate Risk: Capital Infrastructure*	Q1 2025

We recognize the importance of adaptability and flexibility in responding to challenges that may arise during the duration of the Audit Plan. To ensure the continued effective allocation of our audit resources, we have identified two 'reserve' audits which can be conducted if we are unable to perform other planned audits, and resources are available. The 'reserve' audits that we will consider initiating in the second half of 2024 if this circumstance arises are:
- Green Line – Safety. An operational audit of Green Line's safety processes.
- Recreation – Fair Entry Process. An operational audit of The City's Fair Entry process.

If we do not initiate these audits later in 2024, we will consider the topics for inclusion in the 2025 Audit Plan on a risk basis.

Appendix 2 – Cyber Security Assurance

The City Auditor's Office aligns its approach to planning coverage of cyber security risk with the NIST CyberSecurity Framework. The NIST Framework includes practices that are known to be effective for an organization to improve its cyber security posture. Corporate Security uses the NIST Framework, which is referenced in The City's Information Management and Security Policy.

The NIST CyberSecurity Framework includes cyber security activities organized into five functions, which are further divided into categories and subcategories. The five functions, with examples of associated recent audit activity, are:

1. The Identify Function assists in developing an organizational understanding to managing cyber security risk to systems, people, assets, data, and capabilities. *Recent audit activity: Cloud Vendor and Solution Management Audit (2023)*

2. The Protect Function supports the ability to limit or contain the impact of potential cyber security events and outlines safeguards for delivery of critical services. *Recent audit activity: Active Directory Continuous Auditing (2022)*

3. The Detect Function defines the appropriate activities to identify the occurrence of a cyber security event. *Planned audit activity: Cyber Security Audit (2024)*

4. The Respond Function includes appropriate activities to take action regarding a detected cyber security incident. The Respond Function supports the ability to contain the impact of a potential cyber security incident. *Recent audit activity: Cyber Security Incident Response Follow-up Audit (2021)*

5. The Recover Function identifies appropriate activities to maintain plans for resilience and to restore any capabilities or services that were impaired due to a cyber security incident. *Planned audit activity: IT Disaster Recovery Audit (2024)*

We use functions and their associated categories to determine planned audits by considering, for each function:
- Outstanding recommendations currently subject to recommendation follow up;
- Last time audit activity was conducted;
- Administration initiatives; and
- Information on trending risk from discussions with Administration and industry reports.