# City Auditor's Office
# 2018 Annual Report

## Message from The City Auditor

Thank-you for reading this 2018 City Auditor's Office (CAO) Annual Report, representing the fifth annual report issued since my arrival in 2013. It is and remains an honour and privilege to serve as your City Auditor, and an extreme pleasure to lead the CAO team of highly experienced and effective professionals.

Our 2018 CAO Annual Report provides highlights of our important work providing independent and objective assurance, advisory and investigative services, which delivers value and supports greater public trust to Calgarians.

We support effective governance through our regular reporting to Audit Committee on our assurance audits and advisory work. We also continue to provide a comprehensive Whistle-blower Program (WBP) that operates with high integrity and is available to both City employees and citizens. Results of our work are reported publicly on the CAO webpages at www.calgary.ca/auditor and include recommendations and action plan commitments that support The City's common purpose to make life better every day for the citizens of today and tomorrow. Our success in supporting positive change is visible, both in immediate improvements as well as year over year efficiencies. I am pleased to share these positive change success stories in this report.

In 2018, we delivered 55 valued recommendations from 12 audits completed and monitored the closure of 76 action plans. We completed 34 whistle-blower investigations which in turn generated 63 corrective actions. During this same year we provided ongoing advisory services focused on fostering best practices, innovation, and operational improvement. We delivered these services with a staff of 16 and an intentional conservative budget spend of $2.7M.

Our value in providing essential audit services was recognized in the recent Council approval of our 2019-2022 One Calgary 4-year budget. In our plan submission we reiterated our commitment to continue and where possible enhance delivery of services which support key values of risk reduction, reliability, responsiveness and resilience. In 2019, we will continue to provide reliable public reporting on audit results, ensure responsiveness to emerging risks, utilize a risk-based approach and strengthen our office resiliency to deliver even more in the years to come.

The CAO is your independent and objective body and is committed to delivering the highest standards and best practices of a high performing audit office in the public sector.

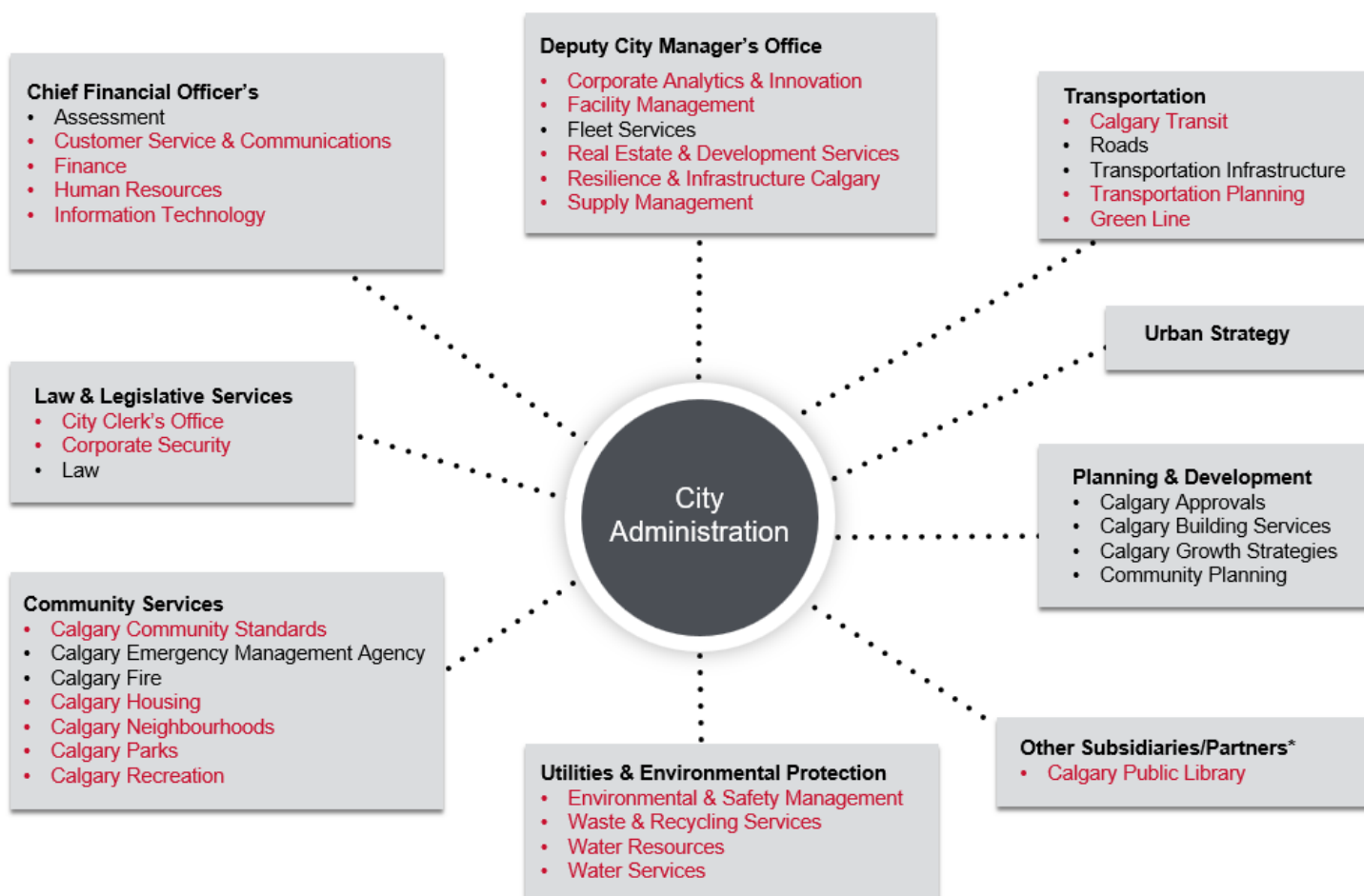Katharine Palmer, CIA, CFE, MBA
City Auditor

**Table of Contents**

## 1.0 Our Coverage

### 1.1 Annual Activities

During 2018, the CAO audit, advisory and investigative services provided significant interaction with 68% of the Business Units within The City of Calgary (The City). The nature of our audit work, also included activity with one of our City subsidiaries/partners. Our extensive coverage, as highlighted in red text, provided us with greater insight into challenges and opportunities faced by the corporation, and increased our agility to provide valued advice in response to key risks.

The CAO was able to achieve this coverage due to the effective collaborative relationship that exists with Administration and the office's professional team of 16 staff. During Q1, 2018, the CAO also reviewed and made updates to both the City Auditor's and WBP's websites to provide increased transparency and understanding of our services.

**Deputy City Manager's Office**
- Corporate Analytics & Innovation
- Facility Management
- Fleet Services
- Real Estate & Development Services
- Resilience & Infrastructure Calgary
- Supply Management

**Chief Financial Officer's**
- Assessment
- Customer Service & Communications
- Finance
- Human Resources
- Information Technology

**Transportation**
- Calgary Transit
- Roads
- Transportation Infrastructure
- Transportation Planning
- Green Line

**Urban Strategy**

**Law & Legislative Services**
- City Clerk's Office
- Corporate Security
- Law

**Planning & Development**
- Calgary Approvals
- Calgary Building Services
- Calgary Growth Strategies
- Community Planning

City Administration

**Community Services**
- Calgary Community Standards
- Calgary Emergency Management Agency
- Calgary Fire
- Calgary Housing
- Calgary Neighbourhoods
- Calgary Parks
- Calgary Recreation

**Other Subsidiaries/Partners***
- Calgary Public Library

**Utilities & Environmental Protection**
- Environmental & Safety Management
- Waste & Recycling Services
- Water Resources
- Water Services

*Calgary Public Library is one of The City's subsidiaries/partners.

## 1.2 Audits Completed

The CAO audit work continues to benefit from our data analytics resources and expertise. Our audits, in many cases, utilize data analytics to look broadly at all related transaction activity in our evaluation of assurance. The CAO uses specialized software, on an ongoing basis, to identify transactions that warrant further review and to assess risk indicators. The CAO has established scripts to provide greater insight into corporate credit card data, employee expense transactions, procurement-related transaction activity, accounts payable data, and employee overtime data. Data analytics also supports WBP investigations. The CAO continues to develop new scripts as well as providing maintenance of existing scripts to support continuous monitoring capability. Where appropriate, the CAO has shared its methodologies and data with Administration leaders to support and enhance their oversight and governance effectiveness.

During 2018, the CAO finalized 12 audits and initiated an additional eight audits. The  symbol indicates audits that utilized data analytics extensively. Full details of the status of all audits at year-end can be found in Appendix A. Summaries of finalized audits are set out below.

**Deputy City Manager's Office**

Procurement Follow-up (AC2018-0413)
The objective of the Procurement Follow-up audit was to conduct a follow-up audit on the effectiveness of management actions and business risk mitigation in response to selected audit recommendations raised in the AC2010-41 Procurement Phase 2 audit. Specifically, the audit focused on management actions to address the following original recommendations:
- Establish sole sourcing criteria, and review and monitor approval and use of sole sourcing. The intent was to cover both sole and single sourcing activities.
- Monitor Purchase Orders and Change Orders to identify and follow-up on irregularities and escalate as appropriate.

The audit identified that controls were implemented to review and monitor sole and single source procurement. Controls originally implemented to monitor Purchase Orders and Charge Orders had either been replaced or had not been maintained as intended. Although the risk exposure was limited, there were opportunities to enhance controls. We raised three recommendations to further support open, transparent and best value procurement practices through consistent delivery of single and sole source procurement, and timely identification, escalation and resolution of irregularities that could be indicators of wrongdoing.

Open Data Initiative (AC2018-1008)
The objective of the Open Data Initiative audit was to evaluate the effectiveness of current processes and governance practices that support successful achievement of the City's Open Data Initiative goals, based on key criteria from a best practice document produced by Canada's Open Data Exchange[1].

Results of our audit noted the Open Data Initiative governance practices and processes are effective to ensure completeness, accuracy, usability and adherence to FOIP for the published data. However, the current open data strategy lacked clarity on long-term objectives and vision. In addition, key performance indicators relevant to the achievement of the Open Data Initiative's objectives, and Open Data Initiative's costs and benefits were not established. Two recommendations were raised to further enhance the open data strategy and to define, track and report performance measures related to the Open Data Initiative's objectives. Five additional recommendations were included in the report to support improved governance reporting, customer feedback process, and clarification of roles and responsibilities for data stewards.

> **Adding Value: Open Data Initiative**
>
> "I believe the recommendations [in the report] are well aligned for clarifying the strategic direction of the program and for ensuring that the program matures appropriately." Manager, Innovation and Data, Corporate Analytics and Innovation.

## Chief Financial Officer

Corporate Credit Card (Data Analytics) (AC2018-0035)
The objective of this audit was to review the anomalies in the Corporate Credit Card (CCC) data analytic results and provide assurance on the effectiveness of related compliance and fraud prevention controls. This was achieved through testing associated credit card monitoring controls and validating the results of our data anomalies with Accounts Payable (AP).

The audit utilized data analytics to examine anomalies in credit card data from June 2016 to June 2017. Through our review of these anomalies we confirmed that a majority were indicative of non-compliance to CCC policy and procedures. We determined that existing monitoring controls over CCC were generally operating as designed, however, despite AP's monitoring practices, non-compliance to CCC policy continued to occur. We made three recommendations related to employee training and communication, enforcing accountability to individual cardholders, developing escalation steps to support card suspension and improving efficiency and effectiveness of CCC processes. We also made one recommendation to re-evaluate the process to capture GST on foreign transactions.

Cash Flow Management (AC2018-0343)
The mandate of The City's Treasury division includes "to generate investment income while preserving capital and provide liquidity for the cash flow requirements of all City funds." Cash flow management, including forecasting daily City cash requirements, is a critical input to this mandate, particularly given the significant variances in daily inflows and outflows of cash that The City experiences. The objective of this audit was to assess the effectiveness of The City's cash flow forecast process by assessing the design and operation of controls and key sub-processes that mitigate the following risks:
• The cash flow forecast cannot be completed on a timely basis;
• Data inputs used to create the cash flow forecast are inaccurate or incomplete; and
• Data outputs from the cash flow forecast are inaccurate due to errors in analysis.

We concluded that Treasury's current cash flow forecasting process was effective in design and operation in mitigating the risks identified (i.e. timeliness, and accuracy) and supported The City's informal cash flow management strategy. Three of four recommendations were raised to provide additional reliability and rigour to the existing process. We also raised a fourth recommendation that Treasury increase transparency through inclusion of the cash flow management strategy in quarterly and annual investment reporting.

---

[1] Open Data Exchange: Open Data Blueprint - Helping municipalities think differently about open data.

Cyber Security Incident Response (AC2018-0410)
The objective of this audit was to determine if The City has an incident response process that will reduce the impact of a non-routine cybersecurity incident. The audit objective was achieved by evaluating controls across each of the four phases of the incident response cycle:
1. *Preparation:* Establishing an incident response capability so the organization is ready to respond to incidents.
2. *Detection and Analysis*: Determining whether an incident has occurred and, if so, the type, extent, and magnitude of the problem.
3. *Containment, Eradication, and Recovery*:
   a. Containment - provide time for developing a tailored remediation strategy.
   b. Eradication - eliminate components of the incident, such as disabling breached user accounts.
   c. Recovery - restore systems to normal operation, confirm that the systems are functioning normally, and (if applicable) remediate vulnerabilities to prevent similar incidents.
4. *Post-Incident Activity*: Learning from the incident by reviewing what happened and how staff and management performed in dealing with the incident since lessons learned improve future responses.

Due to the nature of this audit, results were provided in a confidential report.

Employee Expense (AC2018-0756)
City of Calgary employees incur expenses in the course of conducting City business, such as, travel, meals, training and development and professional fees and dues. In 2017, The City paid approximately $4.5M for employee expenses for out of town travel, courses, memberships, parking, and car allowances. Non-compliance with policies and misalignment with The City's shared values and the 4Cs can result in payment for inappropriate expenses, unnecessary costs and reputational damage. The objective of this audit was to assess employee expenses for compliance with City policies and alignment with The City's shared values and the 4Cs, and identify efficiency and cost saving opportunities.

> **Adding Value: Employee Expenses**
>
> "I am increasingly impressed by the professionalism and collaborative nature of the CAO staff conducting the audits. Audits are conducted with the minimum of disruption, and reporting and developing recommendations and responses are always a very collaborative process." Manager, Tax, Receivables, and Accounts Payables, Finance

All employee reimbursements and CCC expenses tested in our sample complied with applicable City policies and aligned with The City's shared values and 4Cs. In addition, a year-over-year downward trend on total employee expenses from January 1, 2015 to December 31, 2017 may be viewed as a positive result of Administration's intentional management of controllable costs. We raised two recommendations to enhance policy and guidance on the use of personal vehicles, and consistent course reimbursement. We also made two recommendations related to opportunities to improve efficiency by automating the employee expense reimbursement process and reducing the 100% validation of expense claims to a sample approach.

## Law & Legislative Services

2017 Municipal Election Review (AC2018-0852)
The last Calgary election was held on October 16, 2017. The public expressed concerns about their Election Day experience, including long line ups at voting stations and delays in reporting of election results. The City responded to these concerns on October 17, 2017, confirming the accuracy of election results and compliance with legislation, as well as committing to improving election processes. As part of the process improvement initiative, the City Clerk/Returning Officer requested that the CAO undertake a root cause analysis review.

Our root cause analysis identified four significant contributing factors that led to increased voter wait times, voting station accessibility concerns and delays in the reporting of election results on Election Day. Three significant contributing factors, if not addressed, could result in the reoccurrence of increased voter wait times and accessibility concerns in future elections:
• Insufficient initial ballot supply;
• Insufficient voting station selection process; and
• Absence of a detailed staffing plan.

A fourth contributing factor which delayed the reporting of Election Day results was insufficient After the Vote procedures to support voting stations in accounting for ballots supplied, completing the ballot count, and communicating results to the Elections Office. We raised four recommendations to minimize the identified contributing factors and to improve voter experience during the next 2021 Election Day.

<table>
<tr><td>

**Adding Value: Plebiscite Readiness Review**

"The Review confirmed that these changes [to provide an improved voter experience] were an appropriate approach to future elections and provided confidence for delivery of Vote 2018." Manager, Elections & Census

</td><td>

Plebiscite Readiness Review (AC2018-1247)

The CAO conducted a Plebiscite Readiness Review at the request of the City Clerk/Returning Officer to validate plebiscite readiness and support greater transparency on actions taken by Election and Census Services to provide an improved voter experience. The objective of the readiness review was to provide independent validation on Election and Census Services documented procedures and processes which support:

- Appropriate ballot distribution plans;
- Efficient design of voting station process to mitigate queue line ups;
- Appropriate end of night count processes;
- Timely escalation and resolution of issues; and
- Effective functionality of the tabulator.

Results of our review, as of September 26, 2018 noted significant readiness work effort underway in the form of draft processes, business rules, and end-to-end testing plans, which addressed appropriate ballot distribution, and timely escalation and resolution of issues. Other key activities were in first stages of development and could not be fully validated or confirmed at the time of the review. These key activities included the end of night tabulator count and reconciliation. It is important to note our independent validation was specific to draft documentation and plans, many of which were undergoing final amendments at the time of the audit review.

</td></tr>
</table>

## Utilities and Environmental Protection

Bonnybrook Plant D Expansion (AC2018-1346)



The Bonnybrook Wastewater Treatment Plant's Plant D Expansion Project (the Project) will increase the Plant's treatment capacity by 30% to service projected population growth in Calgary and the surrounding communities, with a projected cost of $636M. The Project comprises 14 Work Packages. Project planning began in 2013, construction in 2016, and completion is expected in 2025. The objective of the audit was to assess the effectiveness of The City's project management of the Project. The objective was achieved by evaluating the design and operation of project controls that mitigate schedule, safety, quality, and environmental risks.

We concluded that overall, the project management team have designed and implemented project controls that mitigate schedule, safety, quality, and environmental risks. We made four recommendations to increase efficiency of controls through improvement in oversight, monitoring, and reporting.

## Other Subsidiaries and Partners

New Central Library Readiness (AC2018-0034)



This was the third and last of three sequenced audits of the New Central Library project, which was a significant build with a budget of $245M, and an Opening Day date of November 1, 2018. The objective of the audit was to assess the readiness of the Calgary Public Library to assume responsibility for the New Central Library. Readiness was defined for this audit as the ability to provide library services in the New Central Library throughout the first month of operation.

We concluded that the Calgary Public Library was on track to achieving their move-in and usage targets by setting the planning and process to deliver key services/programs, ensuring that key building operations were in place, and managing security incident risks. We raised three recommendations focused on refining transition objectives, and associated monitoring and reporting to further assist Calgary Public Library in ensuring that key services and training goals were fully achieved by Opening Day.

## Transportation

Green Line Engagement (AC2018-0088)

The Green Line Light Rail Transit project has an estimated construction cost of $4.65B for the first stage of construction. The CAO plans to conduct a series of audits on the Green Line infrastructure project. This first Green Line audit, focused on citizen engagement, was undertaken since obtaining input from Calgarians and other stakeholders on integration with existing communities, route alignment, station locations, and opportunities for Transit Oriented Development is critical, given the significant investment in the Green Line Project. The Engage Policy defines engagement as the purposeful dialogue between The City and stakeholders to gather information to influence decision making. The objective of this audit was to assess the effectiveness of engagement control activities that supported the advancement of the Green Line Project. We evaluated the extent to which engagement activities were aligned with The City's Engage Policy and the criteria in the Engage Framework and Tools.

Overall, engagement activities reviewed were executed in alignment with the guiding principles of the Engage Policy. To further support transparency and accountability, we raised six recommendations to improve the Reporting Back and Evaluation steps in the engagement process and the process to track and monitor communication and engagement costs. Although the audit focused on engagement activity specific to Green Line, two of the recommendations related to opportunities to update the Engage Framework and Tools to provide further standards and guidance that will benefit all future engagement at The City.

Real Estate Acquisitions (Green Line LRT Stage 1) (AC2018-1032)

**Adding Value: Real Estate Acquisitions (Green Line LRT Stage 1)**

"It's been a pleasure working with you and the rest of the team. Your feedback has been valuable and appreciated." Senior Manager, Project Access, Green Line

This second Green Line audit focused on real estate acquisitions for Stage 1 since land acquisition represented one of the highest risks to the project's ability to move forward with construction, which is expected to be complete by 2026.

To support the expected construction schedule and mitigate the risk of contractor delay claims, an acquisition program was initiated to acquire required properties no later than March 31, 2020. The objective of the audit was to provide assurance that the real estate team had effective controls and risk mitigation processes to support achievement of their business objective, which was timely acquisition of all land for the Green Line Stage 1.

The real estate team had an established process to manage land acquisitions and controls to mitigate the risks of acquiring land at unfavourable prices or conditions were designed and operating effectively. We identified two areas where control enhancements were required to mitigate the risk of not meeting the project execution plan and of ineffective environmental due diligence. Ineffective communication and escalation of delays to the acquisition of required properties may impede the timely completion of the land acquisition portion of the project. In addition, roles and responsibilities for environmental review were not clearly defined for large projects resulting in the risk that environmental due diligence was not effective, and environmental liabilities and remediation costs were not identified and communicated. We raised two recommendations specific to the issue communication and escalation process, and three related to the environmental due diligence process.

## 1.3 Advisory Services

The CAO provides advisory services on an ad hoc or project basis as requested by Administration. The intent of our advisory services is to provide an independent view and best practice insight on current, new or emerging risks and opportunities facing The City based on our knowledge of best practice on risks, controls and governance frameworks along with our deep understanding of City strategies, culture and organization. During 2018, the CAO provided advisory services to a number of areas including:

- The City's Infrastructure Calgary Steering Committee as an advisory member;
- The City's Corporate Project Management Framework Steering Committee as an advisory member;
- A committee of City Business Units by providing advice on an update of provincial legislation.
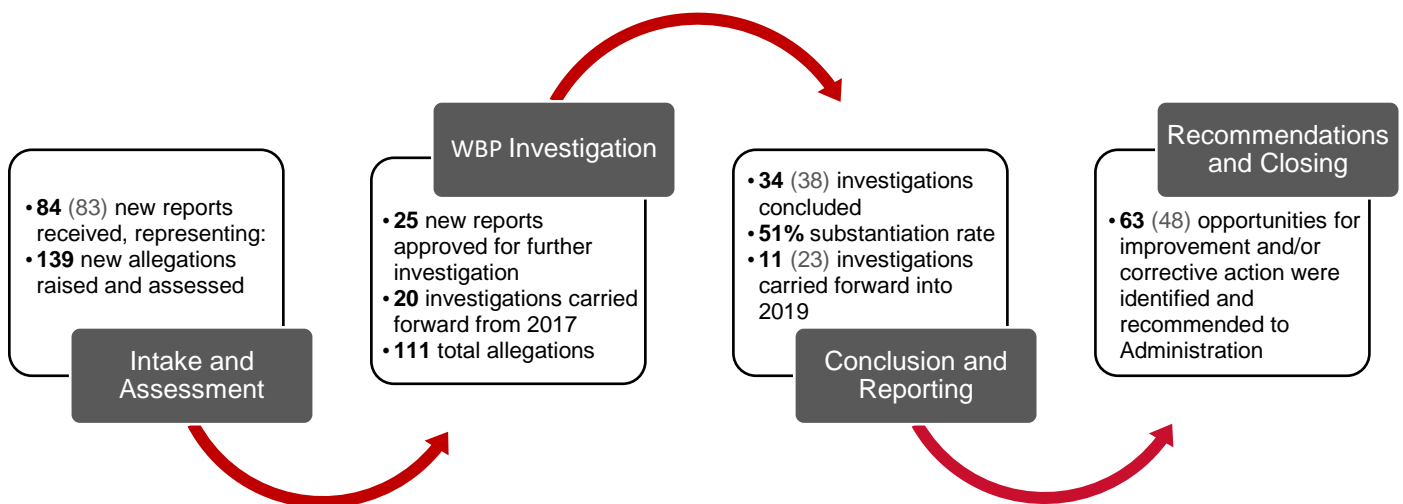
As an independent group, without affiliation to a particular Business Unit or Directorate, the CAO is uniquely positioned to provide value-add advice. In providing these services we utilize the full expertise of our team including the specialized skills of our Audit Manager, IT, who ensures the CAO keeps current on City technology changes and related emerging risks. As a combined team we have expertise across internal audit, fraud, accounting, IT, project management and engineering, supported by the following categories of professional designations.

| Professional Categories | Number of Staff |
|---|---|
| Internal Audit | 11 |
| Fraud | 3 |
| Accounting | 7 |
| IT | 4 |
| Project Management | 2 |
| Professional Engineer | 1 |

## 1.4   Investigative Services

During 2018, the WBP, which is operated independently through the CAO, received reports from employees and Calgarians pertaining to a variety of concerns involving City employees and/or operations throughout The City at a volume level consistent with prior years. Reporting activity is positively regarded as an indication that awareness of the WBP, and employee confidence to report concerns, exists across the organization.

WBP activity for the year ending December 31, 2018 (numbers in brackets represent 2017 activity):

**Intake and Assessment**
- **84** (83) new reports received, representing:
- **139** new allegations raised and assessed

**WBP Investigation**
- **25** new reports approved for further investigation
- **20** investigations carried forward from 2017
- **111** total allegations

**Conclusion and Reporting**
- **34** (38) investigations concluded
- **51%** substantiation rate
- **11** (23) investigations carried forward into 2019

**Recommendations and Closing**
- **63** (48) opportunities for improvement and/or corrective action were identified and recommended to Administration

WBP procedures require all whistle-blower reports involving any staff member of the CAO to be assessed independently by the Chair, Audit Committee. Reports submitted online and identified as sensitive are automatically redirected for confidential review only by the Chair, Audit Committee. On determination that a report does not involve a staff member of the CAO and can be objectively assessed by the WBP, it is redirected to the WBP and is no longer considered sensitive. The WBP has received confirmation from the Chair, Audit Committee that all sensitive reports received in 2018 were appropriately assessed and are considered closed.

Procedural enhancements and efficiencies applied to the WBP in recent years continue to improve timely assessment and response to concerns reported in 2018, resulting in:

✓   67% decrease in outstanding investigations involving reports made in prior years

✓   33% decrease in open files carried forward to 2019 compared to prior year

✓   49% decrease in average days required to complete investigations compared to prior year

**Anonymous Reporting**
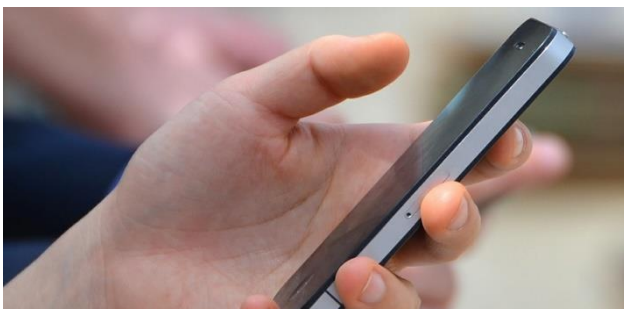
Council Policy CC026 Whistle-blower Policy supports anonymous (Anon.) reporting facilitated through a confidential, two-way, third party communication channel to support a reporter who may not feel comfortable disclosing their identity to the WBP office.

Where the reporter's identity remains undisclosed, The City cannot provide the reporter protection against reprisal. WBP activity over the last three years reflects the ongoing need and demand for this option for specific reporters.

| Year report submitted | 2018[2] | | 2017 | | 2016 | |
|---|---|---|---|---|---|---|
| | Anon. | Non-Anon. | Anon. | Non-Anon. | Anon. | Non-Anon. |
| Reports submitted and assessed | 61 | 22 | 57 | 26 | 55 | 38 |
| Reports approved for investigation | 20 (33%) | 5 (23%) | 19 (33%) | 6 (23%) | 27 (49%) | 13 (34%) |
| Allegations[3] approved for investigation | 35 | 14 | 47 | 24 | 40 | 17 |
| Allegations investigated and substantiated[4] | 17 | - | 18 | 6 | 19 | 3 |
| Substantiation rate[5] | 49% | - | 38% | 25% | 47% | 18% |
| Corrective actions recommended | 24 | - | 36 | 5 | 37 | 8 |

✓ **More anonymous reports** - Anonymous WBP reports consistently outnumber reports in which individuals self-identify. While specific reasons may not be known to the WBP, the use of anonymity can be indicative of a number of factors including the existence of real or perceived fears of reprisal or judgment related to reporting, and is not unexpected. Although 2018 figures are not yet available, 2016 and 2017 figures published by NAVEX Global[6] reported the receipt of a slightly greater number of anonymous reports (56% and 58%, respectively[7]) than those where reporting individuals disclosed their identity.

✓ **Effective assessment process** - While anonymity is not a factor in the objective assessment applied to each allegation raised and decision to investigate or not, results in the last three years found more allegations raised anonymously have met the threshold for investigation than those raised without anonymity. Only those allegations meeting basic whistle-blower criteria[8] meriting further investigation are advanced through the WBP process. Since 2016, the WBP assessment process has filtered 55% of allegations raised as not meriting further investigation by the WBP, resulting in their referral to Administration or no further action.

✓ **High substantiation rate** - A higher substantiation rate may be indicative of an informed reporter who, familiar with what constitutes a breach or violation of policy or procedure, submits a timely report with a sufficient level of specifics critical in supporting investigation of allegations raised. Specifically for employees, this rate can be further attributed to ongoing Code of Conduct training and awareness of available reporting options. Although not all allegations investigated are substantiated, an unsubstantiated allegation does not necessarily mean the report was without merit. Recommendations to Administration can still result from investigation of an unsubstantiated allegation.

The use of anonymity to report is a personal choice. While availability of anonymous reporting is widely regarded as a best practice and a critical component of effective corporate governance, confidential disclosure of an employee's identity to the WBP is necessary in order to provide full protection against reprisal. WBP procedures carefully consider confidentiality throughout the investigation, and the disclosure of information is limited and made only on a need-to-know basis or as required by law.

---

[2] A number of allegations raised in 2018 remain under investigation and their conclusion in 2019 will result in changes to figures reported at December 31, 2018.
[3] A report can contain multiple allegations.
[4] Figures provided are from concluded investigations only; investigations related to non-anon allegations are still proceeding into 2019.
[5] Substantiation rate is determined by dividing allegations substantiated by total allegations investigated.
[6] NAVEX Global maintains the world's largest database of report data obtained from 13,000 global clients representing in excess of 42 million employees.
[7] 2018 Ethics & Compliance Hotline and Incident Management Benchmark Report.
[8] Basic reporting criteria necessary to support investigation is provided at www.calgary.ca/whistle.

<table>
<tr><td>

# 2.0
# Our
# Impact

</td></tr>
</table>

## 2.1    Audit Recommendations

The CAO takes a risk-based approach to the planning and execution of audits. Each audit focuses on key risks to the achievement of Administration's objectives, which supports meeting City Priorities. During planning, we work with staff to gain a thorough understanding of the area, project or process being audited and key risks.

With Administration's input, risks are ranked high, medium or low based on the impact and likelihood should the risk event occur. The fieldwork plan is designed to test controls and related processes which support successful risk mitigation.

During 2018 we issued 12 audit reports, and raised 55 recommendations. As was the case in previous years, recommendations raised remained focused on mitigating highest risk exposures, and resulted in 69% of Administration's action plans (74 in total) addressing high and medium risks. Through the use of audit software we continued to track the level of risk by recommendation raised. We shared this risk prioritization in quarterly updates with Administration so they in turn can identify outstanding recommendations that require prompt action.

**ACTION PLANS BY RISK LEVEL**
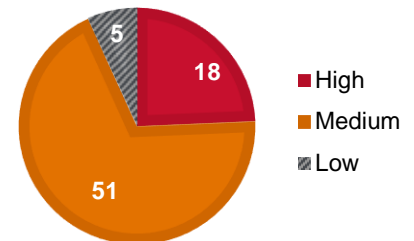


**2018 ACTION PLAN RISK LEVEL BY DEPARTMENT**
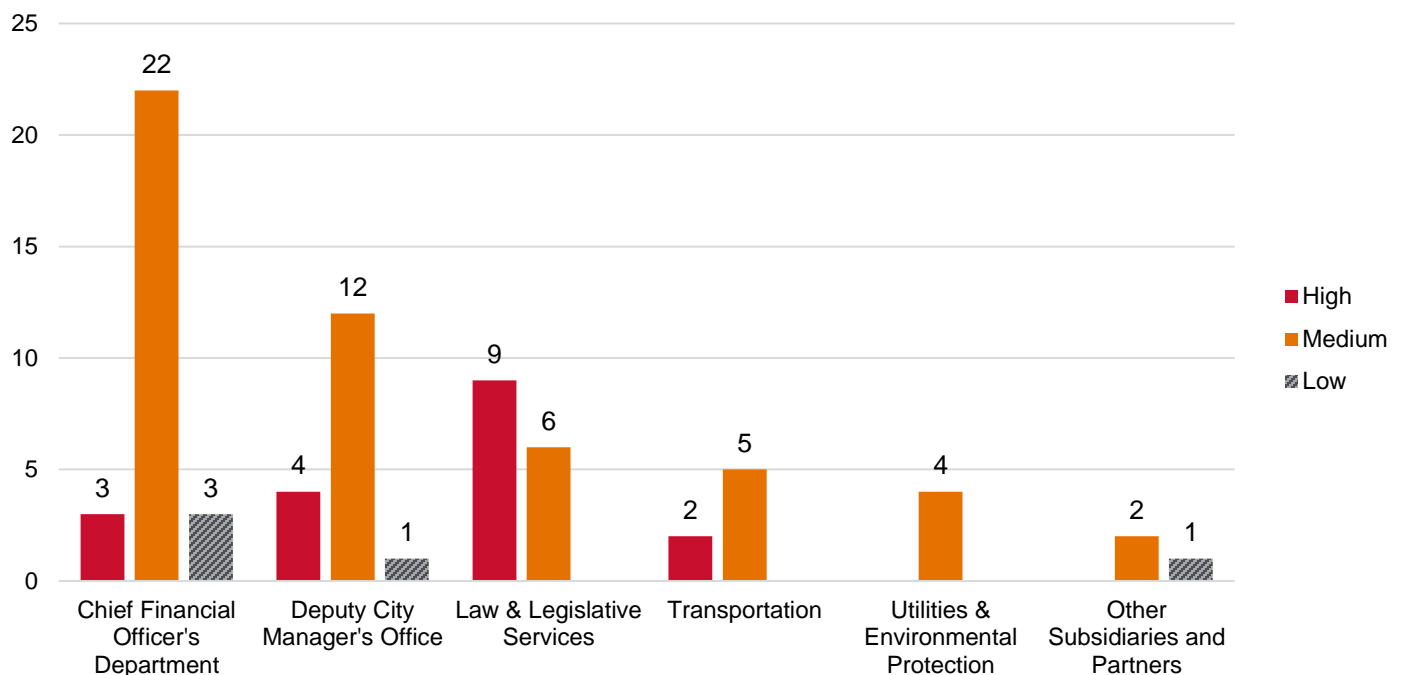
The CAO provides independent assurance regarding the effectiveness of governance, risk management, and internal control. The COSO Internal Control Framework is a widely accepted framework that outlines the principles and components necessary for an organization to effectively manage its risks by implementing internal controls. The CAO categorizes recommendations into the five fundamental COSO components to identify potential trends and provide Administration with additional insight into the effectiveness of internal controls. Over the last three years the CAO has consistently raised recommendations focused on embedding and enhancing effective control activities. Since there have been very few overlapping or repeat audits performed in the last three years, the heightened number of recommendations specific to control activities should not be viewed as a significant weakness of a specific Business Unit or service. Rather this analysis should be viewed as a positive outcome of our risk-based audit process and reflective of how all COSO components are evaluated when raising recommendations to Administration that are practical, cost efficient, and focused on addressing root cause and mitigating future business risk to an appropriate risk tolerance.

**RECOMMENDATION BY COSO ELEMENT**
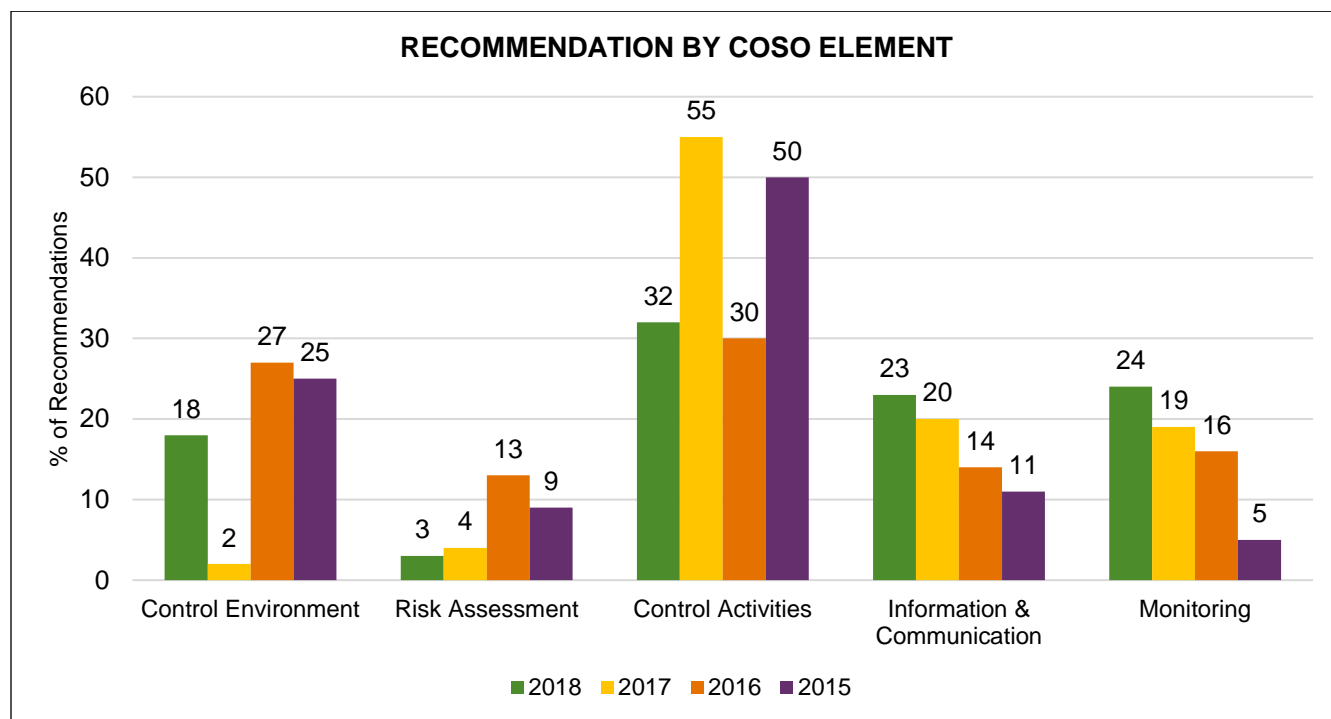


## 2.2  Investigation Recommendations

The WBP investigative process is structured to not only respond to concerns raised, but also to identify and address root causes which can either be localized to a specific work area or more broadly applicable to the entire organization. Identifying root causes and prompt corrective action is widely recognized as essential to operating an effective employee reporting program and is reflected in our WBP Policy and process. Over the last year, opportunities for improvement or corrective action were identified in 62% of investigations concluded in 2018. As a result, there was a significant increase in corrective action recommendations raised compared to previous year noting:

✓  51% increase in investigations resulting in recommendations for corrective action compared to prior year

✓  31% increase in recommendations for corrective actions compared to prior year

Follow-up with Administration throughout the year confirmed corrective actions were completed and as of December 31, 2018, all but one corrective action had been implemented and considered closed.

For the second consecutive year, the majority of corrective actions raised were directed at addressing conflict of interest allegations. Conflict of interest allegations received in 2018 were generally related to employee situations where an employee's ability to objectively perform their civic duties was questioned. These corrective action recommendations, with the support of Human Resources, improved awareness of the City's Code of Conduct and Conflict of Interest Policy and supported targeted education and training at both individual and Business Unit levels to mitigate future occurrences.

| Reporting Category of Allegation | Classification of Allegation | Corrective Actions | |
|---|---|---|---|
| | | 2018 | 2017 |
| Business Integrity | Conflict of Interest | 28 | 17 |
| | Vendor Management | - | 3 |
| HR, Diversity and Respectful Workplace | Respectful Workplace | 14 | - |
| | Inefficient Use or Misuse of City Resources | 1 | - |
| | Abuse of Benefits | - | 4 |
| | Preferential Treatment | - | 2 |
| Misuse, Misappropriation of Assets | Theft of City Assets or Supplies | 6 | 9 |
| | Theft of Time | 6 | 6 |
| | Inefficient Use or Misuse of City Resources | 2 | 4 |
| | Acceptable Use of City Technology Resources | 2 | 2 |
| Accounting, and Financial Reporting | Misappropriation or Misuse of City Funds | - | 1 |
| | | 63 | 48 |

A summary of each investigation resulting in corrective action is disclosed through the public-facing WBP webpage www.calgary.ca/whistle, which is updated on a quarterly basis. Each summary excludes personal or identifying information pertaining to individuals or Business Units involved in the investigation in support of the WBP's adherence to reporter protection and personal privacy. Each corrective action summarized on the WBP webpage may incorporate multiple specific actions. The publishing of allegations and the corresponding summaries of investigative findings and corrective actions supports greater transparency of investigation actions taken, WBP accountability, and The City's commitment for appropriate response and action.

<table>
<tr><td rowspan="2">3.0<br>Our<br>Commitment<br>to<br>Value-add</td><td>

## 3.1  Key Performance Indicators

As part of our commitment to continuous improvement, we track our added value based on the following key performance indicators of Efficiency, Effectiveness, Quality, and Staff proficiency. We exceeded our commitment targets on two, Quality and Staff. Timely implementation of recommendations was below our established target, despite our ongoing follow-up process.

On efficiency measures, we intentionally accepted an audit (Plebiscite Readiness Review) outside of the approved plan, at the request of Administration, which slightly impacted our ability to deliver on the original plan. As noted in Appendix A we are confident in the delivery of these remaining audits in early 2019.

Effectiveness, as measured by timely implementation of recommendations (within 30 days of the original action plan date), was also slightly below target. Despite our timely follow-up and discussion with Administration on realistic action plan dates, we recognize the increased demands on resources across The City, which likely has impacted final implementation dates. We will continue to hold proactive discussions with Administration to support them in delivering on these commitments with appropriate mitigation of residual risk. In addition to these four key performance indicators, we track staff retention on an annual basis. At the end of 2018, our staff had an average of 5.3 years of service within the CAO.

</td></tr>
</table>

| Measure Area | Performance Indicator | Target | 2018 | 2017 | 2016 | Comments |
|---|---|---|---|---|---|---|
| Efficiency | On Track to Annual Plan | 100% | 94% | 92% | 98% | Slightly below target reflecting longer than anticipated reporting phases to two audits. |
| Effectiveness | Timely Implementation of Recommendations | 65% | 42% | 61% | 71% | Results may be attributed to increased demand on resources and/or optimistic implementation dates. |
| Quality | Client Satisfaction | 75% | 96% | 98% | 94% | Fourteen client surveys were received during 2018 covering ten audits with a response rate of 83%. |
| Staff | Training Plan Achieved | 90% | 98% | 98% | 93% | Professional training included a cost effective mix of internal/external and self-study activities. |

## 3.2   Professional Work Standards

Professional work standards apply across all audits, advisory projects, and whistle-blower investigations and are key to our goal of adding value in the services we deliver.

The CAO conducts its audit activities in adherence with the Institute of Internal Auditors' (IIA) International Standards for the Professional Practice of Internal Auditing (*Standards*).

Our internal quality program was conducted throughout the year, and included the completion of:
- Quarterly audit file peer reviews (by an auditor not involved in the audit);
- Quarterly KPI monitoring;
- Post-audit lessons learned exercises and client surveys; and
- Periodic review and update of key audit processes.

The internal quality activity evidenced conformance to *Standards*, and opportunities for further process improvements were incorporated into updates of procedures and practices. As part of this activity, the CAO confirms the continued organizational independence of its operation.

Whistle-blower investigations are carried out in alignment with best practices and the codes of conduct of the Association of Certified Fraud Examiners and Association of Certified Forensic Investigators of Canada. Quality reviews are conducted on all completed investigations.

The foundation of the CAO is the professional skills and knowledge of the staff. To run effective audits, advisory projects and investigations, a range of complementary professional designations enhances the team's effectiveness. All staff conducting audits, advisory and whistle-blower investigations have at least one of the Certified Internal Auditor, Certified Information Systems Auditor, Certified Fraud Examiner or Certified Forensic Investigator designations. To further enhance certifications and to keep current on best practices, all staff participate in ongoing professional training. The CAO supports 40 hours of training per employee per year, however all staff engage in additional continuous learning on their own personal time.

Throughout 2018, several of our professional staff have contributed time to give back to their external peer community through a number of professional committees including:
- Board member of IIA Canada;
- Sub-committee Chair of the Association of Local Government Auditors;
- Member of the Association of Local Government Auditors' judging panel for the annual Knighton Awards (exceptional performance audit reports); and
- Committee member of the Canadian Audit and Accountability, Municipal Oversight Program Advisory Group.

## 3.3 Budget

The CAO strives to provide the highest level of independent and objective assurance, advisory and investigative services within Council–approved budget. Our approved 2018 annual budget of $2.9M reflects operating costs associated with completing audit, advisory and investigative services.

**Operating Budget**

While the majority of the CAO budget represents associated salary for the professional team, the funding also enables the office to hire subject matter experts to evaluate specialized risk areas or provide specific knowledge. During 2018 the CAO utilized contract audit resources to assist with the Green Line Engagement and Open Data Initiative audits.

| Categories ($'000's) | Annual Budget | Actual | Variance* |
|---|---|---|---|
| Salary | 2,619 | 2,424 | 195 |
| Contracts | 96 | 66 | 30 |
| Training | 65 | 51 | 14 |
| Other | 134 | 141 | (7) |
| Total | 2,914 | 2,682 | 232 |
| * Variance partially attributed to staff vacancy and timing differences in contract expenses. | | | |

# 4.0  Appendices

## Appendix A – Audit Activity Status as at December 31, 2018

| 2017/2018 Approved Audit Plan | | | |
|---|---|---|---|
| **#** | **2017 Carry Forward Audits** | | **Status** |
| 1 | Green Line Engagement | An operational audit on the effective utilization of citizen engagement to support the objectives of the capital project. | Complete: Reported January |
| 2 | Corporate Credit Card (Data Analytics) | A compliance audit utilizing data analytics to assess the effectiveness of related Corporate Credit Card compliance and fraud prevention controls. | Complete: Reported January |
| 3 | New Central Library Readiness | 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. | Complete: Reported February |
| 4 | Cash Flow Management | An operational audit of treasury (cash flow) management. | Complete: Reported April |
| 5 | Cyber Security Incident Response | An IT audit assessing the effectiveness of response processes established to support and protect critical data from cyber-attacks. | Complete: Reported April |
| 6 | Procurement Follow-up | A follow-up audit on management actions to address recommendations raised in previous CAO audits (from 2009 to current). | Complete: Reported April |
| **#** | **2018 Audits** | | **Status** |
| 1 | Employee Expenses | A compliance audit of employee expenses utilizing data analytics. | Complete: Reported June |
| 2 | 2017 Municipal Election Review | A management request (City Clerk's Office) to conduct a root cause analysis review of the issues which occurred on the 2017 election day and to evaluate proposed strategies to improve the election day process. | Complete: Reported July |
| 3 | Open Data Initiative | An operational audit of the Open Data Program governance. | Complete: Reported September |
| 4 | Real Estate Acquisitions (Green Line LRT) | An operational audit assessing the real estate acquisitions related to the Green Line LRT. | Complete: Reported October |
| 5 | Calgary Parking Authority | An operational audit of Calgary Parking Authority's asset management processes for the parkade portfolio that they own and operate. | Reporting |

| | 2017/2018 Approved Audit Plan | | |
|---|---|---|---|
| **#** | **2018 Audits Continued** | | **Status** |
| 6 | Bonnybrook Plant D Expansion | An operational audit of the Bonnybrook Plant D Expansion capital project. | Complete: Reported November |
| 7 | Community Planning/Calgary Approvals | An operational audit to assess the effectiveness of processes to improve permit timelines. | Fieldwork |
| 8 | Calgary Community Standards – Livery Transport Services | An operational audit assessing the effectiveness of internal controls that support public and driver safety. | Reporting |
| 9 | Annual Control Environment Assessment | An operational audit assessing the design effectiveness of the Annual Control Environment Assessment and assessing the operating effectiveness of control activities which support COSO Principle 3: Establishes Structure, Authority and Responsibility. | Reporting |
| 10 | Emergency Management | An operational audit of emergency preparedness and related business continuity plans. | Fieldwork |
| 11 | Plebiscite Readiness Review | A special review at the request of the Returning Officer/City Clerk to validate plebiscite readiness and support greater transparency on actions taken by Election and Census Services to provide an improved voter experience. | Complete: Reported October |
| **#** | **2019 Audits Initiated in 2018** | | **Status** |
| 1 | Green Line – Governance | An operational audit of Green Line Project organization/governance framework. | Planning |
| 2 | Off-site Levy Administration | An operational/IT audit of the effectiveness of City processes (including calculation practices) and system controls that support capital cost recovery and use of collected levies governed by the 2016 Off-site Levy Bylaw. | Planning |
| 3 | Warehouse/Inventory Systems | An operational audit of warehouse and inventory systems supporting significant City assets. | Planning |

## Appendix B – Audit Recommendation Follow-up

There were 60 outstanding recommendation action plans at 2018 year-end. Of these, 70% were not yet due and classified as pending audit review, 30% were reviewed and classified as in-progress and are being tracked to a revised implementation date. Classification as pending, and in-progress is based on CAO review of evidence of implementation based on original and revised implementation dates and may not reflect Administration's progress on action plans.

| 2018 Recommendation Action Plan Turnover | | | | | | |
|---|---|---|---|---|---|---|
| Status | Opening Jan. 1, 2018 | Revised Date Required | Reported in 2018 | Closed-Risk Mitigated | Closed-Risk Accepted | Ending Dec. 31, 2018 |
| **Pending** | 46 | (23) | 74 | (50) | (5) | 42 |
| **In-Progress** | 16 | 23 | | (18) | (3) | 18 |
| **Total** | **62** | **0** | **74** | **(68)** | **(8)** | **60** |



OVERDUE ACTION PLANS
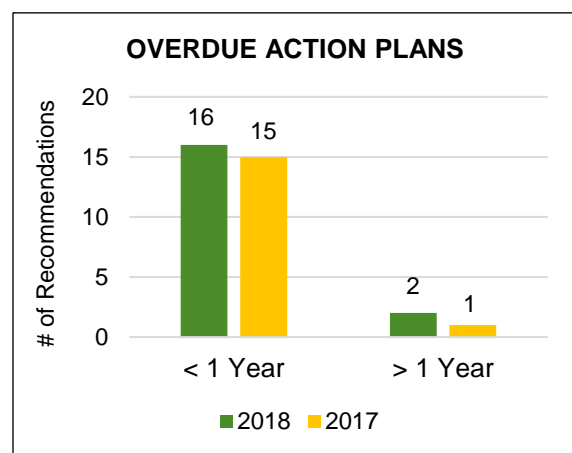
Follow-up results continued to be positive this year. Of the 74 recommendation action plans reported in 2018 (56 in 2017), 30 (41%) were closed (33% in 2017). The remaining 44 were either pending (34) or in-progress (10) at year-end.

The overall number of overdue action plans has increased slightly from 16 to 18 in 2018. There were no action plans that were more than two years past their original commitment date.[9]

In 2018, we received 23 (19 in 2017) requests to revise action plan implementation dates, all of which were first time revisions. Of the 18 in-progress action plans at year-end, 15 are first time revisions and 3 are second time revisions. There were no third time revisions.



OUTSTANDING RECOMMENDATIONS AT YEAR-END # OF REVISED DATE REQUESTS

---
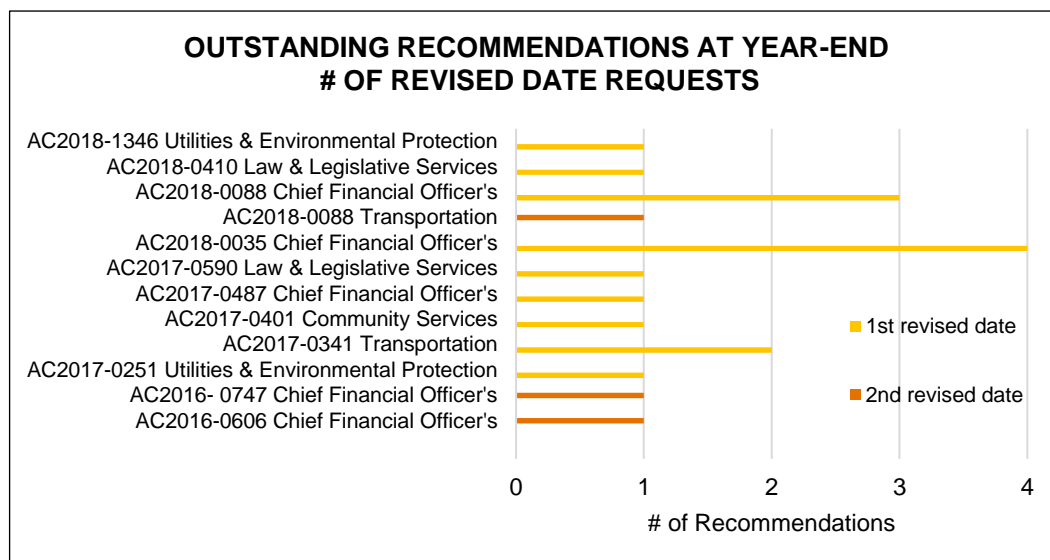
[9] The two recommendations outstanding for more than a year were both second time revisions. One action plan was high-risk and related to the Vendor Master File Audit and monitoring duplicate vendors. The action plan was in-progress due to the complexity of the work and technical reporting issues. The other action plan was medium risk and related to the Hedging Audit (Foreign Exchange and Fuel). The action plan was 75% complete to allow the FX Advisory Committee to prepare operational procedures to define risk tolerance and acceptable corporate risk exposure.