



## AGENDA

### AUDIT COMMITTEE

January 31, 2019, 9:30 AM  
IN THE COUNCIL CHAMBER  
Members

Councillor E. Woolley, Chair  
Councillor J. Gondek, Vice-Chair  
Councillor G-C. Carra  
Councillor J. Farkas  
Citizen Representative L. Caltagirone  
Citizen Representative M. Dalton  
Citizen Representative M. Lambert  
Mayor N. Nenshi, Ex-Officio

1. CALL TO ORDER
2. OPENING REMARKS
3. CONFIRMATION OF AGENDA
4. CONFIRMATION OF MINUTES
  - 4.1 Minutes of the Regular Meeting of the Audit Committee, 2018 November 20
5. POSTPONED REPORTS  
*(including related/supplemental reports)*  
None
6. ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES
  - 6.1 Annual Principal Corporate Risk Report - AC2019-0032  
Attachments 1 and 2 held confidential pursuant to Section 24 of *FOIP Act*
  - 6.2 External Auditor 2017 Management Letter Update - AC2019-0022
  - 6.3 Calgary Parking Authority Asset Management Processes Audit - AC2019-0010
  - 6.4 New Accounting Standards Update (Verbal) - AC2019-0140

7. ITEMS DIRECTLY TO COMMITTEE

7.1 REFERRED REPORTS  
None

7.2 NOTICE(S) OF MOTION  
None

8. URGENT BUSINESS

9. CONFIDENTIAL ITEMS

9.1 ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

9.1.1 External Auditor – Provision of Additional Services - AC2019-0082  
Held confidential pursuant to Sections 16 and 24 of *FOIP Act*

9.1.2 Audit Forum (Verbal) - AC2019-0042  
Held confidential pursuant to Sections 24 and 26 of *FOIP Act*

9.1.3 External Auditor (Verbal) - AC2019-0084  
Held confidential pursuant to Sections 24 and 26 of *FOIP Act*

9.1.4 City Auditor (Verbal) - AC2019-0085  
Held confidential pursuant to Sections 24 and 26 of *FOIP Act*

9.1.5 City Auditor 2018 Performance Review (Verbal) - AC2019-0105  
Held confidential pursuant to Sections 17 and 19 of *FOIP Act*

9.2 URGENT BUSINESS

10. ADJOURNMENT

Council Members may participate in the meeting remotely, if necessary.



**MINUTES  
AUDIT COMMITTEE**

**November 20, 2018, 9:30 AM  
IN THE COUNCIL CHAMBER**

**PRESENT:** Councillor E. Woolley, Chair  
Councillor J. Gondek, Vice-Chair  
Councillor G-C. Carra  
Councillor J. Farkas  
Citizen Representative L. Caltagirone  
Citizen Representative M. Lambert

**ALSO PRESENT:** Acting Chief Financial Officer C. Male  
City Auditor Katharine Palmer  
External Auditor H. Gill  
Executive Assistant C. Smillie  
Acting City Clerk D. Williams  
Manager T. Mowrey

**1. CALL TO ORDER**

Acting City Clerk Debbie Williams called the Meeting to order at 9:30 a.m.

**2. ELECTION OF CHAIR**

Following nomination procedures, Councillor Woolley was appointed as Chair of the Audit Committee, by acclamation.

**3. ELECTION OF VICE-CHAIR**

Following nomination procedures, Councillor Gondek was appointed as Vice-Chair of the Audit Committee, by acclamation.

**4. OPENING REMARKS**

Councillor Woolley provided opening remarks.

**5. CONFIRMATION OF AGENDA**

**Moved by** Citizen Representative Caltagirone

That the Agenda for the 2018 November 20 Regular Meeting of the Audit Committee be confirmed.

**MOTION CARRIED**

**6. CONFIRMATION OF MINUTES**

- 6.1 Minutes of the Regular Meeting of the Audit Committee, 2018 October 24

**Moved by** Councillor Farkas

That the Minutes of the 2018 October 24 Regular Meeting of the Audit Committee be confirmed.

**MOTION CARRIED**

7. POSTPONED REPORTS

None

8. ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

- 8.1 Bonnybrook Plant D Expansion Audit, AC2018-1346

**Moved by** Citizen Representative Lambert

That with respect to Report AC2018-1346, the following be approved:

1. That the Audit Committee receive this report for information; and
2. That the Audit Committee recommend that Council receive this report for information.

**MOTION CARRIED**

Councillor Gondek introduced a group of students from the Calgary Islamic School Akram Jomma Campus in Ward 10, accompanied by their teacher.

- 8.2 Audit Committee 2019 Work Plan, AC2018-1319

A Revised Attachment, was distributed with respect to Report AC2018-1319.

**Moved by** Councillor Carra

That with respect to Report AC2018-1319, the following be approved, **after amendment**:

That the Audit Committee:

1. Approves the Audit Committee's 2019 Work Plan; and
2. Recommends that Council receive this Report and the 2019 Work Plan (**Revised** Attachment) for Information.

**MOTION CARRIED**

8.3 Status of Community Associations & Social Recreation Organizations on City-Owned Land, AC2018-1099

A clerical correction was noted in Attachment 3 of Report AC2018-1099 by deleting the Report number "AC2018-1009" and by substituting with Report number "AC2018-1099".

**Moved by** Councillor Carra

that with respect to Report AC2018-1099, the following be approved:

That Audit Committee recommends that Council:

1. Receive this report for information; and
2. Direct that attachments 3, 4 and 5 of this report remain confidential pursuant to sections 23, 24 and 16 of the *Freedom of Information and Protection Act* and remain so until such time as section 16 is no longer satisfied.

**MOTION CARRIED**

8.4 Law and Corporate Security Report, AC2018-1350

Distributions were made with respect to Report AC2018-1350:

- A revised Page 9 of Attachment 2; and
- A PowerPoint presentation entitled "Audit Committee", dated 2018 November 20.

**Moved by** Councillor Gondek

That with respect to Report AC2018-1350, the following be approved:

That the Audit Committee recommend that Council:

1. Receive this report for information; and
2. Direct that Attachments 4 and the closed session presentation and discussion remain confidential pursuant to Sections 24, 25 and 27 of the *Freedom of Information and Protection of Privacy Act*.

**MOTION CARRIED**

**REVISED MATERIALS**

8.4.1 Revised Report

8.4.1.1 2018 Law and Corporate Security Report

9. **ITEMS DIRECTLY TO COMMITTEE**

9.1 REFERRED REPORTS

None

9.2 NOTICE(S) OF MOTION

None

10. URGENT BUSINESS

None

11. CONFIDENTIAL ITEMS

**Moved by** Citizen Representative Lambert

That pursuant to Sections 16, 19, 24 and 26 of the *Freedom of Information and Protection of Privacy Act*, the Audit Committee move into Closed Meeting at 11:14 a.m. in the Council Lounge, to discuss confidential matters, with respect to the following items:

- 11.1 (Postponed) Audit Committee Annual Self Assessment (2017-2018), AC2018-1177;
- 11.2 Audit Forum (Verbal), AC2018-1320;
- 11.3 External Auditor (Verbal), AC2018-1321; and
- 11.4 City Auditor (Verbal), AC2018-1322.

**MOTION CARRIED**

Committee moved into Public Meeting at 12:10 p.m. with Councillor Woolley in the Chair.

That Committee rise and report.

11.1 ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

11.1.1 (Postponed) Audit Committee Annual Self Assessment (2017-2018), AC2018-1177

Administration in attendance during the Closed Meeting discussions with respect to Verbal Report AC2018-1177:

Clerk: D. Williams. Advice: C. Smillie.

**Moved by** Citizen Representative Lambert

That with respect to Report AC2018-1177, the following be approved:

The Audit Committee:

1. Approve Administration Recommendations 1 and 2; and
2. Direct that the Report, Attachment and Closed Meeting discussions remain confidential pursuant to Sections 16 and 19 of the *Freedom of Information and Protection of Privacy Act*.

**MOTION CARRIED**

11.1.2 Audit Forum (Verbal), AC2018-1320

A confidential PowerPoint, dated 2018 November 20, from Finance, was distributed with respect to Verbal Report AC2018-1320.

Administration in attendance during the Closed Meeting discussions with respect to Verbal Report AC2018-1320:

Clerk: D. Williams. Advice: K. Palmer, C. Male. Observer: G. Wiebe, C. Smillie. External: H. Gill.

**Moved by** Citizen Representative Lambert

That with respect to Verbal Report AC2018-1320, the following be approved:

That the Audit Committee direct that distribution and Closed Meeting discussions remain confidential pursuant to Sections 24 and 26 of the *Freedom of Information and Protection of Privacy Act*.

**MOTION CARRIED**

11.1.3 External Auditor (Verbal), AC2018-1321

No report was given.

11.1.4 City Auditor (Verbal), AC2018-1322

No report was given.

11.2 URGENT BUSINESS

None

12. ADJOURNMENT

**Moved by** Councillor Gondek

That this meeting adjourn at 12:11 p.m.

**MOTION CARRIED**

That following items have been forwarded to the 2018 Regular Meeting of Council, 2018 December 17:

Consent

Bonnybrook Plant D Expansion Audit, AC2018-1346

Audit Committee 2019 Work Plan, AC2018-1319

Status of Community Associations & Social Recreation Organizations on City-Owned Land, AC2018-1099

Law and Corporate Security Report, AC2018-1350

The next Regular Meeting of the Audit Committee is scheduled to be held 2019 January 31 at 9:30 a.m.

CONFIRMED BY COMMITTEE ON

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CHAIR

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ACTING CITY CLERK

UNCONFIRMED



City Manager's Office Report to  
Audit Committee  
2019 January 31

ISC: UNRESTRICTED  
AC2019-0032

## **Annual Principal Corporate Risk Report**

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### **EXECUTIVE SUMMARY**

Integrated Risk Management (IRM) enhances The City of Calgary's planning and decision making and encourages proactive, rather than reactive, management of risk. The Audit Committee has a significant role in the identification, risk analysis and management procedures to mitigate risk. In keeping with its oversight role, the Audit Committee receives and reviews reports from Administration twice per year on The City's management of risk and the Integrated Risk Management Program.

This report provides Audit Committee with an update on The City's Principal Corporate Risks that could affect the achievement of Council's Directives and Administration's Commitments. In addition, this report provides an update on risk appetite and risk tolerance, an enhancement to the IRM program. Administration has been working with stakeholders to implement risk appetite and risk tolerance across the organization. Applying risk appetite and tolerance supports Council's Directives by guiding risk response strategies and promoting accountability through a common understanding of the level of risk the organization is willing to accept in pursuit of objectives.

#### **ADMINISTRATION RECOMMENDATION:**

That the Audit Committee recommends that Council:

1. Receive this report for information; and
2. Direct that Attachments 1 and 2 remain confidential pursuant to Section 24 (1) (a)&(b) of the Freedom of Information and Protection of Privacy Act for a period of 15 years.

### **PREVIOUS COUNCIL DIRECTION / POLICY**

The Audit Committee Bylaw (48M2012) states that the Audit Committee is responsible for "overseeing the process of The City's Integrated Risk Management System", among other things. The Audit Committee oversees The City's process of risk identification, risk analysis and management procedures to mitigate risk. Specifically, the Bylaw states that Audit Committee receives and reviews, at least twice a year, reports from Administration regarding The City's Integrated Risk Management (IRM).

At the Strategic Meeting of Council on 2018 January 31, Council adopted the "Council Directives to Administration for 2019-2022 One Calgary Service Plans and Budgets" (Report C2018-0115), which included the following Council Directive under A Well-Run City:

"We need to recognize that we miss opportunities for innovation in management, service delivery and planning because of an existing culture of risk avoidance. We need to create a culture, including City Council, that embraces appropriate levels of risk, innovation, experimentation, and embraces lessons learned as opportunities to improve."

On 2018 November 20, the Audit Committee approved its 2019 Work Plan (AC2018-1319) which included consideration of the Annual Principal Corporate Risk Report on 2019 January 31. Consistent with the 2019 Work Plan, this report focuses on the Principal Corporate Risks (updated as of 2018 December 18). Audit Committee's 2019 Work Plan also includes an update on the IRM Model and Framework, which will be brought forward on 2019 July 19.

City Manager's Office Report to  
Audit Committee  
2019 January 31

ISC: UNRESTRICTED  
AC2019-0032

## Annual Principal Corporate Risk Report

### BACKGROUND

The City Manager's Annual Principal Corporate Risk Report to the Audit Committee is the result of many integrated and ongoing streams of work undertaken to identify, analyze and determine appropriate responses to risk. The twice per year risk review process requires the coordination and support of service owners, departments, and senior leaders with the most strategic information about risks brought to the Audit Committee.

One of Administration's ongoing work streams includes the development and implementation of risk appetite and risk tolerance (Attachment 3). Risk appetite and tolerance serve as parameters for decision makers as to how much risk The City is prepared to accept in the pursuit of objectives.

### INVESTIGATION: ALTERNATIVES AND ANALYSIS

#### Principle Corporate Risks

The Principal Corporate Risks (PCRs) represent the most strategic risks facing the organization. The risks are monitored and managed by senior leadership. Since the last update was provided to the Audit Committee on 2018 July 25, three of the 16 Principal Corporate Risks have changes to their descriptions and five have changes to their trend rating.

The Principal Corporate Risks (updated as of 2018 December) are provided below in alphabetical order. The risks are explored in greater depth, including the risk rating, trend and risk management strategy in the confidential Attachment 1.

Please note: the bold text identifies the risk name and indicates an update to the risk description since the last update to Audit Committee.

1. **Business Continuity Risk:** An interruption to an essential service provided to Calgarians caused by a vulnerability being exposed to a natural, technological, or human hazard.
2. **Capacity for Change Risk:** Increasing velocity, pace and quantity of change in the natural, social, economic and political environment, combined with limited flexibility in the organization to respond contributes to reduced capacity, preparation and experience required to implement new initiatives and adapt to changing priorities.
3. **Economic & Social Impact Risk:** Ongoing pressures from the regional economic downturn are creating increased demand for social supports. This has an impact on both The City and its partners, operations and service delivery.
4. **Environmental Risk:** Potential increase in severe weather and climatic changes may cause disruptions to operations and service delivery. Corporate and community-wide greenhouse gas (GHG) emissions may not meet reduction targets for 2020.
5. **Financial Risk:** Lower general revenues and/or higher expenses than budgeted negatively impacts service delivery, tax rates and our ability to adapt to growth and **increases the City's reliance on debt.**

City Manager's Office Report to  
Audit Committee  
2019 January 31

ISC: UNRESTRICTED  
AC2019-0032

### **Annual Principal Corporate Risk Report**

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6. **Growth Risk:** While growth carries many economic and social benefits, it is also a significant risk for The City because many services and infrastructure need to be in place prior to, or timed with demand. This means The City must anticipate both the level and spatial pattern of growth. These risks can impact The City's capacity to deliver and provide infrastructure and services that meet city-wide demands.
7. **Health & Safety Risk:** Potential harm to City employees and contractors. This may result from non-compliance with health and safety regulations or an incident that could impact City employees/contractors and/or citizens, and expose the organization to potential financial and reputational risks.
8. **Infrastructure Management Risk:** The City owns and operates public infrastructure systems including water service, storm and sanitary sewers, roads, sidewalks, pathways, bridges and other structures and buildings. Ensuring that assets are in good, reliable condition is essential to keeping the city safe. The City is exposed to the risk of assets failing, particularly from inadequate lifecycle maintenance.
9. **Legal & Compliance Risk:** Law provides legal, governance, risk management, and issues management advice with respect to federal and provincial laws and bylaws. Advice is not always sought in sufficient time to allow a strategy to be developed or action to be taken on a proactive basis, resulting in the corporation having to react to issues or lawsuits. This can impair the corporation's ability to complete projects and conclude transactions on time, on budget and within scope, and may result in financial losses or unnecessary business, legal, financial or reputational risk for The City.
10. **Operations, Process Risk:** Failure to ensure appropriate processes are in place to manage the complexity of operations.
11. **Partnership Risk (Civic Partners):** Counterparty risk arising from City partners unable to deliver services.
12. **Political Risk:** Changing priorities or actions of municipal, regional, or other orders of government paired with rapid changes in the natural, social or economic environment could result in funding challenges that may adversely impact The City's ability to deliver on citizen expectations.
13. **Reputation Risk:** Reputation risk is damage to the image of The City or negative perceptions by citizens or stakeholders as a result of actions of elected officials or City employees. **This risk can threaten The City's ability to maintain positive and productive relationships with citizens, businesses, partners and the ability to achieve its corporate objectives.**
14. **Security Risk:** A violent attack on or in City space could result in loss of life, serious injury as well as halting critical service delivery.

City Manager's Office Report to  
Audit Committee  
2019 January 31

ISC: UNRESTRICTED  
AC2019-0032

## **Annual Principal Corporate Risk Report**

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15. **Talent Management & Workforce Planning Vulnerability Risk:** Inability to attract, develop, engage and retain key talent and knowledge in order to meet current and future business needs.
16. **Technology Risk:** There is a risk to **business disruption due to vulnerability or failure of applications**. Rapid pace of emerging threats such as cyber-attacks (willful attack on public infrastructure, public safety, transportation, water treatment, system access, intentional damage, privacy breach, distributed denial-of-service attacks, etc.). Potential impacts include breaches of confidential information, and disruption to the availability of critical systems and applications, and the integrity of those systems.

Further to the direction provided by the ALT at its review of the PCRs on 2018 December 18, work is currently underway to split “Economic and Social Impact Risk” into two distinct risks: “Economic Risk” and “Social Risk”. The intent is to manage and monitor the two aspects of the risk separately. An update will be brought to the Audit Committee on 2019 July 19.

A complete summary of the changes to the risk ratings and trends for the PCRs is provided in Attachment 2. Since being introduced in 2017, the “at a glance summary” shows the progression of the risk ratings and trends over time. For this update, a column titled, “Administration’s approach to this risk” has been included. This is an enhancement and provides additional commentary regarding The City’s approach to the risk.

### **Risk Appetite and Risk Tolerance**

As part of the continual improvement of the Integrated Risk Management (IRM) program, IRM has been working on risk appetite and risk tolerance specific to The City of Calgary (Attachment 3), including definitions and a risk appetite scale.

To facilitate the implementation of risk appetite and tolerance across the organization, IRM is working closely with stakeholders to create a common understanding and to assist with the practical application of risk appetite and tolerance. Further cross-corporate implementation is planned throughout 2019.

In addition to levels of risk being included as a Council Directive, Council has identified risk appetite and risk tolerance as a topic of interest. As such, Administration will work with the Audit Committee and Council to develop a common understanding of risk and overall direction for The City’s risk appetite.

### **Stakeholder Engagement, Research and Communication**

The completion of the twice per year risk review process requires the coordination and support of service owners and teams, departments, and senior leaders. The process promotes the development of risk competency across the organization and fosters a more mature risk culture wherein there is increased awareness of risks to the achievement of objectives, stronger understanding of risk management practices, and enhanced use of risk management tools to support decision-making.

City Manager's Office Report to  
Audit Committee  
2019 January 31

ISC: UNRESTRICTED  
AC2019-0032

## **Annual Principal Corporate Risk Report**

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### **Strategic Alignment**

The IRM program supports the achievement of Council's Directives and Administration's Commitments as outlined in the One Calgary 2019-2022 Service Plans and Budgets. As part of The City's Performance Management System, The IRM program is continuously improving to better meet The City's risk management needs.

### **Social, Environmental, Economic (External)**

Effective risk management helps to ensure The City's ongoing resilience and ability to serve citizens in accordance with The City's strategic goals.

### **Financial Capacity**

#### ***Current and Future Operating Budget:***

Activities related to the IRM Program continue to be undertaken within approved budgets.

#### ***Current and Future Capital Budget:***

None related to this report.

### **Risk Assessment**

The City's IRM program supports decision-making and enables successful management of both opportunities as well as threats and hazards. If risks are not identified, assessed, and managed The City is at risk of incurring unnecessary costs and service disruption. Continued, effective management of the Principal Corporate Risks, and the implementation of enhancements to the IRM program (including risk appetite and tolerance) helps to address this risk.

**REASON(S) FOR RECOMMENDATION(S):** This report is provided to Audit Committee to support the Committee in its role to oversee the process of risk identification, analysis and management procedures to mitigate risk, by providing information on risk management work that Administration has completed, and the results of that work. It is recommended that the Principal Corporate Risk Summary (Attachment 1) and the Overview of Ratings and Trends (Attachment 2) be discussed during the closed portion of the meeting to maintain a balance between comprehensive reporting and discussion of the principal risks facing The City, while protecting the interests of the organization from unintended harm.

### **ATTACHMENTS**

1. Attachment 1 – Principal Corporate Risk Summary Report (Confidential)
2. Attachment 2 – Overview of Ratings and Trends (Confidential)
3. Attachment 3 – The City of Calgary's Risk Appetite and Risk Tolerance



## Attachment 3 - City of Calgary's Risk Appetite and Risk Tolerance.docx

### Introduction

Developing and implementing, risk appetite and risk tolerance will further The City's ability to achieve the following Council Directive under the Citizen Priority: A Well-Run City:

"We need to recognize that we miss opportunities for innovation in management, service delivery and planning because of an existing culture of risk avoidance. We need to create a culture, including City Council, that embraces appropriate levels of risk, innovation, experimentation, and embraces lessons learned as opportunities to improve."

### Definitions

Risk appetite and risk tolerance are part of the The City of Calgary's Integrated Risk Management (IRM) Framework to manage risks that impact the City's ability to achieve objectives.

**Risk:** is defined as the effect of uncertainty on objectives.

**Risk Appetite:** is defined as the amount and type of risk that an organization is willing to pursue or retain (in the pursuit of objectives).

**Risk Tolerance:** is defined as an organization's readiness to bear the risk after risk treatment in order to achieve its objectives (the level of risk acceptable to Council and senior management).

**References:** City of Calgary (2004). *Council Policy - Integrated Risk Management (CC011)*, City of Calgary; International Organization for Standardization (2018). *ISO 31,000:2018 - Risk Management Guidelines; ISO Guide 73:2009*, Geneva.

### Risk Appetite Scale

The following risk appetite scale refers to levels of risk appetite which can be applied to different contexts.

Level 1 Averse	Level 2 Minimalist	Level 3 Cautious	Level 4 Open	Level 5 Motivated
The City is not willing to accept risk under any circumstances.	The City is not willing to accept risk in most circumstances.	The City is willing to accept risk in certain circumstances.	The City is willing to accept risks.	The city accepts opportunities that are inherently high risk.

**Adapted from:** City of Saskatoon (2018). *Corporate Risk Appetite*. (File No. CK 1600-3 and AF1880), Standing Policy Committee of Finance. Saskatoon.

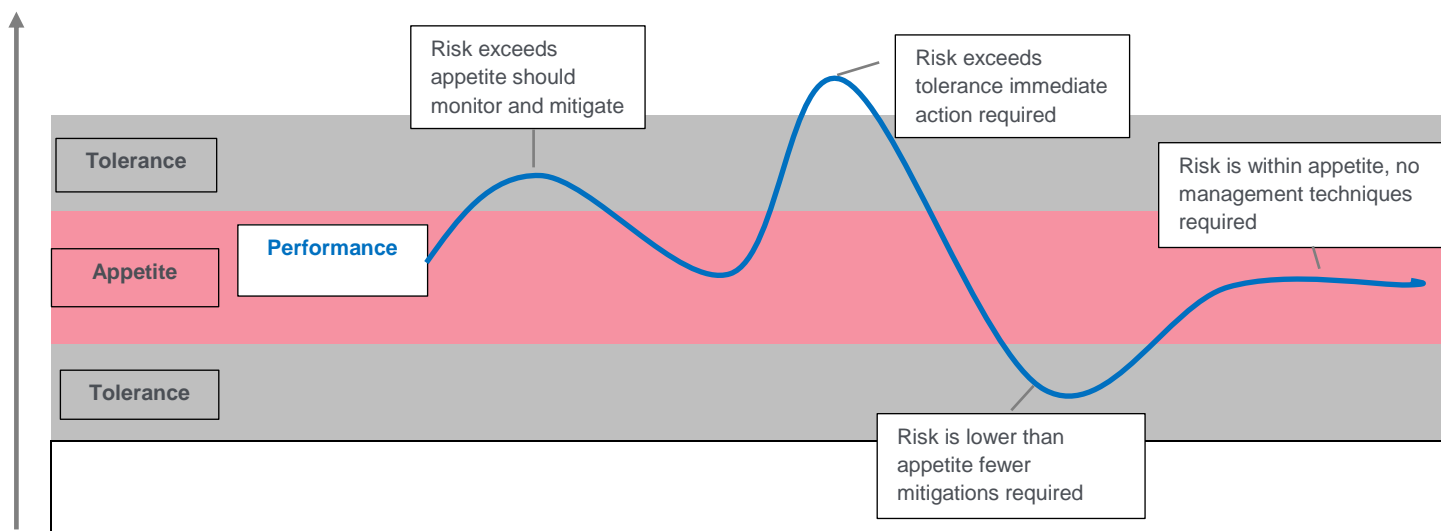
### Using Risk Appetite and Risk Tolerance

Risk appetite and tolerance serve as guidelines for decision-makers as to how much risk The City is willing to accept in the pursuit of its objectives. Risk appetite statements are high level and set the tone for The City's approach to, and appetite for, risk. Administration is working closely with stakeholders to create a common understanding of risk appetite and risk tolerance and to assist with the practical application to their

business objectives. These concepts when applied set parameters for everyday operations, establish a common language and provide signs and signals for decision-makers, at any level, to ensure their risk related decisions are aligned with the overall direction of the organization.

With a common understanding of what risk appetite is, and a risk appetite scale to measure it, The City can determine if it is operating within the desired parameters for any given risk. As shown on the visual below, sometimes the level of risk during the pursuit of the achievement of objectives (performance) exceeds or is lower than the defined risk appetite. These exceptions are noted and can inform the decision about when and why to take on more, or less risk in the pursuit of objectives as demonstrated below.

## Level of Risk



Ultimately, risk appetite and risk tolerance promote individual responsibility as norms and courses for action can be made explicit with a common approach while collective accountability for shared decision making is encouraged.

To apply risk appetite and tolerance, some key considerations are:

- Consider the risks of doing and not doing something;
- Determine if The City is able to absorb the consequences if a risk event occurs;
- Address interrelationship between risks and respective risk appetites; and
- Develop a culture that supports decision-makers who take appropriate amounts of risk.

## Next Steps

As noted above, Administration is working with risk owners and stakeholders to create a common understanding of risk appetite and tolerance. This includes summarizing the Principal Corporate Risks in relation to the risk appetite scale. This work will be continuing in 2019 with an update being brought to the Audit Committee as part of the IRM Model update report on 2019 July 19.



## **EXTERNAL AUDITOR 2017 MANAGEMENT LETTER UPDATE**

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### **EXECUTIVE SUMMARY**

This is an update on identified matters that may be of interest to Administration on the 2017 Audit of the City of Calgary financials. These identified matters were not significant or material in nature.

### **RECOMMENDATIONS:**

That the Audit Committee:

1. Receives this Report and attachments for Information;
2. Recommends that Council receive this Report and attachments for Information.

### **PREVIOUS COUNCIL DIRECTION / POLICY**

The Audit Committee Bylaw 48M2012 states that the Audit Committee, with respect to the External Auditor:

“Receives and reviews the External Auditor’s Management Letter(s), together with any Administration response, and forward, either in full or in summary, to Council for information.”

Schedule “B”, section 1(f)

Council received for information the External Auditor’s 2017 Management Letter for the 2017 Audit at the 2018 July 30 Combined Meeting of Council.

### **BACKGROUND**

The External Auditor, Deloitte LLP, presented their External Auditor 2017 Management Letter, AC2018-0635, at the 2018 June 19 Regular Meeting of the Audit Committee. Audit Committee approved the following:

“Requests the External Auditor to provide their annual report regarding the implementation status of the recommendations contained in the 2017 Management Letter at the 2019 January Audit Committee meeting;”

This report is the update to the 2017 Management Letter as requested in Report AC2018-0635.

### **INVESTIGATION: ALTERNATIVES AND ANALYSIS**

Deloitte’s assessment of Administration’s actions, the original findings, recommendations and Administration’s comments, are outlined in the attached letter dated 2019 January 21 from Deloitte LLP.

Audit Committee should consider all recommendations made by the External Auditor and the responses from Administration to see if the recommendations have been appropriately implemented or responded to.

## **EXTERNAL AUDITOR 2017 MANAGEMENT LETTER UPDATE**

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### **Stakeholder Engagement, Research and Communication**

The letter is addressed to The City's Acting Chief Financial Officer.

### **Strategic Alignment**

This report and recommendations align with Council priority "A well run-city - Calgary's government is open, responsive, accountable and transparent, delivering excellent services at a fair price. We work with our government partners to ensure we have the tools we need".

### **Social, Environmental, Economic (External)**

Not applicable.

### **Financial Capacity**

#### **Current and Future Operating Budget:**

The Audit Committee budget contains a line item for the external auditor fees and there are no budget implications for this Report.

#### **Current and Future Capital Budget:**

There are no budget implications for this Report.

### **Risk Assessment**

There are potential non-material risks to the City of Calgary if the Deloitte recommendations are not appropriately implemented or responded to by Administration.

### **REASON FOR RECOMMENDATION:**

The Audit Committee Bylaw 48M2012 requires the Audit Committee to receive and review the External Auditor's Management Letter Reports and to forward to Council for information.

### **ATTACHMENT**

Deloitte LLP 2017 Management Letter Update

January 21, 2019

Ms. Carla Male, Acting Chief Financial Officer  
The City of Calgary  
800 MacLeod Trail SE  
Calgary, AB T2P 2M5

Dear Ms. Male:

During the course of our December 31, 2017 audit of the consolidated financial statements of The City of Calgary ("The City"), we identified certain matters that may be of interest to Administration and provided a letter of recommendations to Administration and the Audit Committee on June 19, 2018. These matters were not significant or material in nature in the context of the December 31, 2017 financial statements taken as a whole and did not impact our ability to issue our audit report.

This letter provides an update on these matters based on our interim audit procedures performed through to November 2018.

The following summarizes the management letter points included in Appendices A to D:

Year Identified	Appendix	Title	Observation/Description	Status
December 31, 2017	A	Contributions	Contributions are not applied consistently	In progress
December 31, 2017	A	Unsigned developer contribution agreement	Unsigned developer contribution agreement	In progress
December 31, 2016	B	TCA – Reconciliation between LInDA and PSAM	Reconciliations between LInDA and PSAM are not performed on a regular basis	In progress
December 31, 2015	C	Implementation of new TCA policies	We recommend that Administration implement processes to regularly monitor the new TCA policies and processes application	Partially addressed
December 31, 2013 - 2015	D	Tangible Capital Assets	<ol style="list-style-type: none"> <li>1. Untimely review of WIP and accruals</li> <li>2. Delay in hand-off of TCA assets between business units</li> <li>3. TCA costing linked to asset management systems</li> </ol>	#1-3: Partially Addressed

This communication is prepared solely for the information and use of, as applicable, Administration, the Audit Committee, members of Council and others within The City. Further, this communication is not intended to be and should not be used by anyone other than these specified parties or summarized, quoted from or otherwise referenced in another "document" or "public oral statement". We accept no responsibility to a third party who uses this communication.

We wish to express our appreciation for the courtesies and cooperation extended to our representatives during the course of our work. We would be pleased to discuss and/or clarify the matters included herein with you further should you wish to do so.

Yours truly,

A handwritten signature in black ink that reads "Deloitte LLP". The signature is written in a cursive, flowing style.

Chartered Professional Accountants

cc: The Audit Committee of The City of Calgary

## Appendix A - December 31, 2017 year-end observations – January 2019 update

### 1. Contributions

Year Identified - 2017

#### Observation:

During our testing of capital deposits, one of 22 samples tested relating to revenue recognized in fiscal 2017 related to expenses, which had been incurred in fiscal 2015. We discussed this specific sample with the business unit, and noted that the business unit receives contributions from various external parties, and that this contribution was recognized as revenue in 2017 for expenses incurred in 2015. Based on discussions with business unit operational and finance personnel, contributions received can be for an entire project or for a portion of the project. At the time the costs are incurred by The City, the specific contributions are applied directly against the specified project; if not utilized for the specified project, the contributions are refunded. We also note that there can be written or verbal agreements between business units and external parties relating to contributions received by The City.

#### Recommendation:

We recommend:

- a. The business unit conducts a review of the policy and processes relating to contributions with the objective to ensure consistency in the processes and policies utilized to account for contributions and compliance with the accounting guidance (PS 3100, *Restricted Assets and Revenues*, paragraphs 7 to 11);
- b. All contributions have written agreements; and
- c. All contributions are used in accordance with the stipulations as per the original agreements.

#### Administration response:

Administration agrees with Deloitte's recommendations with consideration that this was an isolated sample. In 2018, Administration will review current processes and procedures, as part of The City's ongoing review of its agreements, to identify any gaps and ensure consistent processes and procedures. In addition, Administration will monitor and review transactions using a risk-based approach to ensure that there is consistency and full compliance with the accounting guidance.

#### Administration update (January 2019):

Administration continues to agree with these recommendations with consideration that this was an isolated sample. During 2018, Administration reviewed current processes and procedures, to ensure consistent application and has developed a work plan for 2019 using a risk-based approach to ensure there is consistency and full compliance with the accounting guidance.

**Auditor's response (based on November 2018 interim audit procedures):**

We held discussions with Administration, and we understand that Administration has implemented processes to address this recommendation. Through these discussions, it was noted that a work plan has been developed, which will be implemented through fiscal 2019. We will review Administration's work plan during our year-end fieldwork, apply audit procedures as applicable and will report any deficiencies or further recommendations to Administration and the Audit Committee upon completion of the 2018 year-end audit. As Administration's work plan will be implemented through fiscal 2019, we will continue to work with Administration in addressing this recommendation in the next fiscal year.

## **2. Unsigned developer contribution agreements**

Year Identified - 2017

### **Observation:**

During our audit testing of other receivables for developer contributions, we noted that one of three samples selected for testing did not have a signed copy of the developer contribution agreement on file. For this one sample, we obtained email communication between The City and the developer, which discussed finalizing the signed agreement. We also note The City regularly conducts business with this developer. However, the agreement had not been signed as of March 2018, being the timing of year-end fieldwork. The lack of a signed agreement may put The City at a risk of loss if the developer does not provide the funding or does not comply with the terms and conditions of the agreement.

Through our inquiry process for obtaining the signed agreement, we also noted that there was some confusion between business units as to which business unit is responsible for obtaining and maintaining the signed agreement on file.

### **Recommendation:**

We recommend that The City review its processes in regards to maintenance and responsibility of signed agreements to limit instances of confusion between business units. We also recommend business units follow up with developers on a regular basis (e.g. monthly or quarterly) for any unsigned agreements to ensure The City receives the signed agreements on a timely basis.

### **Administration response:**

Administration agrees with this recommendation and notes that there have been instances in which developer contributions were not signed on a timely basis. To strengthen The City's processes for signed developer contribution agreements and thereby, reduce the risk associated with untimely execution of agreements, The City implemented new controls in Q4 2017, which require all developer agreements to be signed before developers are approved to start their development activities.

### **Administration update (January 2019):**

Administration continues to agree with the recommendation. The new controls implemented in Q4 2017 have had positive results in receiving signed agreements from developers. In 2018, Administration identified that the process involves providing agreements to developers in multi-stages, causing a potential delay in the receipt of signed agreements. To mitigate this risk in 2019, the agreements will be provided to developers as a package that needs to be executed simultaneously ensuring that the City receives signed agreements from developers in a timely manner.

### **Auditor's response (based on November 2018 interim audit procedures):**

During our year-end audit procedures, we will test the new controls implemented in Q4 2017 to confirm that they are designed and implemented according to Administration's new process. We will also review a selection of agreements from developers to determine whether The City has the appropriate signed agreement on file. We will report any significant deficiencies to Administration and the Audit Committee upon completion of the 2018 year-end audit.

## Appendix B – December 31, 2016 year-end observations – January 2019 update

### 1. *Tangible capital asset ("TCA") – Reconciliation between LInDA and PSAM*

Year Identified - 2016

#### **Observation:**

During our 2016 year-end audit procedures, we noted that reconciliations between the Land Inventory Data Application (LInDA) system and PeopleSoft Asset Management (PSAM) system for land are performed only when there is a change in the status of the land (i.e. sale or division of land). However, through Administration's continuous refinement and improvement of The City's capital asset accounting and management systems, there were instances of duplication of land identified in 2016. These duplications resulted in prior period errors of \$8.6M, which were included in the restatement of the December 31, 2015 balances. These duplications would have been identified on a timelier basis if frequent reconciliations between the LInDA system and PSAM were performed.

#### **Recommendation:**

We recommend that reconciliations of land be performed between the LInDA and PSAM systems on a regular basis.

#### **Administration response:**

Administration agrees with this recommendation. The City assigned a dedicated resource to start the reconciliation of land between the LInDA and PSAM systems beginning in Q3 2017 using a risk-based approach. The TCA Program will complete its review of the most complex land parcels by 2018 and the remainder of low-risk reconciliations will be completed by 2019. Significant accounting differences, once identified and confirmed through the TCA Program's investigation, will be communicated to the Audit Committee.

#### **Administration update (January 2018):**

Administration continues to agree with this recommendation. During 2017, the TCA Program has started the reconciliation of land between LInDA and PSAM. The TCA Program is currently limited by resource constraints but will continue to review its most complex land parcels in 2018. The remainder of the less complex reconciliations are planned to be complete by 2019. The City will correct errors as they are discovered through the reconciliation process.

#### **Auditor's response (based on November 2017 interim audit procedures):**

We will review the Administration prepared reconciliations during our year-end fieldwork and will report any deficiencies or further recommendations to Administration and the Audit Committee upon completion of the 2017 year-end audit.

#### **Auditor's update (based on 2017 year-end audit procedures):**

At December 31, 2017, Administration has completed 95% of the reconciliations from PSAM to LInDA. The remaining 5% of data is currently under review and as it is more complex, requires additional time. Administration is also scheduled to perform the reconciliation from LInDA to PSAM in 2018 once the PSAM to LInDA reconciliations are completed. Based on the reconciliations performed by Administration, a prior period error was identified and corrected as part of the restatement of the 2016 financial statements. We applied substantive audit procedures to test the restatement.



We note that Administration is still on track to complete the full reconciliation by fiscal 2019. With the completion of the reconciliation, Administration plans to implement a control process on a monthly basis to ensure that all changes in LInDA are also reflected in PSAM and vice versa. We will continue to apply audit procedures to test the completion of the reconciliations and the controls implemented.

As this observation is still in progress, this recommendation will be carried forward to fiscal 2018.

**Administration update (June 2018):**

Administration continues to agree with this recommendation. The TCA Program will continue the reconciliation of land between LInDA and PSAM, and will correct errors as they are discovered. The project is on track to be completed by fiscal 2019.

**Administration update (January 2019):**

Administration agrees with the recommendation that reconciliations of land be performed between the LInDA and PSAM systems on a regular basis. The TCA Program established a monthly land reconciliation process in 2018 between LInDA and PSAM; with errors corrected as they are discovered. This reconciliation will transition into sustainment in 2019. The TCA Program is still on track to complete the full reconciliation by fiscal 2019.

**Auditor's response (based on November 2018 interim audit procedures):**

We will review the Administration prepared reconciliations during our year-end fieldwork. We will also perform detail testing through a sample basis on TCA additions/disposals. We will report any deficiencies or further recommendations to Administration and the Audit Committee upon completion of the 2018 year-end audit.

## Appendix C - December 31, 2015 year-end observations – January 2019 update

### **1. Implementation of new tangible capital asset ("TCA") policies**

Year Identified - 2015

#### **Observation:**

The City implemented a new policy and process for accounting for machinery and equipment during 2015. Administration has plans to revise the remaining TCA policies and process within the next few years as part of the TCA Project Charter. Accordingly, there is a risk that the new processes are not implemented consistently across all business units.

#### **Recommendation:**

We recommend that Administration implement processes to regularly monitor the new TCA policies and application. These processes would include establishing a team to review the TCA policies and instituting a process whereby this team randomly completes spot checks of the adoption and implementation of the business unit's application of the new TCA policies.

#### **Administration response:**

Administration agrees with the recommendation. In 2016, changes to the TCA reporting policy will be:

- a. Reviewed and monitored by Corporate Financial Reporting and business units during interim and annual reporting periods;
- b. Reinforced using on-going training sessions provided by the Corporate TCA project and Corporate Financial Reporting to key personnel in both Operations and Finance; and
- c. Validated by Corporate Financial Reporting using newly developed system controls.

The above processes and controls will be used for all asset categories that are examined by the TCA project.

#### **Administration update (January 2017):**

- a. Corporate Financial Reporting has reviewed and monitored the application of the TCA reporting policy throughout the year for May and September and will monitor for December;
- b. On-going training sessions are held with both Operations and Finance during the year; and
- c. Newly developed system controls validated and ensured the appropriate application of the updated TCA reporting policy. For instance, Administration used system-generated reports to identify and investigate unusual transactions.

**Auditor's response (based on November 2016 interim audit procedures):**

We held regular discussions with Administration during the year regarding the new TCA policies implemented. We have started our internal control and substantive procedures for the new TCA policies and newly developed system controls during the interim fieldwork and will complete these procedures during the year-end fieldwork. In addition, during our year-end audit procedures we will obtain the training session materials and attendance records for the 2016 sessions. We will report any significant deficiencies or errors to Administration and the Audit Committee upon completion of the 2016 year-end audit.

**Auditor's update (based on 2016 year-end audit procedures):**

We held regular discussions with Administration during the year regarding the new TCA policies implemented in 2016 (Buildings and Engineered Structures). We performed our internal control and substantive procedures for the new TCA policies implemented and newly developed system controls during our year-end fieldwork. We also obtained the training session materials and attendance records for the 2016 sessions held in May, September and December. We will continue to hold regular discussions with Administration as Administration implements new TCA policies in 2017 for other asset categories.

**Administration update (June 2017):**

Administration continues to agree with this recommendation. The City's newly formed TCA reporting team will also review TCA transactions to ensure they are compliant with the updated TCA policies and processes using the TCA costing system. Development and implementation of The City's policies and processes for the remaining asset categories are expected to be completed by 2019 based on Administration's response to 2016's MLP #2.

**Administration update (January 2018):**

Administration continues to agree with this recommendation. The TCA reporting team and Corporate Financial Reporting will continue to monitor the application of the TCA policy and processes using the TCA costing system. TCA policies have been reviewed and asset hierarchy changes for land and land improvements were implemented in 2017. The vehicles asset class will be revisited and is expected to be completed by 2019.

**Auditor's response (based on November 2017 interim audit procedures):**

We held regular discussions with Administration during the year regarding the new TCA policies implemented. We commenced our internal control and substantive audit procedures for the new TCA policies and system controls during interim fieldwork and will complete these procedures during the year-end fieldwork. We will report any significant deficiencies or errors to Administration and the Audit Committee upon completion of the 2017 year-end audit.

**Auditor's update (based on 2017 year-end audit procedures):**

We held regular discussions with Administration regarding the new TCA policies implemented in 2017 (Land and Land Improvements). We performed internal control and substantive procedures for the new TCA policies implemented and newly developed system controls during our year-end fieldwork. We also obtained the training session materials for the May 2017 TCA session, noting that meetings are being held in regards to the new TCA policies.

We note that the only remaining asset category that requires assessment is vehicles. Administration will continue discussions in June 2018 to determine if an update to the vehicle policy is required. We will continue to hold regular discussions with Administration to determine what conclusions are reached around the vehicle TCA policy and we will plan our audit procedures accordingly.

**Administration update (June 2018):**

Administration continues to agree with this recommendation. The formation of the centralized TCA reporting team has facilitated consistent application of TCA policies and guidelines. The vehicles asset class will be revisited and is expected to be completed by 2019.

**Administration update (January 2019):**

The vehicle asset class policy was approved effective January 1, 2018. This completes the asset class review and policy update. The TCA reporting team ensures consistent and compliant application of the policies.

**Auditor's response (based on November 2018 interim audit procedures):**

We held regular discussions with Administration during the year regarding the new TCA policy implemented. We commenced our internal control and substantive audit procedures for the new vehicle asset class policy during interim fieldwork and will complete these procedures during year-end fieldwork. We will report any significant deficiencies or errors to Administration and the Audit Committee upon completion of the 2018 year-end audit.

## Appendix D - December 31, 2014 year-end observations – January 2019 update

As we communicated in June 19, 2018, The City has continued to expend focus and effort on the accounting of TCA, including implementation of many of our recommendation points issued during the prior years' audits, as well as continuous staff education and training.

During 2018, Administration made significant progress in regards to TCA accounting and reporting. As part of the TCA Project Charter established in 2014, we note that a TCA Costing System was implemented in April 2017. We also note that the centralized TCA reporting team became fully operational starting February 2017. The TCA Costing System will allow for accounting of TCA through automated systems, taking away the manual element at the business unit level.

It is expected that both the TCA costing system and centralized TCA reporting team will allow for the application of consistent accounting approaches to TCA, which will be simple and streamlined, and with full implementation will allow for overall compliance with TCA policies and processes by The City.

We note that observations 1-3 have been partially addressed through the implementation of the TCA costing system and centralized TCA reporting team. However, as both the TCA Costing System and centralized TCA reporting team were implemented part way through 2017, we understand that Administration's TCA sustainment processes will continue to develop and mature. We will apply the appropriate auditing procedures and complete an assessment of the full implementation of our recommendations relating to TCA during our year-end procedures for the fiscal 2018 audit.

We have summarized the observations below. The full history of these observations was communicated in our letter of recommendations presented on June 19, 2018.

#	Observation title	Year identified	Background	Administration update (January 2019)	Auditor update (based on November 2018 interim audit procedures)
1	Tangible Capital Assets - Untimely review of work in progress and accruals	2013 - 2015	<p>To ensure that the project costs, accruals and work in progress are accounted for on a timely basis, we recommended the implementation of a formalized process to review capital expenditures and reconciliations throughout the year versus at the end of the year, which will reduce the amount of review of capital projects at year-end when business unit personnel are focused on other financial reporting finalization matters.</p> <p>During 2017, a TCA reporting team was established and the TCA Costing System was implemented. The TCA reporting team is reviewing WIP transactions for TCA policy compliance on an on-going basis and will record accruals on an as needed basis.</p> <p>System and process improvements will continue to be refined in 2018.</p>	<p>The TCA reporting team is reviewing expenditures on an ongoing basis to ensure compliance.</p> <p>Assets are loaded or accrued in the year the asset goes in-service.</p>	<p>We will hold discussions with the TCA reporting team regarding the frequency of the process.</p> <p>We will test a selection of capital expenditures incurred and accruals made to TCA. We will communicate any deficiencies to both Administration and the Audit Committee upon completion of the 2018 year-end audit.</p>

#	Observation title	Year identified	Background	Administration update (January 2019)	Auditor update (based on November 2018 interim audit procedures)
2	Tangible Capital Assets – Delay in hand-off of TCA assets between business units	2013 - 2015	<p>There is, at times, a significant delay in “hand-off” of TCA assets between business units.</p> <p>During 2017, a TCA reporting team was established and the TCA Costing System was implemented. The TCA reporting team is structured to share information across business units and ensure the hand off packages are loaded by the appropriate business units.</p> <p>The TCA costing module will continue to be improved to address the needs of tracking and loading multi business units’ projects.</p> <p>The TCA reporting team is looking at transfers monthly and will record accruals on an as needed basis.</p>	<p>The TCA reporting team has been working with operations staff to ensure hand-off packages are provided with sufficient time to record prior to year-end.</p> <p>Due to the timing of asset in-service dates and respective hand-off package receipt timing, the TCA reporting team will review and record the costs as required.</p>	<p>We held regular discussions with Administration during the year regarding the TCA reporting team’s structure and process.</p> <p>During our year-end audit procedures, we will test a selection of hand-off packages with respect to in-service dates. We will communicate any deficiencies to both Administration and the Audit Committee upon completion of the 2018 year-end audit.</p>
3	Tangible Capital Assets – TCA costing linked to asset management systems	2013 - 2015	<p>We noted that some business units still rely on the LINDA system to identify any donated land in the year. The information within the LINDA system initiates with the developer, which at times may be a lengthy process. Therefore, recording of these donated assets may not be occurring in a timely manner such that assets could be recorded in the incorrect fiscal period.</p> <p>During 2017, a TCA reporting team was established and the TCA Costing System was implemented.</p> <p>Further actions to be taken by Administration is also noted in MLP #1 of Appendix B.</p>	<p>Operations have developed processes that identify donated land without reliance on LInDA. The Construction Completion Certificate (“CCC”) is used as the primary identifier for donated land transfers.</p>	<p>During our year-end audit procedures, we will test the implementation of the revised process of identifying donated land. We will communicate any deficiencies to both Administration and the Audit Committee upon completion of the 2018 year-end audit.</p>

## Calgary Parking Authority Asset Management Processes Audit

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### EXECUTIVE SUMMARY

The City Auditor's Office issued the Calgary Parking Authority Asset Management Processes Audit Report to Administration on 2018 December 18. The report identified Calgary Parking Authority (CPA) asset management processes required significant improvement to effectively mitigate safety, financial, and sustainability risks. We raised six audit recommendations, which included establishing a strategic asset management framework, intended to help CPA focus on areas of higher priority, as well as identifying areas where CPA can build on current processes, and initiatives underway. CPA accepted all recommendations and committed to the implementation of action plans no later than 2021 February 28. The City Auditor's Office will track the implementation of these commitments as part of our on-going follow-up process.

### RECOMMENDATIONS

1. That Audit Committee receive this report for information; and
2. That Audit Committee recommend that Council receive this report for information.

### PREVIOUS COUNCIL DIRECTION / POLICY

Bylaw 30M2004 (as amended) established the position of City Auditor and the powers, duties and functions of the position. Under the City Auditor's Office Charter, the City Auditor presents an annual risk-based audit plan to Audit Committee for approval. The City Auditor's Office 2017/18 plan was approved on 2016 November 10. The City Auditor is accountable to Council and subject to the oversight of Audit Committee under Bylaw 48M2012 (as amended).

### BACKGROUND

CPA is the City of Calgary's (The City's) partner entrusted to manage, control, operate and maintain designated off-street parking areas, structures, and facilities owned and leased by The City as established under the Calgary Parking Authority Bylaw 28M2002. As of 2017 December 31 CPA owned and operated 5,220 stalls across seven parkades with an assessed value of \$290M that generated gross annual revenue of \$27.2M. In 2017, CPA returned \$19.8M to The City based on Bylaw distribution requirements.

The objective of this audit was to assess the adequacy of CPA's asset management processes for the parkade portfolio CPA owns and operates. This objective was achieved by assessing the design and operational effectiveness of significant controls that mitigate safety, financial and reputational risks.

### INVESTIGATION: ALTERNATIVES AND ANALYSIS

We were unable to complete full testing of significant controls due to recent CPA staff turnover and current documentation retention practices. Based on supporting information available we determined the asset management processes required significant improvement.

A top priority is the development of an Asset Management Strategy that aligns asset management activities to organizational objectives and is integrated into areas with a role in asset management. This strategy will set the foundation for effectively managing assets which will help CPA realize optimal value over each parkade's full lifecycle and manage safety risks associated with parkades in poor condition. Another essential component of effective asset

## **Calgary Parking Authority Asset Management Processes Audit**

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management is developing individual Lifecycle Strategies for parkades based on criticality and risk of failure. These strategies will enable CPA to optimize resource allocation between operations and capital maintenance and make risk-based decisions on prioritizing projects and replacement or divestment of parkades.

Once these strategies have been developed, CPA can leverage and enhance current asset management processes and:

- Clarify and document the purpose of the Parking Structure Replacement Fund, set a target balance, and establish supporting processes to ensure an appropriate fund balance is achieved.
- Utilize current Land Summary Reports and Capital Replacement Studies to develop a comprehensive Asset Registry that contains information required to perform effective lifecycle analysis, including significant structural, mechanical and electrical components and associated condition assessments.
- Confirm the criteria currently utilized for prioritizing projects in 5-Year Capital Plans, which identify yearly preventative and lifecycle maintenance repairs for each parkade, and revise the current capital plan as needed to ensure alignment to the Lifecycle Strategy and effective resource allocation.
- Document asset management processes and establish record retention requirements to further support sustainability of operations.

### **Stakeholder Engagement, Research and Communication**

This audit was conducted with the Facilities and Finance teams within the Calgary Parking Authority with the General Manager acting as the principal audit contact.

### **Strategic Alignment**

Audit reports assist Council in its oversight of the City Manager's administration and accountability for stewardship over public funds and achievement on value for money in City operations.

### **Social, Environmental, Economic (External)**

N/A

### **Financial Capacity**

#### **Current and Future Operating Budget**

N/A

#### **Current and Future Capital Budget**

N/A

### **Risk Assessment**

The activities of the City Auditor's Office serve to promote accountability, mitigate risk, and support an effective governance structure. This audit was undertaken as part of the approved City Auditor's Office 2017/2018 Annual Audit Plan since CPA's parkades are vital to their core



**Calgary Parking Authority Asset Management Processes Audit**

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business. Effective asset management processes throughout each parkade's lifecycle are fundamental to ensure customer safety, sustainability of CPA's operations and continued financial return to The City. In addition, effective asset management will help realize optimal asset value over each parkade's lifecycle by supporting appropriate forecasting, resource allocation, and decision-making.

**REASON FOR RECOMMENDATIONS**

Bylaw 48M2012 (as amended) states: "Audit Committee receives directly from the City Auditor any individual audit report and forwards these to Council for information".

**ATTACHMENT**

Calgary Parking Authority Asset Management Process Audit - AC2019-0010





**Calgary**

City Auditor's Office

# **Calgary Parking Authority Asset Management Processes Audit**

**December 18, 2018**

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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*.

## Executive Summary

The Calgary Parking Authority (CPA), is a City of Calgary (The City) partner entrusted to manage, control, operate and maintain designated off-street parking areas, structures, and facilities owned and leased by The City as established under the Calgary Parking Authority Bylaw - 28M2002. As of December 31, 2017, CPA owned and operated 5,220 stalls across seven parkades with an assessed value of \$290M that generated gross annual revenue of \$27.2M. In 2017, CPA returned \$19.8M to The City based on Bylaw distribution requirements.

Since CPA's parkades are vital to their core business, effective asset management processes throughout each parkade's lifecycle are fundamental to ensure customer safety, sustainability of CPA's operations and continued financial return to The City. In addition, effective asset management will help realize optimal asset value over each parkade's full lifecycle by supporting appropriate forecasting and resource allocation decision-making.

The audit objective was to assess the adequacy of CPA's asset management processes for the parkade portfolio CPA owns and operates. This objective was achieved by assessing the design and operational effectiveness of significant controls that mitigate safety, financial and reputational risks.

We were unable to complete full testing of significant controls due to recent CPA staff turnover and current documentation retention practices. Based on supporting information available we determined asset management processes required significant improvement. We raised six recommendations to assist CPA in establishing a strategic framework to support effective asset management and appropriately mitigate safety, financial, and sustainability risks. Our recommendations are intended to help CPA focus on areas of higher priority, as well as identifying areas where CPA can build on current processes, and initiatives underway.

A top priority is the development of an Asset Management Strategy that aligns asset management activities to organizational objectives and is integrated into areas with a role in asset management. This strategy will set the foundation for effectively managing assets which will help CPA realize optimal asset value over each parkade's full lifecycle and manage safety risks associated with parkades in poor condition. Another essential component of effective asset management is developing individual Lifecycle Strategies for parkades based on criticality and risk of failure. These strategies will enable CPA to optimize resource allocation between operations and capital maintenance and make risk-based decisions on prioritizing projects and replacement or divestment of parkades.

Once these strategies have been developed, CPA can leverage and enhance current asset management processes. For instance, CPA established a Parking Structure Replacement Fund to partially fund the replacement of parkades. This fund has an annual contribution requirement of \$2M plus interest earned. However, there is no further definition provided to clarify expectations of partial funding. CPA should clarify and document the purpose of the Replacement Fund, set a target balance, and establish supporting processes to ensure an appropriate fund balance is achieved.

Additional CPA processes currently in place such as the Land Summary Report, which identifies the parkades CPA owns, overall condition, description, estimated remaining life, revenue, expenditures, and occupancy, and commissioned Capital Replacement Studies, can be utilized to develop a comprehensive Asset Registry. The Asset Registry should contain information required to perform

effective lifecycle analysis, including significant structural, mechanical and electrical components and associated condition assessments.

CPA also developed 5-Year Capital Plans for 2014-2018 and 2019-2023, which identify yearly preventative and lifecycle maintenance repairs for each parkade. CPA should confirm the criteria currently utilized for prioritizing projects on the capital plan and revise the current capital plan as needed to ensure alignment to the Lifecycle Strategy and effective resource allocation.

A current CPA initiative underway is the development of project monitoring and reporting processes that align to the mandatory sections of The City's Corporate Project Management Framework requirements with respect to project overview, project status, schedule, financials, risks and issues. We support continuation of this initiative as it will ensure that projects are completed to contract specifications (time, budget, scope and quality) and that issues and risks are communicated, escalated and resolved appropriately. To further support sustainability of operations we recommended CPA document asset management processes and establish record retention requirements.

CPA has agreed to all recommendations and have set action plan implementation dates no later than February 28, 2021. The City Auditor's Office will follow-up on all commitments as part of our ongoing recommendation follow-up process.

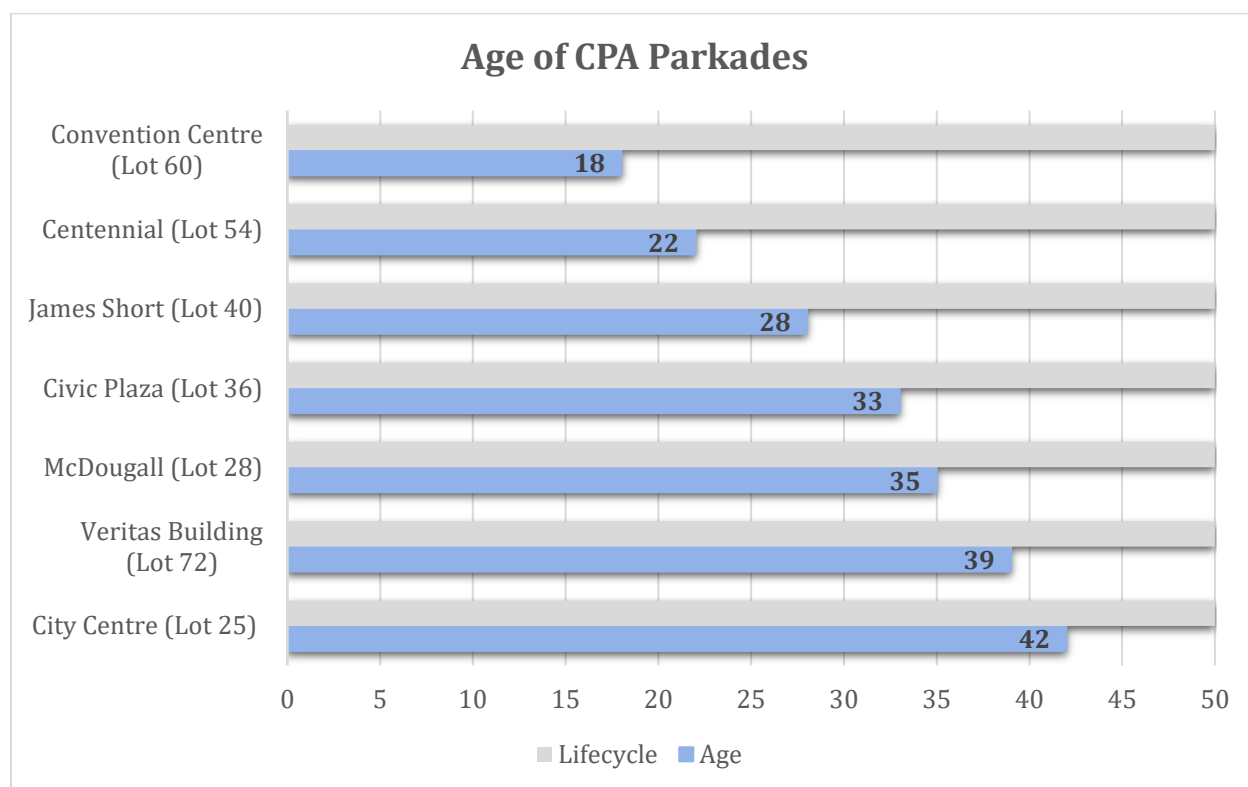


## 1.0 Background

The Calgary Parking Authority (CPA) was established under Bylaw 28M2002 - The Calgary Parking Authority Bylaw by The City of Calgary (The City) Council. CPA fulfills The City's parking mandates and implements the municipality's parking policies by providing and managing on and off street public parking facilities, managing and operating third-party parking facilities, enforcement programs and providing parking advisory services. Council's Calgary Parking Committee oversees CPA.

As of December 31, 2017, CPA operated 11,986 parking stalls in parkades and surface lots that generated gross annual revenue of \$34.6M. Of these total stalls, CPA owned and operated 5,220 stalls across seven parkades that generated gross annual revenue of \$27.2M. Bylaw 28M2002 indicates that CPA must meet financial return expectations established by Council. A return of 65% of net income after distributions has been agreed upon since 2008. The return to The City in 2017 was \$19.8M.

The oldest CPA owned parkade was built in 1976 and the most recent was built in 2000, with an average age of 31 years. A distribution of the age of CPA's parkades is included in the chart below:



CPA's parkade lifecycle is 50 years. To fund the replacement of parking structures, the Calgary Parking Committee established a Parking Structure Replacement Fund (Replacement Fund) with an annual contribution requirement of \$2M plus interest earned. The fair value of the fund at December

31, 2017 was \$94.5M. At year-end 2016, the estimate to replace Lot 25 and 28 were \$159.2M and \$85.5M respectively.

CPA was included on the 2017/2018 Annual Audit Plan as an operational audit of CPA's key internal control processes. During the planning phase of the audit, we conducted interviews with staff and reviewed relevant documentation, including CPA's 2017 Risk Register and Control Environment Assessment, to better understand these internal control processes.

In our planning, CPA staff indicated that parkades are a vital part of CPA's core business and identified parkade asset management processes as a higher risk area. Effective asset management processes throughout a parkade's lifecycle are fundamental to customer safety, the sustainability of CPA's operations, and continued financial return to The City.

Asset management is a systematic process of planning, acquiring, operating, maintaining, renewing, and disposing of assets cost-effectively. Effective asset management helps an organization realize optimal asset value over an asset's full lifecycle by supporting effective forecasting and decision-making. In planning, we researched asset management processes and identified good asset management practices in the following six key areas based on The City's asset management practices, government practices and ISO 55000 standards:

1. **Asset Management Strategy** - A key component of asset management is an Asset Management Strategy that outlines overall long-term asset management objectives that align to organizational objectives and is integrated into areas with a role in asset management. The Asset Management Strategy forms the foundation for effectively managing assets, which should then flow through to the asset management processes listed below.
2. **Critical Assets** - Define which assets are critical to sustain continued organizational performance and which assets have a high risk of failure. Develop a Lifecycle Strategy for each class of assets based on criticality.
3. **Long-term Funding** - Evaluate available funding to maintain, replace and acquire assets and identify additional funding through a dedicated reserve or borrowing.
4. **Current State** - Determine the current state of assets including condition, useful life, economic life, value and replacement cost.
5. **Managing Lifecycle Costs** - Determine asset costs over the entire lifecycle and develop a long-term plan to effectively allocate resources at minimum cost.
6. **Level of Service** - Define stakeholder service demand and expectations, and associated performance metrics.

## 2.0 Audit Objective, Scope and Approach

### 2.1 Audit Objective

The objective of this audit was to assess the adequacy of CPA's asset management processes for the parkade portfolio CPA owns and operates. The objective was achieved by assessing the design and operating effectiveness of significant controls that mitigate safety, financial and reputational risks related to the following five high inherent risks (risks before controls are put in place):

1. Parkade condition and appearance do not meet customer expectations and needs;
2. Parkade condition impacts citizen safety;
3. Parkades don't meet expected life cycle;
4. Replacement Fund is insufficient to replace parkades at the end of their life cycle; and
5. Waste occurs on contracted lifecycle maintenance.

A risk matrix that maps controls to the identified risks is included in the appendix.

### 2.2 Audit Scope

Our audit scope focused on transactions from January 1, 2015 to June 30, 2018. Specifically, we focused on CPA Facilities and Operations 5-Year Capital Plans, as well as the associated budget process. In addition, we reviewed any Replacement Fund related documents since establishment in 1999.

Asset management processes related to surface lots and buildings were out of scope.

### 2.3 Audit Approach

We conducted interviews with staff and reviewed relevant documentation, assessed the design of control documentation, and evaluated the operation of significant controls identified in the appendix.

## 3.0 Results

Our testing was based on significant controls as identified in the appendix and grouped according to the key areas of asset management processes outlined in the background section. Based on supporting information available we determined asset management processes required significant improvement.

Our recommendations are intended to help CPA focus on areas that should be addressed first, and identify areas where CPA can build on current processes. These recommendations set a framework to guide effective asset management and mitigate financial, safety and sustainability risks, which is critical given the age of the parkades and uncertainty regarding Replacement Fund sufficiency. The following sections outline the results of our review.

### 3.1 Asset Management Strategy- (no associated controls identified)

Early in testing CPA management advised that they do not have a clearly defined Asset Management Strategy. As a starting point, we recommended that CPA develop an Asset

Management Strategy that aligns asset management activities to organizational activities and is integrated into areas with a role in asset management (Recommendation 2).

An Asset Management Strategy should be customized to the scale of the organization and can be a high level document that details the relationship between organizational and asset management objectives and guides overall asset management activities within the organization. CPA's Asset Management Strategy should consider the following:

- The City's Council policies such as the Cash-in-Lieu Policy<sup>1</sup> and associated stall requirements and The City's strategies such as the Downtown Parking Strategy.
- Expansion activities to increase parking stalls to meet growth demand, including options to develop new assets through The City's Land Acquisition Fund<sup>2</sup>.
- New technology, such as autonomous vehicles and demographic trends, such as jobs moving away from the downtown, that could reduce the number of replacement stalls required and identify a need for mixed use parking.

### **3.2 Critical Assets- Parkade Lifecycle Strategy (Control #6)**

Once an Asset Management Strategy has been developed, we recommended that CPA create a Lifecycle Strategy for each parkade that sets objectives that are aligned to the Asset Management Strategy (Recommendation 3). Lifecycle Strategies will enable CPA to optimize resource allocation between operations and capital maintenance and make risk-based decisions on prioritizing projects, and replacement or divestment to manage safety and sustainability risk. Strategy development should include identification of critical parkades based on significance to CPA operations and risk of failure. Each strategy should also consider parkade condition, operational and capital costs to maintain the parkade in adequate condition, and lifecycle replacement costs once parkades have reached the end of their useful life, such as demolition and divestment costs.

### **3.3 Long-term Funding- Replacement Fund (Controls #7, #8 and #9)**

Although, CPA established a Parkade Replacement Reserve Fund in 1999 to partially fund the replacement costs of parkades when they reach end of life, there is no further definition provided to clarify expectations of partial funding. Founding documents require that the Parking Committee review annual contributions to the Replacement Fund to ensure the appropriate level of reserve is maintained. However, this review did not take place in 2017 or 2018. The most recent review of fund adequacy occurred in June 2016. The total replacement cost for all parkades at the end of 2016 was \$785.7M versus a fund balance of \$83.7M. Forecasts presented to the Parking Committee included assumptions such as estimated remaining life of each parkade, interest rates, the future value of the contributions and the expected shortfall to replace all parkades.

To support mitigation of risks to CPA's sustainability, we raised a recommendation that supports effective evaluation of Replacement Fund sufficiency taking into consideration Lifecycle Strategies (Recommendation 1).

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<sup>1</sup> **Cash-in-Lieu** - Developments within the downtown core were limited to providing a maximum of 50 percent of their required parking on-site with a requirement to make a cash-in-lieu of parking payment to The City for the balance. These stalls are required to be kept for the life of the building.

<sup>2</sup> **Parking Land Acquisition Fund** - On May 18, 2016, the Standing Policy Committee on Transportation and Transit created a process to allow the CPA to access funds from the Parking Land Acquisition Reserve for lifecycle maintenance.

We also obtained a listing from the general ledger and confirmed there were no outgoing transactions and annual contributions of the required \$2M occurred in accordance with Replacement Fund requirements during the audit period under review.

### **3.4 Current State- Asset Registry (Control #5)**

A key part of effectively managing assets is knowing their current state including what is owned, condition, useful life and value. A comprehensive Asset Registry, with consistently defined condition ratings for each asset, facilitates effective lifecycle analysis and decision making, which mitigates the risk of ineffective resource allocation.

CPA has a Land Summary Report that identifies the parkades they own, overall condition, description, estimated remaining life, revenue, expenditures, and occupancy. CPA hired an engineering firm to prepare Capital Replacement Studies in 2017 on the structural components of each parkade on our audit scope. These studies included a list of significant structural components, the remaining useful life of the component, along with estimated costs to replace or restore the component over a ten-year period.

We recommended that CPA utilize the information in the Land Summary Report and Capital Replacement Studies to develop a comprehensive Asset Registry that includes information required to perform effective lifecycle analysis, including significant structural, mechanical and electrical components and associated condition assessments (Recommendation 4).

### **3.5 Managing Lifecycle Costs- (Controls #1-#4)**

Once an organization has developed Lifecycle Strategies for parkades and determined the current state of its assets, processes should be developed to effectively manage lifecycle costs. These include the development of a long-term capital plan and associated budget and processes to monitor and report on progress against the capital plan.

#### Long-term Capital Plan

CPA developed a 5-Year Capital Plan for 2014-2018 and 2019-2023, which identifies overall yearly preventative and lifecycle maintenance repairs for each parkade with a priority rating from 1 to 3. There was insufficient supporting documentation or corporate memory to assess how the plans were developed, how projects listed in the plan were prioritized, and how Capital Replacement Studies may have been incorporated in the 5-Year Capital Plans.

Long-term capital plans should prioritize lifecycle maintenance based on asset condition and criticality to ensure effective allocation of resources at the lowest cost and effective management of safety risk due to parkades in poor condition. We recommended that CPA confirm the criteria currently utilized for prioritizing projects on the long-term capital plan and revise the plan as needed to ensure alignment to the Lifecycle Strategy (Recommendation 5).

#### Budget

Although CPA prepared 4-Year Budgets for 2015-2018 and 2019-2022, there was no supporting documentation to validate the methodology used to incorporate the 5-Year Capital Plans into the 4-Year Budgets. Similarly, we could not determine how annual budget adjustments were identified and whether they were based on additional condition assessments.

A sample of budget adjustments (BG12s) for 2016-2018 were tested to validate oversight and authorization processes were in place. In all cases each adjustment was approved by the General Manager and the Finance Manager.

#### Progress Reporting and Monitoring

Progress against long-term capital plans and work performed by contractors should be monitored to ensure that projects are completed to contract specifications (time, budget, scope and quality) and that issues and risks are communicated, escalated and resolved appropriately.

Based on a sample of six monthly budget reports we determined CPA Finance has effective tracking and monitoring processes in place on parkade expenditures, including reporting results monthly to management and quarterly to the Parking Committee. Supporting documentation was not in place to verify whether CPA Facilities staff monitored progress against the 5-Year Capital Plan and regularly monitored projects to ensure work was appropriate and met quality standards.

As noted during the audit, CPA, with the assistance of City staff, was developing project monitoring and reporting processes, that align to the mandatory sections of The City's Corporate Project Management Framework (CPMF) requirements with respect to project overview, project status, schedule, financials, risks and issues, environmental health and safety, and use of decision stage gates (last gate review date/number). CPA was also developing a comprehensive quality management checklist outlining quality requirements for each stage of the project from initiation to close out.

Subsequent to the audit period under review, CPA hired a Capital Projects Engineer who will be responsible for monitoring and reporting on capital projects. CPA's General Manager has committed to set role expectations for the Capital Projects Engineer and ensure project management best practices are implemented by January 31, 2019, with respect to progress monitoring and reporting.

### **3.6 Process Guidance**

As noted above, we were unable to verify the design and operating effectiveness of all controls identified in the appendix. To ensure clarity on asset management roles and responsibilities and support business continuity when there is turnover, we recommended that Facilities and Finance document procedures for key asset management processes and establish asset management retention requirements (Recommendation 6).

We would like to thank CPA staff for their assistance and support throughout this audit.

## 4.0 Observations and Recommendations

### 4.1 Replacement Fund Sufficiency

It is uncertain whether the value in the Replacement Fund sufficiently meets the expectation of the founding documents. The purpose of the Replacement Fund outlined in the founding documents is to partially fund the replacement costs of the parkades. However, there is no further definition provided to clarify the expectations of partial funding.

The most recent review on the fund's adequacy occurred in June 2016. Administration presented to the Parking Committee the balance of the Replacement Fund with a projected \$24M shortfall to fund the replacement of the oldest parkade that will reach the end of its estimated life in 2026. The total replacement cost for all parkades at the end of 2016 (presented to the Parking Committee) was \$785.7M versus a fund balance of \$83.7M and a projected future value of \$134.7M. The fund balance at the end of 2017 was \$93.5M.

As noted under 4.3, CPA currently does not have a Lifecycle Strategy for each parkade. Once Lifecycle Strategies are in place and the purpose of the fund is clarified, a fund target can be determined, and fund sufficiency assessed.

The City's Administration Policy on Financial Reserves, indicates that proper management of reserves includes the preparation of an action plan to return a reserve back into compliance with the fund's purpose when a reserve is either over or under funded. Once CPA assesses fund sufficiency, CPA should develop an action plan to ensure the Replacement Fund has an appropriate balance (not over or under funded).

A forecast showing the total replacement cost of the parkades was not prepared or presented to CPA's Parking Committee for the years 2017 and 2018. The founding documents do not require annual forecast presentation, including underlying assumptions. However, they do require that the annual contribution to the fund be reviewed by the Parking Committee to ensure the appropriate level of reserve is maintained. Presentation of the assumptions supports effective decision making on Replacement Fund sufficiency.

Assumptions should also consider:

- The estimate of remaining life, which in the current assumptions is 50 years. The estimate of remaining life should align to the Lifecycle Strategy, which should take into consideration maintenance work that may extend the life of the parkade beyond 50 years.
- The end of life strategy for a parkade, which may include divestment and a new asset funded by the Land Acquisition Fund.
- The need to update other assumptions such as interest rates used to calculate replacement cost.

### Recommendation 1

The General Manager consult with the Parking Committee to clarify and document the purpose of the Replacement Fund including expectation of partial funding, and:

- Set a target fund balance based on Lifecycle Strategies;
- Evaluate fund sufficiency and frequency of the evaluation;
- Develop corresponding plans to ensure an appropriate fund balance is achieved; and
- Review and update Replacement Fund assumptions to ensure alignment with Lifecycle Strategies.

### Management Response

Agree.

Action Plan	Responsibility
The CPA will take a phased approach to address the recommendations.	<u>Lead:</u> Finance Manager
Phase 1 – Review purpose and use of the Parking Structure Replacement Fund with CPA Committee.	<u>Support:</u> Operations & Facilities Manager, Capital Projects Engineer, General Manager
Phase 2 – Use completed Parkade Lifecycle Strategy and Asset Registry Parkade condition summary to update assumptions and determine adequacy of funding of Parking Structure Replacement Fund. If deficiencies are noted, provide action plan to the Committee to return the fund back into compliance.	<u>Commitment Date:</u> Phase 1 - March 29, 2019 Phase 2 - February 28, 2021

## **4.2 Asset Management Strategy**

CPA does not have an Asset Management Strategy. CPA should have an Asset Management Strategy that includes documented overall long-term asset management objectives that align asset management activities to organizational objectives.

The Asset Management Strategy sets the foundation for effectively managing assets and should be integrated into each area of CPA that has a role in asset management activities, including staff in Facilities involved in day to day maintenance and Financial Services. Effective asset management can help CPA realize optimal asset value over the parkades' full lifecycle and manage safety risks associated with parkades in poor condition.



Recommendation 2

The General Manager, develop an Asset Management Strategy that aligns asset management activities to organizational objectives and is integrated into areas with a role in asset management activities.

Management Response

Agree.

Action Plan	Responsibility
CPA will develop an Asset Management Strategy that aligns with the recently approved Strategic Plan and factors in all assets including parkades to ensure it meets organizational objectives.	<u>Lead:</u> General Manager  <u>Support:</u> Operations & Facilities Manager, IT Manager, Parking Solutions Manager  <u>Commitment Date:</u> September 30, 2019

**4.3 Parkade Lifecycle Strategy**

CPA does not have a Lifecycle Strategy for each parkade. CPA should have a Lifecycle Strategy that sets objectives, including end of life, for each parkade aligned to the Asset Management Strategy. A Lifecycle Strategy will enable CPA to optimize resource allocation between operational and capital maintenance and make risk-based decisions on prioritizing projects, and replacement or divestment to manage safety and sustainability risks.

Recommendation 3

The Operations & Facilities Manager develop a Lifecycle Strategy for each parkade that aligns to the Asset Management Strategy. Each Lifecycle Strategy should be reviewed periodically by the General Manager and updated as appropriate.

Management Response

Agree.

Action Plan	Responsibility
The CPA will develop a Parkade Lifecycle Strategy in conjunction with a consulting scope assignment for the Asset Registry and Parkade condition recommendation. See response to recommendation 4 for more detail.	<u>Lead:</u> Operations & Facilities Manager  <u>Support:</u> Capital Projects Engineer  <u>Commitment Date:</u> November 30, 2020

#### 4.4 Asset Registry and Parkade Condition

Although CPA has a Land Summary report that identifies the parkades they own, the report does not include a comprehensive list of significant components for each parkade (structural, mechanical and electrical), the current condition of each component, and estimated lifecycle maintenance, replacement, and disposal costs. An Asset Registry that includes all pertinent information supports effective lifecycle analysis and decision making, which mitigates the risk of ineffective resource allocation.

##### Recommendation 4

The Operations & Facilities Manager develop a comprehensive Asset Registry that includes information required to perform effective lifecycle analysis, including appropriate structural, mechanical and electrical condition assessments.

##### Management Response

Agree.

Action Plan	Responsibility
CPA will develop a detailed scope of work as a consulting assignment to assess the condition of each component to each parkade (structural, mechanical, electrical). The scope will include development of a Parkade Lifecycle Strategy that will allow CPA to effectively mitigate risk and allocate resources to meet the Asset Management Strategy objectives. The deliverable stemming from this assignment will inform the capital plan objectives from recommendation #5.	<u>Lead:</u> Operations & Facilities Manager <u>Support:</u> Capital Projects Engineer <u>Commitment Date:</u> November 30, 2020

#### 4.5 Managing Lifecycle Costs- Capital Plan

CPA developed a 5-Year Capital Plan for 2014-2018 and 2019-2023, which identifies overall yearly preventative and lifecycle maintenance repairs for each parkade with a priority rating from 1 to 3. Due to staff turnover and a lack of process and supporting documentation we were unable to determine how the plans were developed and how projects listed in the plans were prioritized.

In addition, although CPA commissioned structural Capital Replacement Studies, we were unable to determine how this information was incorporated into the plans. CPA should have a formal process to develop a long-term capital plan that identifies and prioritizes preventative and/or capital and lifecycle maintenance repairs for each parkade, which aligns to the Lifecycle Strategy and considers additional condition assessments. Project identification and prioritization that aligns to each parkade's Lifecycle Strategy ensures resources are allocated effectively to manage safety risk due to parkades in poor condition, and sustainability risk.

Day to day maintenance should also be coordinated with lifecycle maintenance to ensure that expenditures are consistent with the Lifecycle Strategy for the parkade. In addition, prioritization of projects on the 5-Year Capital Plan should be re-evaluated and approved periodically and should be based on additional condition assessments.

#### Recommendation 5

Once a Lifecycle Strategy is developed, the Operations & Facilities Manager:

- a) Confirm the criteria currently utilized for prioritizing projects on the long-term capital plan and ensure the criteria aligns to the Lifecycle Strategy.
- b) Revise the long-term capital plan as needed, to support parkade preventative and capital lifecycle maintenance repairs in alignment to the Lifecycle Strategy.

#### Management Response

Agree.

Action Plan	Responsibility
Using the results from the implementation of action plans related to recommendations 3 and 4, CPA will develop a proactive capital plan that will prioritize projects ensuring alignment with corporate objectives.	<u>Lead</u> : Operations & Facilities Manager <u>Support</u> : Capital Projects Engineer, General Manager, Finance Manager <u>Commitment Date</u> : February 28, 2021

#### **4.6 Process Guidance**

CPA should establish procedures, including record retention expectations, to support critical asset management functions and capital allocation. This includes procedures detailing creation and requirements of a Lifecycle Strategy for each parkade, an Asset Registry, the 5-Year Capital Plan, the 4-Year Budget and Reserve Fund Forecast Assumptions. Having clear procedures will ensure clarity on roles and responsibilities and support business continuity when there is turnover. Procedures should be reviewed periodically to ensure continued alignment with strategies.

#### Recommendation 6

The General Manager:

- a) Ensure Facilities and Finance staff document procedures for key asset management processes and review periodically to ensure they are still appropriate; and
- b) Establish asset management documentation retention requirements.

#### Management Response

Agree.

Action Plan	Responsibility
CPA will review the existing records management policy and delegation of authority policy to ensure asset management and capital allocation functions are explicitly addressed. Process guidance will be developed to ensure clarity around roles and responsibilities and establish periodic reviews.	<u>Lead</u> : General Manager <u>Support</u> : CPA Leadership Team <u>Commitment Date</u> : April 30, 2019

## Appendix A

Business Objective:	Provide, manage and operate parking facilities.				
Risk Category	Risk	Inherent Risk (H/M/L)	Acceptable Business Risk (H/M/L)	#	Identified Significant Controls
Financial	Downtown parkades do not meet the expectations and needs of customers and other key stakeholders (resulting in lost revenue)	H	L	1	The project manager monitors contractors to ensure work is appropriate, meets quality standards and is billed in conformance with the contract. (Level of Service)
Safety /Financial/ Reputational	Parkades are in poor condition compromising safety and not meeting expected life spans.	H	L	2	Every 5 years a Capital Plan is developed which prioritizes yearly preventative and/or capital and lifecycle maintenance repair for each of CPA's parkades. This plan is created by a consultant and is based on recommendations by engineers in related fields (i.e. structural, mechanical, electrical architectural and civil engineers). This plan also includes an evaluation of each facilities condition. (Managing Lifecycle Costs)
				3	Progress against the 5-Year Capital Plan (status of plan) is monitored by the Operations & Facilities Manager and is communicated to appropriate stakeholders. (Managing Lifecycle Costs)
				4	Changes to the 5-Year Capital Plan are approved. (Managing Lifecycle Costs)

Business Objective:		Provide, manage and operate parking facilities.			
Risk Category	Risk	Inherent Risk (H/M/L)	Acceptable Business Risk (H/M/L)	#	Identified Significant Controls
				5	CPA has an Asset Registry that identifies parkades they are responsible for. This registry includes a facility condition which is updated periodically to reflect appropriate lifecycle repairs completed in the 5-Year Capital Plan. (Current State)
				1	The project manager monitors contractors to ensure work is appropriate, meets quality standards and is billed in conformance with the contract. (Managing Lifecycle Costs)
Sustainability /Financial	Parkades are in poor condition compromising ability to meet expected life spans.	H	L	2	Every 5 years a Capital Plan is developed which prioritizes yearly preventative and/or capital and lifecycle maintenance repair for each of CPA's parkades. This plan is created by a consultant and is based on recommendations by engineers in related fields (i.e. structural, mechanical, electrical architectural and civil engineers). This plan also includes an evaluation of each facilities condition. (Managing Lifecycle Costs)
				3	Progress against the 5-Year Capital Plan (status of plan) is monitored by the Operations & Facilities Manager and is communicated to appropriate stakeholders. (Managing Lifecycle Costs)
				4	Changes to the 5-Year Capital Plan are approved. (Managing Lifecycle Costs)

Business Objective:		Provide, manage and operate parking facilities.			
Risk Category	Risk	Inherent Risk (H/M/L)	Acceptable Business Risk (H/M/L)	#	Identified Significant Controls
				5	CPA has an Asset Registry that identifies parkades they are responsible for. This registry includes a facility condition which is updated periodically to reflect appropriate lifecycle repairs completed in the 5-Year Capital Plan. (Current State)
				1	The project manager monitors contractors to ensure work is appropriate, meets quality standards and is billed in conformance with the contract. (Managing Lifecycle Costs)
Financial	Replacement Fund is insufficient to replace parkades at the end of their life.	H	L	6	A documented Lifecycle Strategy exists for each parkade including end of life and related funding mix. (Critical Assets/Lifecycle Strategy)
				7	The Parking Committee periodically reviews Replacement Fund forecast prepared by management. This includes updating assumptions such as: expected remaining life of assets, replacement costs, performance of underlying investments and contributions to the Replacement Fund. (Long-term Funding)
				8	The purpose, condition, restrictions on the Replacement Fund are clearly defined and approved by the Parking Committee. (Long-term Funding)
				9	Management ensures transactions comply with Replacement Fund requirements approved by the Parking Committee. (Long-term Funding)

<b>Business Objective:</b> Provide, manage and operate parking facilities.					
<b>Risk Category</b>	<b>Risk</b>	<b>Inherent Risk (H/M/L)</b>	<b>Acceptable Business Risk (H/M/L)</b>	<b>#</b>	<b>Identified Significant Controls</b>
Financial/ Reputational	Waste occurs on contracted maintenance repairs of Parkades	H	L	1	The project manager monitors contractors to ensure work is appropriate, meets quality standards and is billed in conformance with the contract. (Managing Lifecycle Costs)