



**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.

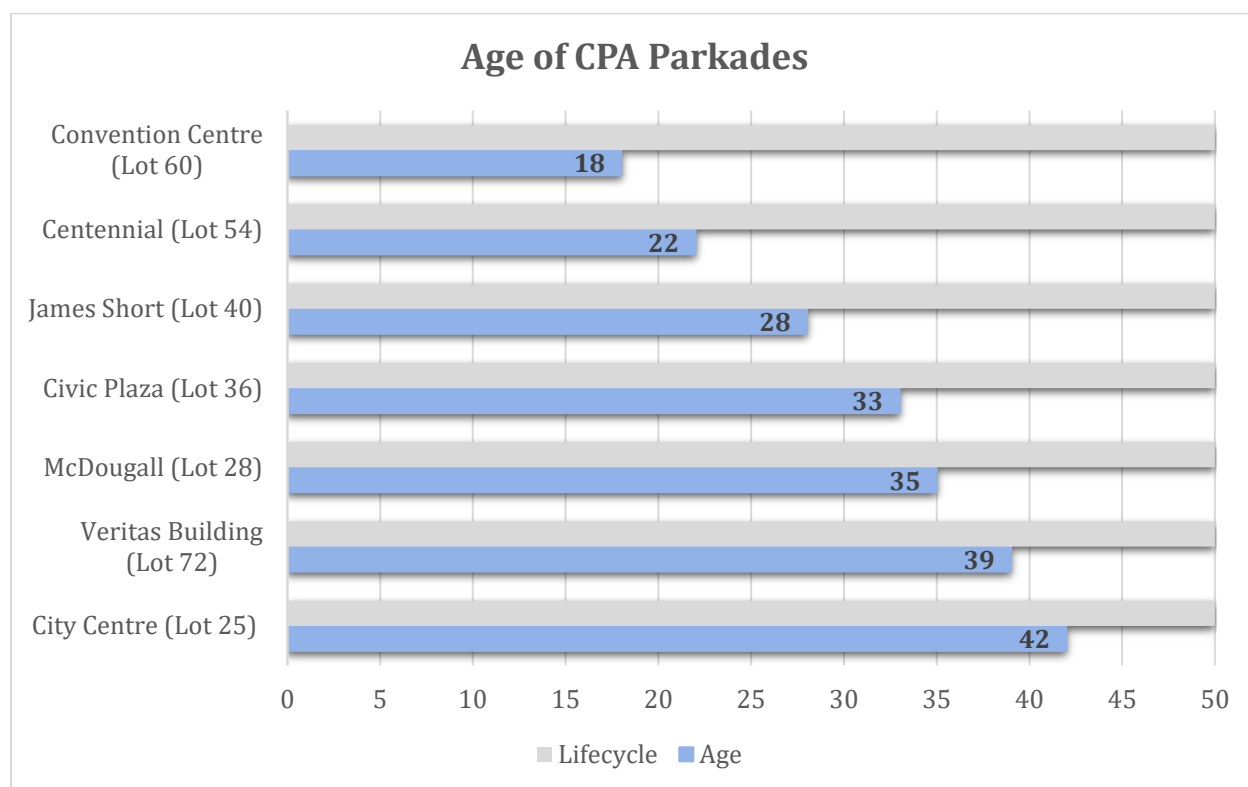
CPA has agreed to all recommendations and have set action plan implementation dates no later than February 28, 2021. The City Auditor's Office will follow-up on all commitments as part of our ongoing recommendation follow-up process.

## 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
<p>The CPA will take a phased approach to address the recommendations.</p> <p>Phase 1 – Review purpose and use of the Parking Structure Replacement Fund with CPA Committee.</p> <p>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.</p>	<p><u>Lead:</u> Finance Manager</p> <p><u>Support:</u> Operations &amp; Facilities Manager, Capital Projects Engineer, General Manager</p> <p><u>Commitment Date:</u> Phase 1 - March 29, 2019 Phase 2 - February 28, 2021</p>

**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
<p>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.</p>	<p><u>Lead:</u> General Manager</p> <p><u>Support:</u> Operations &amp; Facilities Manager, IT Manager, Parking Solutions Manager</p> <p><u>Commitment Date:</u> September 30, 2019</p>

**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
<p>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.</p>	<p><u>Lead:</u> Operations &amp; Facilities Manager</p> <p><u>Support:</u> Capital Projects Engineer</p> <p><u>Commitment Date:</u> November 30, 2020</p>

#### 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
<p>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.</p>	<p><u>Lead:</u> Operations &amp; Facilities Manager <u>Support:</u> Capital Projects Engineer <u>Commitment Date:</u> November 30, 2020</p>

#### 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
<p>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.</p>	<p><u>Lead</u>: General Manager <u>Support</u>: CPA Leadership Team <u>Commitment Date</u>: April 30, 2019</p>

Appendix A

<b>Business Objective:</b>		<b>Provide, manage and operate parking facilities.</b>			
<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	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)

<b>Business Objective:</b>	<b>Provide, manage and operate parking facilities.</b>				
<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>
				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>	<b>Provide, manage and operate parking facilities.</b>				
<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)