CALGARY PARKING AUTHORITY 2019 RISK REGISTER



ISC: UNRESTRICTED

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Risk Title	Risk Description	Existing Controls or Treatment Techniques in place	Likelihood	Impact	Risk Rating	g Trend	Summary of Risk Rating	Key Risk Indicators	Principal Corporate Risk	Improvement required? (Y / N)	Summary of Improvement Activities	Improvement Status	Owner	Notes
Risk title	Risk Description:	List the 5 most important controls which are currently in place, add a succinct description where necessary			Extensive High Medium Low Slight	Indicate whether risk is: Increasing ↑ Decreasing ↓ Stable ↔	(Why Risk is rated as it is / what trends are telling us)	List the top indicators are you using to monitor this risk	List PCR this risk aligns	Yes: improvement is required. No: Improvement NOT required NA: Risk has not been assessed	List key control activities to be implemented; or If risk level is to be increased, what key controls can be removed? Indicate the projected completion date for each activity (ie. 2019 Q3 or 2021)	Completed In Progress Overdue NA	List risk owner	Additional notes as required
1 Parking inventory	Inability to react in a timely manner to market opportunities to increase or decrease parking inventory based on demand and customer needs.	1	Almost Certain	Significant		↑	Existing opportunities are being lost due to the long turnaround time due to process.	Percentage of transactions lost due to delays. Declining Revenue	Operations, Process Risk	Yes	Request change in City of Calgary policy relating to CPA transactions or through Council action. Estimated completion 2020.	In Progress	Glen Furtado	Loss of Lots 7, 21, 66 & 80 = 299 stalls and approx. \$1.83M in revenue per year.
2 Policy changes	Changes in City of Calgary policies affecting parking.	Ongoing communication with Council members by GM. Frequent meetings with City Administration by GM.	Possible	Significant		↑	Changes to policies without CPA input can affect CPA's ability to be nimble, sustainable and responsive to customer needs.	Agenda for Council including Bylaw 28M2002 and the "Calgary Parking Policies".	Political Risk	Yes	Clarifying discrepancies between the respective City Admin, CPA Committee and CPA Admin roles outlined in the Calgary Parking Policies versus CPA's mandate set out in Bylaw 28M2002 and CPA's operational needs.	In Progress	Glen Furtado	Ongoing monitoring and communication with CPA Committee, Council, and Administration.
3 Labour disruption	Disruption in labour, including potential for job action.	Skilled resources in place leading negotiations including expert advice from external legal counsel.	Possible	Significant		↑	Union employees currently operating without a new signed Collective Bargaining Agreement.	Results of mediation in Q3 - 2019.	Business Continuity Risk	Yes	Complete Business Continuity Plan (Q3 2019). Mediation scheduled between CPA and Union for end of August 2019	In Progress	Kathy Lidbury	Mediation scheduled for August 27 and 28.
4 Inadequate reserves	Potentially inadequate reserves to meet long term capital requirements.	Procuring 3rd party reports detailing upcoming maintenance required at CPA facilities. Preparation of Capital Assetment Management Plan to forecast timing and expense of those maintenance activities.	Possible	Moderate		\leftrightarrow	Studies are being performed to assess the adequacy of existing funds.	Reserves compared to expected required maintenance from third party reports.	Infrastructure Management Risk	Yes	Completion of Capital Asset Management Plan (estimated Q4 2019).	In Progress	Dale Wannamaker, Jared Foulds	/ Completion of report will reveal whether or not this is an issue.
5 Parking demand	Parking demand at current asset locations continues to decline	Ongoing occupancy monitoring in parkades, surface lots, and on street. Monthly financial reporting to Leadership Team.	Possible	Moderate		\leftrightarrow	Recent data has shown demand to be stabilizing.	Significant drop in occupancy rates at some locations.	Economic and Social Impact Risk	Yes	Marketing and pricing initiatives are currently being considered or are under way	In Progress	Jared Foulds	Parking optimization program underway. This will provide access to more live data and enable CPA to make optimal decisions at parkades and surface lots.
6 Obsolete IT	Support for aging IT infrastructure or software is discontinued	Lifecycle monitoring by IT department.	Possible	Moderate		↑	ParkOnline support ends July 2019 by CoC, which could create disruption for monthly contract parkers if the system experiences significant issues.	Failure of Park Online system.	Technology Risk	Yes	Replacement of Park Online with CPA developed Contract Management System to be rolled out by Q4 2019.	In Progress	Moe Houssaini	CMS project for park online migration has kicked off. Base code evalutaion will commence in August.
7 Information Systems security breach	Security breach resulting in compromising of protected information sensitive to the organization's operations.	Identification of security threats. Significant upgrades in 2019 to CPA Infrastructure. PCI Compliance Audits.	Possible	Moderate		\	Risk decreasing as CPA hired a dedicated Cyber Security employee	Successful breach to first level CPA firewalls.	Technology Risk	Yes	CPA is focused on taking steps to reduce risk. Emlpoyee training is ongoing and will be implemented in Q3 2019. Hardware and software upgrades throughout 2019 and 2020 will reduce vulnerabilties.	In Progress	Alex Paredes	
8 Third party revenues	Parking Solutions not achieving revenue targets	Establishing dedicated implementation team(s), Client and Account managers, and enhancing software platforms	Unlikely	Minor		\leftrightarrow	Revenue similar to previous years but growth limited by opportunities in the marketplace and internal capacity	Revenue compared to budget.	Growth Risk	Yes	New Parking Solutions department structure implemented. Estimated completion Q4 2019.	In Progress	Moe Houssaini	
9 Supplier reliance	Over-reliance on outsourcing service providers and accuracy of 3rd party systems		Possible	Minor		\	New vendors are being explored in areas where CPA has been reliant on a sole provider for various systems.	Interruptions in service due to sole supplier delays.	Partnership Risk	Yes	Team is aware of the key areas where over- reliance on vendors may be a problem and alternate solution providers have been identified	In Progress	Jared Foulds	Will potentially engage in trial cases with new vendors to assess suitability.

Risk Title	Risk Description	Existing Controls or Treatment Techniques in place	Likelihood	Impact	Risk Rating	Trend	Summary of Risk Rating	Key Risk Indicators	Principal Corporate Risk	Improvement required? (Y / N)	Summary of Improvement Activities	Improvement Status	Owner	Notes
10 9th Avenue Parkade	The new parkade construction is completed late and/or over budget	Signed agreement stating fixed cost of construction and land reduces risk of going over budget. CPA's Project Manager's ongoing supervision of project. Monthly reports detailing progress.	Unlikely	Minor		\downarrow	Project well underway with major costs procured. Uncertainty risk decreasing.	Actual costs compared to budget. Project timeline and milestones.	Legal & Compliance Risk	No	Use of standard progress report on a monthly basis significantly mitigates risk. CPA regularly attends Project Steering Committee meetings.	Complete	Dale Wannamaker	Excellent working relationship between CPA / CMLC allows for open communication and collaboration on resolution of issues.
11 3rd party agreements	Improper execution and maintenance of agreements with external parties	Review of agreements by in house legal counsel seconded from City of Calgary.	Possible	Minor		\	With legal expertise in house for several years now, the risk has been reduced over time.	Breaches of contract per year.	Legal & Compliance Risk	No	Ongoing standardization of contract terms and conditions.	In Progress	Andrew Donohoe	CPA will be creating a position whose duties include the tracking and maintenance of contracts to increas our compliance and plan ahead for contract renewals
12 Customer satisfaction	Reduction in customer satisfaction	Annual customer satisfaction surveys. Monitoring and responding to social media posts. Coordinating public responses through Communications department.	Unlikely	Minor		\leftrightarrow	Controls in place reduce risk to acceptable levels.	Reults of annual customer satisfaction surveys.	Reputation Risk	No	Specific actions taken to address feedback from customer satisfaction surveys (i.e. enhanced security presence at certain parkades).	In Progress	Shelley Trigg	Customer satisfaction based on annual survey at all time high with respect to safety and cleanliness of CPA facilities.
Service disruption	Disruption in network and computer services	Backup network connections at each location. Upgrades to pay machines which autmatically transmit issues back to IT department. Cloud based services	Possible	Moderate		→	Controls in place reduce risk to acceptable levels.	Monitoring downtime percentage of pay machines and networks.	Technology Risk	Yes	Ongoing analysis of the rigour of IT hardware, software and back-up/redundant processes.	In Progress	Alex Paredes	
14 Records retention	Potential loss of data or inability to find relevant information in a timely manner	Records Retention Policies and Procedures. Dedicated staff member to oversee migration to new framework.	Unlikely	Minor		\	Records retention process overhaul starting in 2017 has reduced risk.	Organizational history lost resulting in rework.	Technology Risk	No	Staff training undertaken to properly identify and save documents in a dedicated drive.	Complete	Dave Arora	
15 Physical securit	Serious physical security incident y occurring on CPA property	Professional security firm engaged to perform security patrols. Camera monitoring. Indicent reporting and review. Employee training.	Possible	Minor		\leftrightarrow	Reduction in risk for steps taken in 2018 to increase security presence offset by increased risk of incident due to safe injection site nearby.	Incident reporting by professional security firm.	Security Risk	Yes	Seconded employee from Corporate Security to provide rigorous security framework and emergency response planning support.	In Progress	Dale Wannamaker	
16 Workplace Safety	Failure to maintain workplace safety resulting in a significant increase in serious injury frequency.	Full time Safety Advisor. COR certification Audits. Mandatory safety training for all staff. Monitoring of all incidents and near misses with recommendations for improvements. Regular communication with Leadership Team.	Rare	Minor		\leftrightarrow	Controls in place reduce risk to acceptable levels.	COR audit results. # of incidents	Health & Safety Risk	Yes	Ongoing work to close process gaps identified by COR Audit.	In Progress	John Allen	



Risk Register Instructions

Task	Description				
Risk Title	Create a brief title for your risk.				
Risk Description	Briefly describe your risk.				
	Existing Controls: A control is any process, policy, device, practice, or other action which modifies risk. The strength of a control must be appropriate to the nature and magnitude of the risk it modifies. The benefit of a control must be considered relative to its cost.				
	Risk Treatment: Risk treatment involves selecting one or more options for modifying risks, and implementing those options. It involves a cyclical process of assessing the risk treatment, deciding whether the residual risk levels are tolerable, if not, generating new risk treatments and assessing the effectiveness of that treatment.				
Existing Controls or Treatment Techniques in place	acceptable strategies to treat risks are as follows: Eliminating or avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk; Reducing or mitigating the risk by changing the likelihood and/or consequence; usually accomplished through additional ontrols.				
	 Transferring or sharing the risk with another party or parties, including agreements in contracts, the use of insurance, and contingent arrangement. Once an external transfer takes place, the risk should be reassessed to identify risk externalities from the process. Retaining (accepting the residual risk) or exploiting the risk in order to pursue an opportunity. Executed by informed 				
	decision but regular monitoring should be undertaken to ensure the risk does not escalate.				
	THESE CONTROLS OR TREATMENT ACTIONS SHOULD ALREADY BE IN PLACE. IT IS EXPECTED THE CONTROLS WILL				
Likelihood	Drop down: Almost Certain, Likely, Possible, Unlikely, and Rare Refer to Likelihood Guidelines Tab				
	Note, consider the "current state" likelihood (with all current controls and risk treatment in place)				
	Drop down: Severe, Significant, Moderate, Minor, and Negligible.				
Impact	Refer to Impact Guidelines Tab Note consider the "current state" impact (with all current controls and rick treatment in place)				
Risk Rating	Note, consider the "current state" impact, (with all current controls and risk treatment in place) Risks are rated in terms of likelihood and impact, in accordance with the Risk Matrix (refer to Risk Matrix Tab). This column will be automatically generated based on your selection of likelihood and impact				
Trend	Establish whether the trend for each risk is increasing (↑); decreasing (↓); or stable (↔)				
	(Select from drop down) This component explains the "why" behind the change in the risk, i.e. what is happening to cause the risk to increase or				
Summary of Risk Rating	decrease? If Risk Rating is increasing or decreasing, indicate top 3 reasons Are there any quantitative or qualitative RED FLAGS which would indicate the risk is about to materialize?				
Key Risk Indicators					
Council Priorities	Drop down list of Principal Corporate Risks Refer to Principal Corporate Risk Tab for additional information				
	Select the top 1-3 priorities which this risk impacts the most.				
	Risks are assessed in their current state, including current controls in place. The organization may want to accept the risk, in				
	rists current state and simply monitor it for changes. If so, no significant improvement would be required (the template would reflect a "no" in this column). However, if significant additional risk management actions are required (risk avoidance, further risk mitigation, transfer the risk, or exploit the risk), then the template would reflect "yes".				
Significant Improvement Required?	Yes: improvement is required. No: Improvement NOT required NA: Risk has not been assessed				
	Select Yes, No, NA from drop-down menu				
	This section describes the key significant activities which need to be taken to alter the risk, and the methods being used to avoid the risk, mitigate the risk, share the risk or embrace the opportunity. Previously, risk registers and the Principal Risk assessments only engaged the technique of "risk mitigation," which did not encourage other approaches to the effective management of risk within the organization.				
Summary of Improvement Activities	Activities already in place at the time the risk was assessed, are generally not repeated on this form, as the impact of existing activities is captured as part of the risk rating.				
	List key control activities to be implemented; or if risk level is to be increased, what key controls can be removed?				
	Indicate the projected completion date for each activity in general terms (i.e. 2021 or 2019Q4)				
Improvement Status	Once the significant improvement activity has been implemented (previous column), what is the status of that activity? It may be; completed (green); in progress (yellow); or overdue (red). If no improvements were noted (previous column), then the status would be NA (gray).				
Owner	Select from drop-down The risk owner is an individual who is responsible for the management and monitoring of the risk. This person is responsible for the oversight of the risk and the coordination of risk management activities, where required. The owner will be listed by job title. The risk owner may delegate actions within the risk management strategy.				
Notes	Notes may include (but not limited to) the following: Risk has not been assessed				
	Logic for selecting likelihood/ impact ratings Connection to Principal Corporate Risks explanation				



The City of Calgary: Likelihood Guidelines

Almost Certain	90% and greater	Is expected to occur in most circumstances		
Likely	65-89%	Will probably occur in most circumstances		
Possible 35-64%		Might occur at some time		
Unlikely	11-34%	Could occur at some time		
Rare 10% and less		May occur only in exceptional circumstances		



The City of Calgary: Impact Guidelines

Summary

Severe	Unable to meet objectives due to serious, extend
Significant	Difficulties to achieve objectives. Delays or notable aspects of
Moderate	Some challenges on ability to achieve objectives. Some delay. Some a part.
Minor	Coping strategies required - able to be addressed with exist
Negligible	Minimal Impact. Still able to achieve objectives witl

	Workforce	•Minor injury or first aid treatment. Low turnover; easy to hire people with required skills in a timely fashion.	 Injury requiring treatment by medical practitioner and/or lost time from workplace. Minor psychological impact. Some turnover; some difficulty in hiring people with required skills in a timely fashion.
Impact Category	Technology	 Non-critical system faces minor interruption. Compromise of unrestricted information otherwise available in the public domain. 	 Non-critical system faces significant interruption. Minor compromise of protected information sensitive to internal or subunit interests.
	External	 Immediately reversible damage. Minimal flood damage in an isolated area. 	•Short-term reversible damage. •Minimal flood damage in more than one area.
	Financial	•Financial impact is within expected variance and pre-emptively accounted for.	•Financial impact is expected and planned for with minor adjustments needed.
	Strategic	•A strategic goal within the organization is slightly impacted. •Reputation to internal stakeholders may be slightly impacted.	•Strategic goal within the organization requires some adjustment. •Reputation to key internal stakeholders is adversely impacted.

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•Minimal impact on non-core operations. The impact can be dealt with by routine operations.

•Some impact on organizational capability in terms of delays, systems quality but able to be dealt with at operational level.

Risk Category	Defin
Workforce	Any risk associated with staff or management turnover, work cultur processes as well as practices. This may encompass succession pla capacity
Technology	Any risk associated with an organization's capacity and sustainability use of technolog
External	Risks to the organization that arise from outside the organization. The related to trends in employment rates, social economic
Financial	Risks related to The City's structures and processes that ensure sound policies and
Strategic	Risks that either affect or are created by organization-wide strategic related to The City's management of its legislative, advisory and litiga and credibility with its partners, sta
Operations	Any risk that processes or systems either design or implem

ed disruption.		
objectives not completed.		
spects of obejtives are only met in		
ing plans and resourcse.		
hout disruption.		
 Major injury or psychological illness/hospitalization. High turnover; small delays in ability to hire people with required skills in some areas of the organization. 	 Permanent, or multiple major, injuries or psychological illness. High turnover; notable delays in ability to hire people with required skills in some areas of the organization. 	•Conditions that fatality(ies). •Very high turno extended period: required skills in organization.

 Major injury or psychological illness/hospitalization. High turnover; small delays in ability to hire people with required skills in some areas of the organization. 	Permanent, or multiple major, injuries or psychological illness. High turnover; notable delays in ability to hire people with required skills in some areas of the organization.	Conditions that could result in fatality(ies). Very high turnover; unable to hire for extended periods of time people with required skills in many areas of the organization.
Critical system faces minor interruption. Compromise of protected information sensitive to the organization's operations.	Critical system faces significant interruption. Compromise of restricted information sensitive to organizational interests.	 Irreparable widespread damage to critical system(s). Compromise of restricted information with major, ongoing impact.
Long-term reversible damage. Major flood damage in an isolated area.	Limited irreversible damage. Major flood damage in more than one area.	Widespread irreversible damage. Massive flood damage in multiple areas throughout the city.
•Financial impact is greater than planned for, some delay, reduction in scope or alternate funding is required.	•A large unplanned financial impact. Significant delays or adjustments to scope are required. Some alternate funding may be achieved.	•Unplanned financial impact that results in indefinite delays or cancellation of work. Alternate funding is not able to be acquired.
An organizational-wide strategic goal is compromised. Reputation to internal and some external stakeholders may result in some loss of confidence and trust in the organization.	Unable to deliver on an organizational-wide strategic goal for a sustained period of time. Reputation sustains extended, substantial damage to confidence and trust.	Unable to deliver on an organizational-wide strategic goal indefinitely. Reputation extended, substantial damage to confidence and trust which is irreparable.

- •Impact on the organization resulting in reduced performance such that targets are not met.
- •Some unavailability of critical skills/people. •Breakdown of key activities leading to reduction in performance.
- •Protracted unavailability of critical skills/people.
- •Critical failure(s) preventing core activities from being performed.

ition

e, recruitment, retention, workplace health and safety, and staffing inning, talent management, employee development, training, and building.

of information technology. This encompasses both architecture and ical applications.

Proof cause of these risks are not internal to The City. These risks are status, market values, political and legislation changes.

I management of financial resources and its compliance with relevant I standards.

decisions. These risks are related to systems such as legal risks (risks ation activities) or reputational risks (any risk to The City's reputation keholders, and citizens of Calgary).

entation will affect the City's ability to meet its objectives.



Risk Matrix

	Level	Probability*		
	Almost Certain	90% and greater	Medium	High
po	4 Likely	65-89%	Low	Medium
Likelihood	3 Possible	35-64%	Low	Low
=	2 Unlikely	11-34%	Slight	Low
	1 Rare	10% and less	Slight	Slight
	*Probability of given year	f occurrence in a		
			1	2
			Negligible	Minor
			Minimal impact. Still able to achieve objectives without disruption.	Coping strategies required - able to be addressed with existing plans and resources.

High	Extensive	Extensive
High	High	Extensive
Medium	High	High
Low	Medium	High
Low	Low	Medium
Impact		
3 Moderate	4 Significant	5 Severe
Some challenges on ability to achieve objectives. Some delay. Some aspects of objectives are only met in part.	Difficulties to achieve objectives. Delays or notable aspects of objectives not completed.	Unable to meet objectives due to serious, extended disruption.



lesponse Guidelines:

Not Acceptable

Requires much attention

Requires some attention

Monitor

Tolerable



Calgary Principal Corporate Risks

Business Continuity Risk	An interruption to parking services provided to Calgarians caused by a vulnerability being exposed to a natural, technological, or human hazard.
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.
Economic and 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.
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.
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.
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.
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.
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.
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.
Operations, Process Risk	Failure to ensure appropriate processes are in place to manage the complexity of operations.
Partnership Risk	Counterparty risk arising from City partners unable to deliver services.
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.
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.
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.
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.
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.