TORONTO PARKING AUTHORITY

Enterprise Risk Management Project Update

Audit & Risk Management Committee| April 2024

We Defined 4 Key Project Objectives

The Toronto Parking Authority (TPA) engaged KPMG to support the organization as it looked to design and implement an Enterprise Risk Management (ERM) program. The objectives of this ERM project included:

Gain a holistic understanding of TPA's key enterprise risks

Develop a common understanding of the risks that may affect, positively or negatively, the ability of TPA to achieve its strategic priorities:

1. **Build a Great Place to Work**
2. **Strengthen the Core, Execute with Excellence**
3. **Drive Sustainable Growth**
4. **Connect with our Customers**
5. **Innovate with our Stakeholders / Partners**

Establish clear risk roles and responsibilities

Define a risk governance model within the existing organizational structure, with clear roles and responsibilities in identifying, managing and overseeing risks.

Promote a strong risk culture that is transparent and open in sharing risk information.

Build a fit-for-purpose and sustainable ERM Framework

Develop a structured, disciplined ERM process that enables TPA to integrate risk management into decision-making, optimize its existing risk and control environment, and ultimately build further organizational resilience.

Increase risk awareness and communication

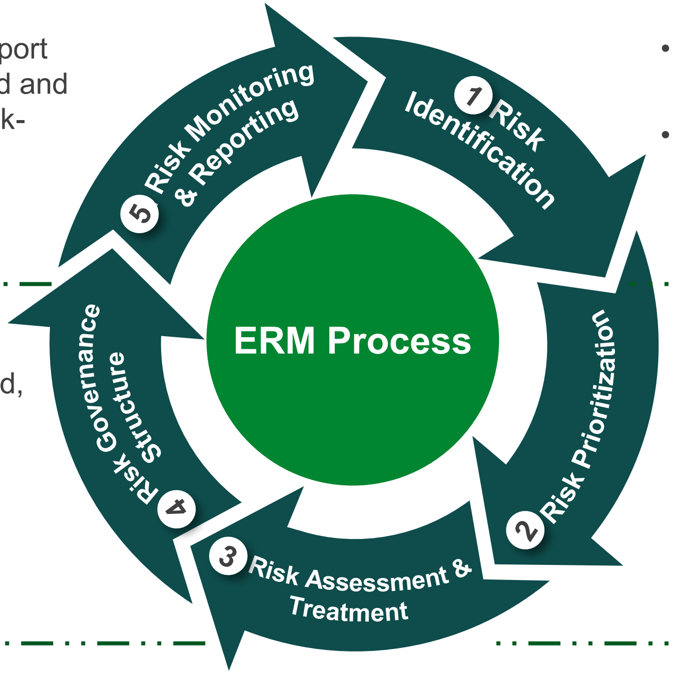
Develop and sustain adequate risk management capabilities that provides further confidence that risks are well managed throughout the organization and that supports a shared understanding of the risks to be managed.

We Embedded a Robust ERM Process

In line with industry good practices (e.g. ISO 31000:2018, COSO ERM 2017), we have implemented a robust five-step risk management process, described below, and supported by comprehensive sources of internal and external information.

- Developed a **risk reporting framework** to support the ongoing monitoring of key risks at the Board and Management Team levels and to help make risk-based decisions.

- Engaged the Board and Management Team (**11 sessions**) to understand the risks facing the TPA.
- Defined and structured a **comprehensive risk universe** with risk categories and sub-categories.



- Formalized **risk roles and responsibilities** across stakeholder groups, including the Board, Management Team, designated ERM Lead.
- Developed an **ERM Policy** to define and communicate ERM objectives, governance structure and process.

- Established **risk likelihood and impact criteria** to provide a common scale to assess and measure risks (both qualitative and quantitative).
- Facilitated a **risk prioritization survey and workshop** with the Management Team to:
  - ✓ Prioritize TPA's **key risks.**
  - ✓ Appoint **Risk Owners** for each key risk.

- Performed **individual detailed risk assessments** with appointed Risk Owners to analyze key risk attributes (risk cause/drivers, consequences and current mitigations).
- Defined additional mitigations and controls to further reduce TPA's key risk exposures (**40 additional mitigations and controls**).

Structuring & Prioritizing TPA’s Comprehensive Risk Universe

We established TPA’s risk universe in a way that is structured (4 key risk categories) and supports the identification and prioritization of key risks. The Management Team prioritized **11 key risks** that could more significantly affect the achievement of the organization’s strategic priorities. **Note: The risks presented in the below risk universe (including the key risks) are not ranked in order of severity / importance.**

Level 1 Risk Categories	Strategic	Financial	Regulatory & Legal	Operational	Operational
Level 2 Risk Sub-Categories	Changes in the City s Direction	Pricing Model	Regulatory Changes	Brand / Marketing	Talent Attraction & Retention
	Financial Sustainability	Liquidity	Regulatory / External Standards Compliance	Social Media	Loss of Key Personnel
	TPA Parking Inventory Availability	Credit / Counterparty	Zoning	Product Deployments	Talent Development
	Competition	Financial Reporting	Accessibility	Customer Experience	Evolving Employee Expectations
	Parking Equipment / Technology Management		Legal & Contracts	Natural & Man Made Emergencies	Employee & Labour Relations
	Macroeconomic Uncertainty		Disputes & Litigations	Pandemic	Outdated IT Infrastructure & Systems
	Prioritization of Initiatives		Fraud & Ethics	Physical Health & Safety	Information System Downtime
	Organizational Culture			Security / Vandalism / Theft	Data Ownership
	Internal Scalability			Vendor Management	Cyber Security
	Partnerships & Collaborations			Joint Venture Management	Privacy Breach
	Environmental, Social, Governance (ESG) Program			Parking Lot Management	
				Aging Parking Infrastructure	

Legend: Strategic, Financial, Regulatory & Legal, Operational, People, Information Security, Management & Technology, Key Risk

Defining Management Accountability for Key Risks

Risk Owners were assigned to each key risk in order to further drive **risk accountability**. Note, risk titles and descriptions were refined and validated as part of the detailed risk assessment process. *Please see the next slide for more details.*

#	Risk Title	Risk Description	Management Risk Owner
1	**Financial Sustainability**	Insufficient financial resources and/or an inappropriate income sharing agreement may affect the ability to fund long-term plans, meet customer expectations and expand the organization's value proposition.	Chief Financial Officer & VP Finance
2	**Change in the City's Direction**	New and/or unexpected changes communicated by City Council / employees (e.g. mandate / program expansion (BikeShare & Electric Vehicle), designation of land / buildings for parking, construction of new parking facilities, etc.) may require the TPA to readjust its priorities and/or create additional pressures (financially, operationally) for the organization.	President
3	**Cyber Security**	Internal / external intrusion and / or attack on information systems which may result in a financial loss, loss / leakage of data, system disruptions and potential reputational damage.	Chief Information Officer
4	**Aging Parking Infrastructure**	Aging parking facility infrastructure may affect the sustainability of TPA's operations and the physical health and safety of TPA's customers, employees, contractors, and/or general public.	VP Operations
5	**Organizational Culture**	Inability to evolve the organizational culture to be performance based (outcome driven), innovative, and hyper collaborative with stakeholders while remaining focused on customers may result in missed opportunities to grow TPA's value proposition.	President
6	**Security / Vandalism / Theft**	Increasing frequency of crime related incidents (e.g. vehicle thefts, vandalism, drug usage, squatting) may affect the physical and psychological health and safety of TPA's customers, employees, contractors, and/or general public.	VP Operations
7	**Parking Equipment / Technology Management**	Aging and/or outdated parking equipment (e.g. on-street meters, cameras) that are not aligned with evolving trends / new technologies may affect the customer experience and operational efficiency, which ultimately can result in loss of revenue and/or reputational damage.	VP Operations
8	**Outdated IT Infrastructure & Systems**	Aging and/or outdated IT systems may affect the customer experience and increase TPA's vulnerability to cyber attacks / intrusions.	Chief Information Officer
9	**Talent Attraction & Retention**	Inability to attract and retain the right talent with the right skillsets and competencies required to be successful within TPA's operational environment may result in the inability to achieve strategic priorities.	VP Human Resources
10	**Data Ownership**	Reduced and/or limited accessibility and availability of TPA data may affect the ability to identify opportunities to improve operations and the customer experience.	Chief Information Officer
11	**Internal Scalability**	Underdeveloped internal processes, systems and/or skillsets that are misaligned with TPA's strategic priorities may result in the inability to adequately support / operate the business.	VP Operations

Assessing TPA's Key Risks

Risk Owners performed a detailed risk assessment in order to better evaluate existing risk mitigations and exposures and ultimately define additional mitigations that should be established to further manage the risk (**Steps A – F**).

Risk Name	Risk Category	Risk Owner(s)	Residual Likelihood Rating	Residual Impact Rating	Residual Risk Rating (Likelihood x Impact)

Step E: Provide **residual risk ratings** using TPA's risk impact and likelihood criterion (*see Appendix*).
Residual risk ratings are assigned after giving consideration to only the ***Current Mitigations***.

Risk Description

Step A: Review the current **risk description** and make adjustments as needed.

Risk Causes/Drivers	Potential Consequences	Current Mitigations
Step B: Identify and document the **risk causes/drivers** that would trigger the risk event.	**Step C:** Identify and document the **potential financial and non-financial impacts** resulting from the risk event.	**Step D:** Identify and document the **mitigation activities/controls** that have **already been implemented** to monitor/manage the risk event.

Additional Mitigations and Controls

Ref	Incremental/Planned Mitigations	Expected Completion Date

Step F: Identify and document any **additional mitigation plans** that could be implemented to help reduce the likelihood and/or impact of the risk. Once identified, set an estimated **date of completion** and assign a **mitigation owner** responsible for managing and reporting on the status of the plan.

Key Highlights

- **Comprehensive Analysis:** Risk Owners assessed potential risk causes/drivers, consequences, as well as current mitigations/controls in place to manage the risk(s). *Please see the Appendix for an overview of the residual risk ratings assigned to key risks.*
- **Action Driven:** Risk Owners assigned **Residual Risk Rating** (existing exposure) and proposed additional mitigations and controls to reduce the risk exposure.

Mitigating TPA's Key Risks

Risk Owners **defined action plans** (with owners and deadlines) to further manage risks to an acceptable level. A total of **40 action plans** were preliminarily identified.

Action Plan Definition

- **Specific:** Action plans included specific **activities and milestones** to be implemented.
- **Resourcing: Resource** availabilities (time, budget, capacity) **and cost benefit tradeoffs** were considered when developing action plans.
- **Industry Practices:** Risk Owners considered **industry leading practices** when developing action plans.
- **Fit-for-Purpose:** The **size and/or nature** of an action plan depended on the **complexity** of the underlying risk cause/driver or consequence, the extent to which the action plan is **linked** to other key risk areas, and the **number of stakeholders** involved in its implementation.

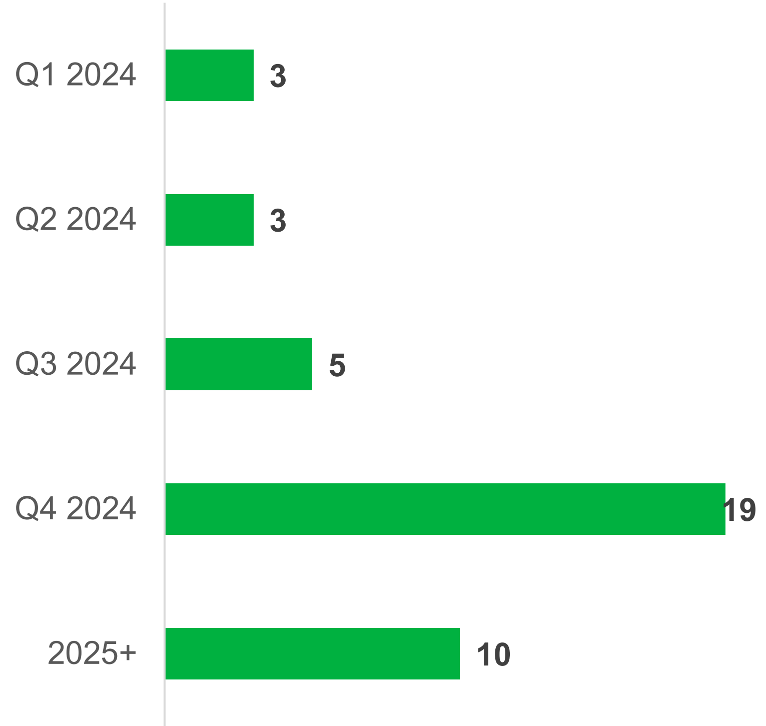
Action Plan Overview

- Action plans have been identified for **all of TPA's 11 key risks**:

✓ Financial Sustainability	✓ Parking Equipment / Technology Management
✓ Change in the City's Direction	✓ Outdated IT Infrastructure & Systems
✓ Cyber Security	✓ Talent Attraction & Retention
✓ Aging Parking Infrastructure	✓ Data Ownership
✓ Organizational Culture	✓ Internal Scalability
✓ Security / Vandalism / Theft	

- **Continuous Improvement:** The **relevance of existing action plans** will be evaluated as part of the ongoing risk monitoring and reporting process. Where appropriate, **new action plans** will be proposed.

Action Plan Expected Timeline(s)



Formalizing Board Risk Oversight

We have proposed a Board Risk Governance structure whereby the Audit & Risk Management Committee exercises direct oversight on both (1) the overall **ERM Policy/process** and (2) oversight of the **key risks**.

Board

↑ ↑ ↑

Audit & Risk Management Committee

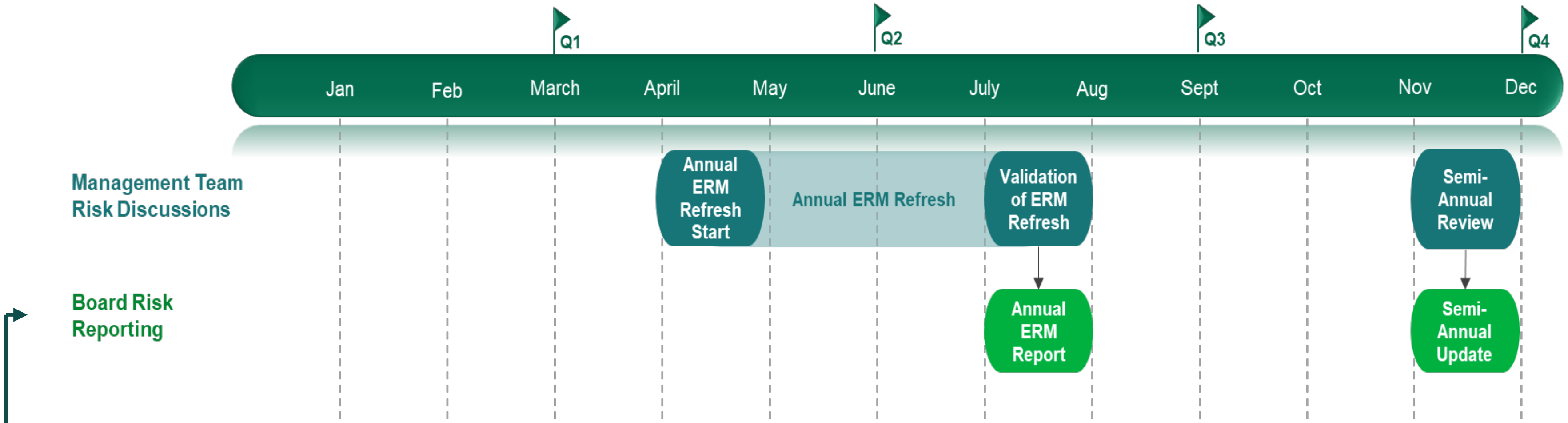
ERM Policy / Process	✓
Financial Sustainability	✓
Change in the City's Direction	✓
Cyber Security	✓
Aging Parking Infrastructure	✓
Organizational Culture	✓
Security / Vandalism / Theft	✓
Parking Equipment / Technology Management	✓
Outdated IT Infrastructure & Systems	✓
Talent Attraction & Retention	✓
Data Ownership	✓
Internal Scalability	✓

Key Highlights

- The **Audit & Risk Management Committee** has the responsibility to assist the Board in discharging its risk oversight responsibilities. This includes:
  - Providing direct oversight of TPA's **ERM Policy and key risks**;
  - **Reviewing periodic risk reports** provided by the Management Team on TPA's key risks; and
  - Advising the Board of any relevant **risk management challenges.**

Establishing a Board Risk Reporting Cadence

We have proposed the following **semi-annual risk assessment and reporting cycle** in order to help the Board and Management Team exercise their risk oversight accountability.



Key Highlights

- Validate the **annual ERM refresh**, including proposed changes to the key risks and action plans (during Q2 Board Session).
- Link and **integrate** the annual ERM refresh with the annual business planning process
- Semi-annual risk reports on **TPA's key risks** will be submitted to the Audit & Risk Management Committee.

Risk Report:	Key Components:	Reported at:	Reporting Party:
Semi-Annual ERM Report to the Audit& Risk Management Committee	• Summary Risk Dashboard • Status of ongoing and completed action plans (mitigation strategies)	Q2 Board Session	CFO (and Risk Owners)
Annual (Year-End) ERM Report to the Full Board	• Validation of ERM objectives and governance structure • Overview of the ERM process • Proposed changes to key risks and action plans • Refreshed Risk Universe	Q4 Board Session	CFO (and Risk Owners)

Note: The timing of each Board Committee meeting may vary depending on the Committee's annual workplan / schedule.

Proposed Next Steps: Sustaining TPA's ERM Program

1. **Semi-Annual Key Risk Review**

- In advance of the November Audit & Risk Management Committee Meeting, the Management Team will meet to discuss updates / changes in TPA's overall risk environment, including any significant new / emerging risks, changes in the outlook of the current key risk profile and the implementation status of the proposed action plans.

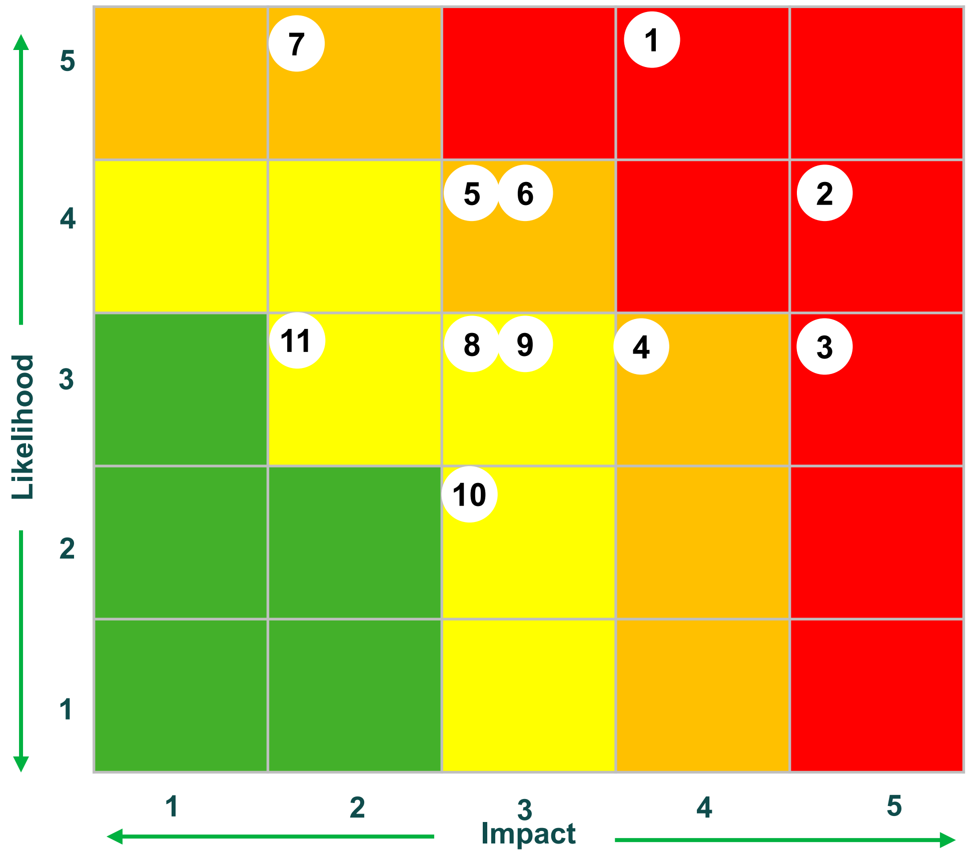
2. **Audit & Risk Management Committee Risk Report Preparation**

- All updates identified by the Leadership Team will be summarized and presented in November.

Appendix: TPA Key Risk Heatmap & Assessment Criteria

TPA’s Residual Risk Rating Heatmap

The heatmap below summarizes the residual risk ratings that were determined as part of the detailed risk assessments.



#	Risk	Residual Likelihood	Residual Impact	Residual Risk (L X I)
1	Financial Sustainability	5	4	20
2	Change in the City’s Direction	4	5	20
3	Cyber Security	3	5	15
4	Aging Parking Infrastructure	3	4	12
5	Organizational Culture	4	3	12
6	Security / Vandalism / Theft	4	3	12
7	Parking Equipment / Technology Management	5	2	10
8	Outdated IT Infrastructure & Systems	3	3	9
9	Talent Attraction & Retention	3	3	9
10	Data Ownership	2	3	6
11	Internal Scalability	3	2	6

TPA’s Risk Likelihood Scale

Assessment Level	Description	Occurrence Rate	Probability (The probability the risk materializes in the next year)
Rare (1)	The risk event is extremely unlikely to occur, and may only occur in exceptional circumstances.	Once every > 8 years	0 - 10%
Unlikely (2)	The risk event could occur, but is improbable.	Once every 4 – 8 years	10 – 30%
Possibly (3)	The risk event might occur under some circumstances.	Once every 1 – 4 years	30 – 60%
Likely (4)	The risk event will probably occur in most circumstances as it is inherent to the organization.	Once every 12 months	60 – 90%
Almost Certain (5)	The risk event is expected to occur in most circumstances and potentially multiple times a year.	Multiple times per 12 months	90 – 100%

TPA's Risk Impact Scale

Dimension	Very Low (1)	Low (2)	Moderate (3)	High (4)	Very High (5)
Financial Impact to Costs	• Minimal financial loss of less than $100,000	• Minor financial loss of $100,000-$500,000	• Moderate financial loss of $500,000-$1M	• Major financial loss of $1M – $3M	• Immense financial loss of more than $3M
Operation / Process Disruption	• Events resulting in little or no disruption to the organization's technology platforms, customer usage of TPA's parking spots and bike share program, and/or development activities.	• Events resulting in minor disruptions to the organization's technology platforms, customer usage of TPA's parking spots and bike share program, and/or development activities.	• Events resulting in modest disruption to the organization's technology platforms (<3 hours), customer usage of TPA's parking spots and bike share program (decrease of <5%), and/or development activities (<1 week).	• Events resulting in significant disruption to the organization's technology platforms (3 – 5 hours), customer usage of TPA's parking spots and bike share program (decrease of 5% - 15%), and/or development activities (1 - 4 weeks).	• Events resulting in widespread disruption to the organization's technology platforms (>5 hours), customer usage of TPA's parking spots and bike share program (decrease of >15%), and/or development activities (>1 month).
Health & Safety (Including customers, employees, public)	• Events which require no / minimal first aid treatment or intervention.	• Events resulting in injuries which require first aid treatment or minor intervention only.	• Events which require casualty treatment and professional intervention.	• Events resulting in permanent loss of function or disability.	• Events resulting in single or multiple fatalities or numerous cases of permanent loss of function or disability.
Reputation & Stakeholders (Including customers, media, gov t, public, partners)	• Events have no impact on the relationship between TPA and the City of Toronto. • Events which do not attract attention from the media. • No impact on new or current development projects.	• Events lead to minor strains or tensions in the relationship between TPA and the City of Toronto. • Events subject to incidental coverage by local media that highlights some concerns about TPA. • Insignificant impact on new or current development projects. • Stakeholder trust can be regained quickly (<1 month).	• Events lead to moderate friction between TPA and the City of Toronto, leading to some disruption in the relationship. • Events subject to incidental coverage by regional media that is critical of TPA, including highlighting potential shortcomings or failures. • Considerable impact on new or current development projects. • Stakeholder trust is challenging to regain (1- 2 months).	• Events lead to significant deterioration in the relationship between TPA and the City of Toronto, leading to strained communication, reduced trust and some conflicts. • Events subject to coverage by national media that is critical in nature. • Significant impact on new or current development projects. • Events that may be subject to discussion during annual meetings of the Board / Management. • Stakeholder trust and the organization's image has been damaged (3 – 4 months).	• Events lead to severe breakdown in the relationship between TPA and the City of Toronto, leading to public disagreements and complete breakdown in communication and cooperation. • Numerous critical opinions / investigative reports in national media that leads to a plumet in customer usage and widespread public anger. • Events that may initiate actions against organization's Board. • Serious loss in stakeholder trust, a loss of Board and Management credibility (> 4 months / irrecoverable).
Legal & Regulatory	• Events not subject to regulatory scrutiny / intervention. • Events not triggering disputes of any kind.	• Events may trigger administrative action or investigation against TPA. • Disputes and claims may be resolved without litigation.	• Decisions by relevant regulatory agencies which require non-standard actions be made by TPA to ensure compliance. • Disputes and claims which may require resolution by litigation or arbitration.	• Regulatory sanctions having significant impact on TPA's operations or the overall cost to maintain compliance. • Single case of litigation or arbitration.	• Severe regulatory consequences which cause long term disruption to TPA's operations or very high costs to be incurred to adapt to requirements. • Criminal sanctions against the organization's Board and Management. • Multiple cases of litigation or arbitration, including class action litigation.