

City of Toronto

Public Charging Delivery Risk Assessment



Table of Contents

Background	3
Introduction	Error! Bookmark not defined.
Risk Assessment	3



Background

On October 10, 2024, City Council adopted the <u>Approach to Public Electric Vehicle (EV) Charging to 2030</u>. The report outlines a strategy and plans that will ensure sufficient public charging infrastructure will be in place to realize TransformTO's goal of 30% EV ownership of registered personal vehicles by 2030.

To support this approach, the initial three-year city-wide EV charging installation and funding plan will be presented to City Council in the fourth quarter of 2025 for approval. A key prerequisite to inform this plan is a decision around a preferred public charging delivery model.

This document provides a risk assessment of an alternative delivery model, referred to as the Collaborative Model, against a City-Led Model, to inform and support how the City will enable the most efficient and effective way to achieve associated near- and long-term goals and objectives within the City's Strategic Planning Framework.

Risk Assessment

A risk assessment has been conducted on both proposed public EV charging delivery models using the City of Toronto's Enterprise Risk Management (ERM) Framework. The goal of the risk assessment is to support risk-informed decision-making in the evaluation of both proposed public EV charging delivery models against the City's strategic, operational, and program objectives. The outputs of this assessment are also used to inform key negotiating principles detailed in Confidential Attachment 1, which are meant to mitigate identified risks and provide guidance around future negotiations with a Successful Proponent.

Strategic Risk

City-Led Model Likelihood: Almost Certain Impact: Major to Severe

Faced with rapid changes, disruptions, and uncertainties in the economy resulting from increasing geopolitical tensions and instability, and considering the magnitude of the City's unfunded capital program and the cost of generational programs such as the housing plan, transit, and climate action initiatives, a City-Led public EV charging delivery model is almost certain to have a major or severe impact on the City's ability to adequately invest in and support key components of its strategic planning framework:

- Council Vision Long-term quality of life vision for Toronto.
- Corporate Strategic Plan The Toronto Public Service's commitment to People, Partnerships, Performance, and Priorities.
- The Official Plan The City's ability to evolve, improve, and realize its full potential in areas such as transit, land use, development, and the environment would be significantly impacted.
- Service Strategies, Plans, and Initiatives Guides what the City does to enhance quality of life, address challenges, serve Torontonians, and achieve results.
- Multi-year Service-Based Budgeting Setting and sustaining a financial foundation for implementing and sustaining the City's strategies, plans, initiatives, and services would be very difficult to accommodate within existing budget priorities with added delivery model requirements without any service cuts and/or reserve funds.



Collaborative Model Likelihood: Possible Impact: Moderate

A Collaborative Model approach would allow the City to focus on planning and resource allocation associated with generational programs and key components of its strategic planning framework. Distribution of risk achieved through this model helps mitigate uncertainties associated with the public EV charging program, therefore limiting the likelihood and magnitude of potential impacts on City's key corporate strategies.

Financial Risk

City-Led Model Likelihood: Almost Certain Impact: Major to Severe

Various types of economic pressures are continuing to create very challenging financial conditions for the City and other levels of government. A City-Led Model is almost certain to have a major or severe impact on the City's ability to utilize its financial resources effectively and efficiently. Requirements of a City-Led program would not be possible to accommodate within current budget allocation or without service cuts and/or reserve funds.

Financial risks can also impact the adequacy of City reserve and reserve fund balances which are Council-approved:

- For planned future funding of core and essential services.
- To protect the City against unbudgeted or unforeseen events.
- To smooth out future program expenditures which may fluctuate from one year to the next.
- To accumulate funds for future capital expenditures or irregular or occasional expenses.

EV charging infrastructure demand uncertainty could lead to underutilization and insufficient return on investment (ROI).

Construction and installation costs may exceed budget estimates due to unforeseen developments. Rapidly evolving charging and vehicle technologies may require additional capital investments further increasing the program costs and eroding the ROI.

Collaborative Model Likelihood: Possible Impact: Moderate

Guaranteed financial commitment to cover capital and operating costs required to plan, deploy, operate, and maintain the Charging Network would reduce the City's budget burden, allowing for allocation of funds to other critical infrastructure projects and essential services. The likelihood and magnitude of potential financial impacts on the City would be limited under the Collaborative Model, with the City able to accommodate within the corporate budget.

Operational Risk

City-Led Model Likelihood: Likely to Occur Impact: Major

City-Led Model would have a major impact on the efficient and effective utilization of City non-financial resources, resulting from people, systems, and breakdowns in internal processes and procedures. Significant additional resources and extended time would be required to build internal staffing and capital resources capacity. This would almost certainly delay public EV charging plan development and



implementation, directly impacting achievement of its near- and long-term goals and objectives. Also, competing priorities may result in loss of required dedicated resources for delivery of some core and essential services.

The complexity of a large EV charging network operation must be considered within the context of interdependencies and agreements with third parties and can become logistically complex and costly. With multiple vendors, it may also be difficult to establish clear accountability for service issues. In addition, structural changes, reorganizations, changes in third-party relationships, and key management turnover can all potentially increase risks for established operations.

Collaborative Model Likelihood: Unlikely to Occur Impact: Minor

The operational capacity and expertise, combined with guaranteed financial commitment under the Collaborative Model to cover costs required to operate and maintain the Charging Network, would make any impacts on City operations improbable and with minor impact. Any potential risks associated with the termination of an agreement would need to be planned for and considered in advance to develop adequate mitigation approach.

Economic & Market Risk

City-Led Model Likelihood: Almost Certain Impact: Major

Uncertainties, rapid changes, and disruptions in the economy resulting from geopolitical tensions and instability, have a potential for significant and continued disruption of supply chains, and resource and service availability. This includes the availability of low and zero emission technologies required for the implementation and sustainability of City-Led Model. The likelihood and magnitude of potential impacts on the City resulting from economic uncertainties and disruptions would be limited under the City-Led Model.

Collaborative Model Likelihood: Likely Impact: Moderate

The Collaborative Model brings innovative technologies and more efficient business models to better identify needs and optimal use of resources, and flexibility needed to efficiently and effectively respond and adapt to supply chain disruptions and resource and service availability.

Regulatory & Legal Risk

City-Led Model Likelihood: Unlikely to Occur Impact: Minor

Exposure to risk can be introduced by non-compliance with internal and external policy, procedural, regulatory, and statutory matters. Federal and provincial legislation and mandates regarding zero emission vehicle (ZEV) sales can significantly impact both supply and demand aspects to ZEV uptake. Such changes in legislation may require significant changes in the program framework, leading to further uncertainty and costs to the City. However, these risks can be mitigated by downloading responsibility and liability for regulatory compliance on any potential supplier.

Collaborative Model Likelihood: Unlikely to Occur Impact: Minor

There are no identifiable differences in the risk between both models. Both can be mitigated by downloading responsibility and liability for regulatory compliance on any potential proponent.



People Risk

City-Led Model Likelihood: Almost Certain Impact: Major

There is a significant gap between the City's public charging program goals and the required competencies and skills of its workforce. Competencies and skills required for efficient and effective deployment and management of public EV charging infrastructure are not considered the City's core competencies, required for the provision of City's core and essential services that should be invested in, controlled, protected, and sustained. Associated risk also has the potential to impose significant losses on brand, reputation, morale, and revenue if a City-Led Model is implemented unsuccessfully.

Collaborative Model Likelihood: Remote Impact: Minor

Expertise and resources available under the Collaborative Model would expedite the planning, permitting, and installation process of public EV charging infrastructure. More efficient business models would ensure better needs identification and optimal use of resources and would enhance the user experience and optimize the charger's utilization, with minimum or no reliance on City resources. Under the Collaborative Model a public EV charging network operator is motivated to ensure a reliable product for maximum revenue generation due to profit sharing. In contrast, existing third-party contracts do not include these provisions and would be difficult to establish across multiple contracts required under the City-Led Model.

Reputational & Community Risk

City-Led Model Likelihood: Possible Impact: Moderate

Negative public perception and media attention surrounding public EV charging program implementation and management challenges has potential for creating a loss of confidence and negative view of the City within the community, other levels of government, and businesses. This would be further amplified by a significantly increased risk of impacts on the community's standard of living, livelihood, and way of life.

Collaborative Model Likelihood: Unlikely Impact: Minor

By allowing the City to focus on critical infrastructure projects, and critical and essential services, impacting community's standard of living, livelihood, and way of life, the likelihood and magnitude of potential impacts on the City would be unlikely and minor under this model.

Technology & Data Risk

City-Led Model Likelihood: Possible Impact: Major

Given the dependence of business operations on information technology, the risks related to the availability of systems, confidentiality, and integrity of data are often considered among the top risks to organizations.

An expected increase in the utilization of the City's public EV charging network would increase exposure and risk resulting from technology failures such as information security incidents or service outages. This could cause costly business disruptions, and potential data loss that could result in financial, legal, regulatory, and reputational near- and long-term damages.



Collaborative Model Likelihood: Unlikely Impact: Minor

Collaborative Model business and technological expertise, innovation, capacity, and efficiency, would ensure reliable and efficient service, including availability of systems, confidentiality, and integrity of data. The City's exposure to technology and data related risks would therefore be improbable and minor under this model.

Contractual Risk

City-Led Model Likelihood: Possible Impact: Major

All contracts present some level of risk. The City-Led Model could possibly require establishment of multiple third-party contracts to enable its planning, deployment, operation, and management. If multiple contracts are required, this would result in a significant risk to the City due to a lack of resources available to provide contract implementation and management by the City and/or supplier. The City's sourcing requirements could also significantly delay the launch of the City-Led Model.

Collaborative Model Likelihood: Possible Impact: Moderate

Collaborative Model would significantly reduce the City's requirements to potentially need to establish multiple contracts to enable and support its public EV charging network planning, deployment, operation, management, and sustainment. This would significantly reduce requirements and pressure on the City's contract management resources and processes.

Risk Assessment Summary

The following table provides a summary of the identified risk probabilities and impacts of the City-Led Model and Collaborative Model on the City.

Risk Category —	City-Led Model		Collaborative Model	
	Likelihood	Impact	Likelihood	Impact
Strategic	Almost Certain	Major to Severe	Possible	Moderate
Financial	Almost Certain	Major to Severe	Possible	Moderate
Operational	Likely to Occur	Major	Unlikely	Minor
Economic & Market	Almost Certain	Major	Likely	Moderate
Regulatory & Legal	Unlikely	Minor	Unlikely	Minor
People	Almost Certain	Major	Remote	Minor
Reputational & Community	Possible	Moderate	Unlikely	Minor
Technology & Data	Possible	Major	Unlikely	Minor
Contractual	Possible	Major	Possible	Moderate



Risk Assessment Summary and Mitigation Approach

Risk assessment of the two public EV charging delivery models indicates that risks associated with a City-Led Model are more likely to occur and have more severe impacts on the City in most key areas than with a Collaborative Model. Therefore, the recommended risk mitigation approach would be to avoid or transfer public charging delivery model risk, through a Collaborative Model, using key negotiating principles based on identified risks, to guide future discussions with a Successful Proponent. Based on the outputs of the assessment, these negotiating principles have been established in Confidential Attachment 1, and are being used as a means of mitigating risk prior to establishing final terms and conditions and entering into a commercial agreement.