

**Green Line Report to  
Green Line Committee  
2020 June 01**

**ISC: UNRESTRICTED  
GC2020-0582**

## **Green Line Program Governance**

---

### **EXECUTIVE SUMMARY**

Ensuring that the optimal governance structure is in place to secure successful delivery of the Green Line Program in accordance with the Council-approved vision, outcomes for Calgarians and guiding principles included in the Green Line Committee's Terms of Reference has been identified as essential by Council, the City Auditor and the Technical and Risk Committee (TRC). The members of the TRC are external industry project specialists in the areas of governance, procurement, commercial strategies, stakeholder management, design, and construction who were retained by the General Manager, Green Line to assist him and the Program's Executive Steering Committee (ESC) in undertaking due diligence, identifying risks and developing effective risk mitigation strategies and engaging in preventative risk management activities to ensure the successful execution of the Green Line Program on time and on budget.

On 2019 July 29, Council directed Administration to have the members of the TRC conduct an independent peer review of various matters including the suitability and adequacy of the governance of the Program. This review is now complete and the TRC's findings as outlined in Attachment 2 to this report have been shared with the General Manager, Green Line and the ESC which is the Administrative committee currently overseeing the Green Line Program. The ESC is chaired by the City Manager and ESC members are the General Manager, Green Line, the Acting General Manager, Transportation, the Delivery Director for the Green Line Program, the Chief Financial Officer, the City Solicitor and General Counsel, the Acting Director of Calgary Transit, and the Director of Supply Management.

This report outlines the findings of the TRC's governance review and the rationale for Administration's concurrence with the TRC's recommendation that Council establish a new Council Committee, the Green Line Program Governance Board (the "Board"), to govern and oversee the successful delivery of the Green Line Program. Administration also supports the TRC's recommendation that Council appoint to the Committee the City Manager and individuals with a range of expertise in areas such as governance, leadership, procurement, engineering design, construction, project management, and P3 transactions in respect of projects comparable to the Green Line Program. Attachment 3 to this report contains the proposed text of a bylaw, the passage of which would result in the creation of a Board with a clearly defined mandate, powers, duties, functions, and accountabilities.

Green Line Report to  
Green Line Committee  
2020 June 01

ISC: UNRESTRICTED  
GC2020-0582

## Green Line Program Governance

---

### ADMINISTRATION RECOMMENDATION:

Administration recommends that the Green Line Committee recommend that Council:

1. Give three readings to the proposed Bylaw, the Green Line Program Governance Board Bylaw (Attachment 3), to establish the Green Line Program Governance Board (the "Board") as a Committee of Council responsible for governing and overseeing the successful delivery of the Green Line Program;
2. Appoint the City Manager to serve as a member of the Board; and
3. Amend Section 2, the Mandate of the Green Line Committee, in the Green Line Committee Terms of Reference by:
  - replacing "Receive quarterly reports from the Green Line Project Team" with "Receive quarterly reports from the Green Line Program Governance Board" and
  - deleting "Receive quarterly reports from the Green Line Technical and Risk Committee."

### PREVIOUS COUNCIL DIRECTION / POLICY

Previous Council direction in regard to Green Line Program governance is included in Attachment 1.

### BACKGROUND

The \$4.903 billion Green Line Stage 1 Program will be the largest infrastructure investment ever made by The City of Calgary. It is critical to ensure that the appropriate governance framework is in place to enable delivery of the Program in accordance with Council's vision on time and on budget.

As requested by Council on 2019 July 29, the TRC conducted an assessment of the existing Green Line Program governance structure, and of governance structures utilized in various mega projects around the world. On 2019 February 21, the TRC advised the Green Line Committee that it was both essential and an optimal time to enhance the Program's current governance structure given that the Program was moving from planning and design to procurement and delivery. Consideration of the TRC's review and recommendations has resulted in Administration's recommendation in this report that while Council retains responsibility for determining the scope, schedule and budget for the Green Line Program, Council should also:

**Green Line Report to  
Green Line Committee  
2020 June 01**

**ISC: UNRESTRICTED  
GC2020-0582**

### **Green Line Program Governance**

---

- establish a new Council Committee, the Green Line Program Governance Board, mandated to govern and oversee the successful delivery of the Program;
- appoint to the Board individuals with a range of expertise in governance, leadership, procurement, engineering design, construction, project management, and P3 transactions in respect of projects comparable to the Program; and
- ensure alignment with corporate financial and other matters and collaboration between the Board, the Green Line Program Team and the Administrative Leadership Team (ALT), and include the City Manager as a Board member.

To support the Board in its due diligence activities on behalf of The City, effective at the Board's first meeting, Administration is recommending that the TRC report to the Board rather than to the Green Line Committee. To ensure that the Green Line Committee continues to fulfil its mandate, Administration is recommending that the new Board provide quarterly reports on the Program to the Green Line Committee.

The text for a proposed bylaw clearly outlining the Board's mandate, roles, responsibilities, and accountabilities is attached to this report as Attachment 3.

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

#### **Governance Audit – City Auditor**

The objective of the City Auditor's 2019 audit of Green Line Program governance was to assess the effectiveness of the then current Program governance framework (Report AC2019-0353 - "Green Line Project Governance Audit"). The report identified that the ESC was the key body within the Green Line governance structure responsible for providing strategic direction and oversight and that the Green Line Department was responsible for the delivery of the Green Line Program.

The audit identified concerns with a lack of clarity around roles, responsibilities and associated accountabilities, decision making, and risk identification. Due to the historical changes in the composition of the Program team, along with the transition of the Program from planning and design to procurement and delivery, there has been a blurring of roles and responsibility and the decision-making structure has not been well defined.

The City Auditor determined that clear lines of decision-making authority are needed throughout the entire Program team from the governing body and senior leadership across to the engineers and supporting services to enable efficient and effective decisions to be made by the appropriate person at the appropriate time. For a Program of this magnitude and complexity decisions must be made in an expedited manner by experienced personnel to avoid unnecessary delays that can increase the risk and ultimately the total cost of the Program.

Green Line Report to  
Green Line Committee  
2020 June 01

ISC: UNRESTRICTED  
GC2020-0582

## **Green Line Program Governance**

---

### **Governance Review - TRC**

#### **TRC's Assignment**

Administration was directed by Council on 2019 July 29 to request that the TRC assess the "suitability and adequacy of the governance and resourcing of the Project."

#### **Investigation**

In conducting its assessment, the TRC reviewed a July 2019 draft document titled "Green Line Project Governance," Administration's presentations to the SPC on Transportation and Transit and agendas and minutes of ESC and Green Line Project Senior Leadership Team meetings. In addition, the TRC met with the General Manager, Green Line, the Delivery Director for the Green Line Program and members of the ESC to discuss governance.

The TRC's assessment of governance focused on two questions:

- Are there opportunities to improve the existing governance structure?
- What are the alternatives to the existing governance structure?

#### **Conclusions**

In its deliverability report, the TRC noted that it defined "successful delivery" as "a program that meets or surpasses the program objectives including safety, budget, schedule, and quality" and concluded that immediate action on several matters (including governance) was required to ensure project success. Overall, the TRC concluded that the Green Line Program Team had been confronted with many concurrent challenges including:

- managing Segment 2 program planning involving the analysis of various options and frequent engagement with stakeholders including members of the public, businesses and Council members;
- preparing and validating iterative cost estimates for the various planning options being considered;
- preparing complex contract documentation coupled with technical engineering design to enable procurement commencement for the first two major contracts (Segment 1 and Light Rail Vehicles);
- active construction of enabling works including complex utility relocations and projects involving both Canadian National and Canadian Pacific Railways;
- securing the professional expertise, project management processes and systems required to execute the multifaceted tasks of managing the procurement and delivery of a mega project; and,
- managing relationships and formal funding commitments with Federal and Provincial funding partners;

**Green Line Report to  
Green Line Committee  
2020 June 01**

**ISC: UNRESTRICTED  
GC2020-0582**

## **Green Line Program Governance**

---

In 2019 July, the procurement strategy for the Green Line Program was changed from one design-build-finance (DBF) contract to a strategy of multiple large contracts with discrete scopes, resulting in some additional complex matters for the Program Team to deal with. While the change in procurement strategy was recommended as a way to de-risk the Program in one respect (by creating smaller projects within the Program that would be more attractive to the market), it added further complexity for the Program Team to address given that, instead of managing one large procurement including one set of Project Agreements and related documentation, there are now three sets of Project Agreements and related documents requiring three RFQ (Requests for Qualification) and RFP (Requests for Proposals) processes. This requires that the Program Team manage owner interfaces for multiple contractor teams and interface risks associated with a physical scope that crosses multiple major contracts.

A scan of the contractor market revealed that contractor teams generally active in delivering large projects were becoming less receptive to accepting the heightened profile of cost and scheduling risks that owners had historically been successful in transferring to them. Contractor teams are now looking for projects to be de-risked to a certain extent prior to the commencement of procurement of the major contract. The enabling works projects currently underway for the Green Line Program (designed to, for example, see utilities requiring relocation be moved prior to entering into large construction contracts) are intended to mitigate that concern. In the current market, contractors that typically bid on transit projects are most interested in projects that are less than \$2.0 to \$2.5 billion. While the 2019 July change in contracting strategy introduced new risks, an offsetting benefit is that contractors may be more motivated to participate in the Green Line Program procurements.

The TRC's view is that it is appropriate and necessary to review mega project governance from time to time and move to new governance structures at various project stages. Given the concurrent challenges noted above, it is essential and in fact the optimal time, to enhance the Green Line Program's governance.

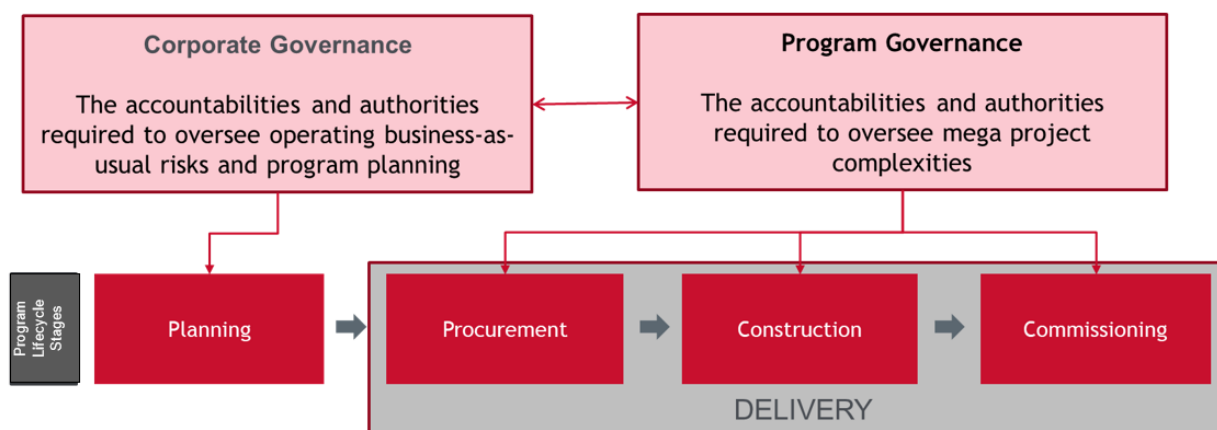
The RFP for Segment 1 is expected to be released in late July in 2020. At that time, the Program Team must successfully transition to focus on management of that procurement, completion of the enabling works program and preparation for the management of the construction of Segment 1. The RFP for the light rail vehicles (LRVs) is expected to be released in early June of 2020. The Program Team must also shift its focus to the management of the procurement of the LRVs along with the interface of that procurement with Segment 1. These two procurements and the construction of Segment 1 and the enabling works can be described as the "Delivery Phase" of the Green Line Program. The TRC determined, and Administration agreed, that it was important to assess the governance structure in the context of meeting the challenges of the Delivery Phase. Concurrent with the Program transitioning into the Delivery Phase in 2020, the planning of Segment 2 must be completed for transition into the Delivery Phase in early 2021.

The TRC's analysis and recommendations are outlined in Attachment 2 to this report.

Overall, the TRC concluded that to successfully execute on a mega project, it is essential to ensure a clear understanding of "Corporate Governance" and, "Program Governance" and the relationship and distinctions between them. The TRC defined "Corporate Governance" and, "Program Governance" as follows relative to the lifecycle of the Program.

## Green Line Program Governance

---



From a governance perspective, the TRC’s recommendation is that having the City Manager serve as a member of the proposed Program Governance Board (the Board) is crucial in ensuring a positive and collaborative relationship between Council, the Board, the Program Team, and the members of The City’s Administrative Leadership Team (ALT). The City Manager will be able to assess where the Program Team needs to adhere to corporate policies, procedures and processes that govern the provision of all City services, and where alternate policies, procedures, and processes are required to capitalize on the opportunities presented by, and manage the risks associated with the Green Line Program.

In anticipation of managing the Delivery Phase risks while completing the planning and design work required for Segment 2, the Program Team’s organizational structure has already been redesigned to more clearly allocate resources between these two important workstreams. The TRC believes that Council’s approval of the Segment 1 and 2 alignments in Report (GC2020-0583) is required to identify and attract internal and external human resources sufficient to successfully deliver the Green Line Program.

The TRC’s view is that to enhance the confidence of taxpayers, funders and stakeholders in The City’s ability to successfully deliver the Green Line Program, ensuring effective program governance by individuals experienced in projects similar in magnitude to the Green Line Program is required.

Currently, the ESC is responsible for oversight of the Program. As noted earlier in this report, the ESC is comprised of some of The City’s most senior leaders, all of whom have deep experience in the delivery of public service in addition to their individual professional and technical expertise. However, these leaders have a myriad of responsibilities and accountabilities and are required to manage the most important and complex initiatives and issues. The TRC believes that for the Green Line Program governance model to be successful, those accountable for governing and overseeing the successful delivery of the Green Line Program must have both sufficient time and similar program expertise to provide this oversight.

## Green Line Program Governance

---

ESC members are now also having to deal with the significant implications of the COVID-19 pandemic and its impact on the corporation and Calgarians. The TRC believes that it would be an optimal time for Council to establish a Board singularly focused on ensuring the successful delivery of the Program and having strong ties, through the City Manager, to all ALT members and the Director of Calgary Transit and Director of Supply Management.

The TRC's view is that the following are the attributes of effective governance required in the Green Line Program:

<b>Accountability (Focus)</b>	Accountability must be unambiguous and ensure there is absolute focus around managing Project risk and meeting Project objectives.
<b>Authority (Autonomy)</b>	Authority must be delegated to the Project leadership and they must have reasonable autonomy from public sector operating environment to make decisions.
<b>Alignment (Culture &amp; Policies)</b>	Alignment of the culture and policies must be around the Project and not the operating environment. These needs will change through the Project lifecycle.
<b>Disclosure (Transparent)</b>	Disclosure of information must be transparent to meet the needs of the public whilst protecting the commercial confidentiality required to manage risk. And the Project leadership must proactively and frequently disclose changes in major project risks.

\* UK Department of Transport – Lessons from transport for the sponsorship of major Programs

Given this, following an analysis of governance structures used for comparable programs in various countries, the TRC assessed the applicability of three frameworks to govern and oversee the Program:

- implementing enhancements to the current governance framework;
- recommending that Council establish a new Committee of Council, the Board, to govern and oversee the Program; and
- the creation of a City wholly owned subsidiary with an independent Board to govern and deliver the Green Line Program.

### Enhancing the Current Governance Framework

The TRC concluded that taking further steps to enhance the current Green Line Program governance framework may result in marginal improvements to overall governance but given all the responsibilities that ESC members have, will not likely be sufficient to deal with the real challenges of the Delivery Phase. The TRC noted that although other governments have managed comparable projects with similar internal governance structures, those governments typically operate in jurisdictions that have strong and experienced centres of technical and management expertise (such as Infrastructure Ontario and Partnerships BC) that play strong supporting roles in governments' execution of projects.

## Green Line Program Governance

---

### Creating a Wholly-owned Subsidiary

A wholly-owned subsidiary would be an effective governance framework. Given the pressure on the delivery of the Green Line Program, TRC and Administration concluded that there is insufficient time to implement a wholly-owned subsidiary. The Program Governance Board Framework as described below should deliver equivalent benefits.

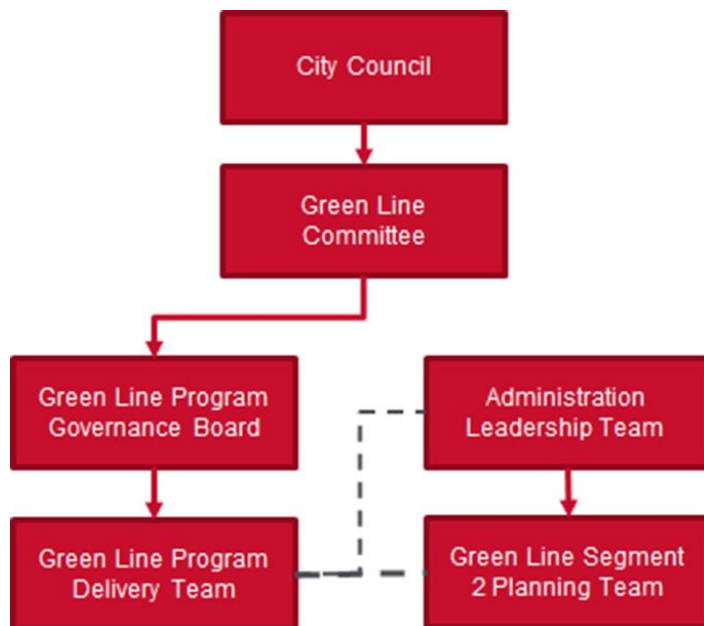
### Establishing a Program Governance Board

Some jurisdictions, including British Columbia, when delivering projects comparable in importance, complexity and magnitude to the Green Line, have mitigated project risk by creating governance frameworks that featured boards with directors who are independent qualified professionals with significant mega project delivery experience and overall governance experience. Specifically, the Capital Regional District (CRD) delegated through a bylaw the authority and accountability for delivering a complex \$775 million wastewater treatment program to a non-corporate Commission of the CRD. A dedicated Project Board is accountable for the delivery of that program.

As further described below, similar to the CRD Commission, the proposed Board would operate with a Council-approved mandate defined in a bylaw that would clearly outline authorities and accountabilities delegated to the Board. The individuals serving on the Board would be appointed by Council based upon an assessment of their competency, capacity and commitment to serve on the Board.

### ***Governance Framework***

The figure below illustrates the proposed governance framework:



*Note: Dotted line denotes communication/collaboration as required.*



## Green Line Program Governance

---

### **Bylaw to Create the Green Line Program Governance Board**

The proposed bylaw text attached to this Report creates a new Committee of Council, the Green Line Program Governance Board. It defines the respective responsibilities of Council and the Green Line Committee, the Board, and Administration and prescribes the Board's mandate to govern and oversee the successful delivery of the Program.

#### Council and Green Line Committee of Council

Council continues to retain decision making authority over:

- Scope: alignment, station locations, and guiding principles (as identified in the Green Line Committee Terms of Reference);
- Budget: capital and operating budgets for the Program and financing;
- Schedule; and
- Real-estate matters.

Council will continue to receive audit and land reports and recommendations from the Green Line Committee on matters within the Green Line Committee's mandate.

The Green Line Committee will receive quarterly reports from the Board and will continue to consider elements of Segment 2 planning and make recommendations to Council accordingly. In order to assist the Board with its due diligence and risk management responsibilities, the TRC will report to the Board rather than to the Green Line Committee.

It is important to note that this proposal is not a change to Council's typical role in procurement and delivery of capital projects, as Council has always delegated responsibility to Administration to prepare procurement documents, conduct procurement processes and make awards, however, it is a change in the sense of having the Board make these awards instead of Administration.

Council will appoint the Board chair and Board members who are individuals with expertise in areas such as governance, leadership, procurement, engineering design, construction, project management, and P3 transactions in mega projects comparable to the Green Line Program. Recruitment for Board members for Council's consideration will begin after the bylaw is passed.

The City Manager will be a permanent member of the Board and the only member of Administration on the Board. Members of Council will not be members of the Board or ex-officio members of the Board, but will remain members of the Green Line Committee.

Together, Council and the Green Line Committee will hold the Board accountable for the mandate the Board is given in the bylaw and for achievement of the Green Line Program vision and outcomes for Calgarians, as outlined in the Guiding Principles and Goals contained in the Green Line Committee's Terms of Reference.

**Green Line Report to  
Green Line Committee  
2020 June 01**

**ISC: UNRESTRICTED  
GC2020-0582**

## **Green Line Program Governance**

---

### Delegation of Authority to the Board

Authority is delegated to the Board to ensure that Council's Green Line Program vision is achieved on time and on budget. The mandate of the Board is to oversee and ensure best practices are implemented by the Green Line Program Team with respect to the:

- development of procurement documents and coordination with business units;
- construction and implementation of the Program in a manner consistent with estimates, budgets, and plans approved by Council;
- management and execution of obligations arising under contracts associated with the Program;
- protection of the integrity of the Program procurement processes in accordance with applicable law and trade agreements to ensure a fair, open, and transparent procurement processes, including avoidance of conflicts of interest;
- receipt and review of reports from an independent fairness monitor;
- evaluation of submissions in response to RFQs and RFPs issued for the Program, including development of the evaluation process and the recommended "short-list";
- management of any scope changes to the Program;
- management and oversight of the implementation of the Program and The City's contractual obligations with regard to the Program;
- management of contractual interfaces;
- receipt, review, clarification and approval of invoices in respect of the Program;
- management of delays and project schedules;
- assessment of whether substantial completion of the work under the project agreements has been achieved;
- assessment of whether Program contracts are being performed in accordance with their applicable contractual terms;
- management of communications and public relations (including as required by the funding agreements)
- Green Line Program Team's reporting relationship to the Administrative Leadership Team; and
- the acquisition and disposition of land required for the Program.

In order to achieve the above mandate, the Board will be provided the authority to allocate Program funds made available under the Program budget approved by Council, oversee the implementation of information technology, project management and document management systems compatible with City systems, and approve the final project agreements and recommend them for execution to the City Manager and City Clerk. The Board will also be provided authority to review and approve the recruitment, hiring, compensation and management of the Program's senior executive and the structure and composition of the Program team, including establishing a compensation structure, evaluation criteria, and recruitment process to recruit and/or retain skilled staff for the Program in a manner that may vary from City policies.

The Board will continually monitor the affordability of the Program and advise Council if material changes to scope, schedule, or budget are required. The Board will be obligated to comply with

**Green Line Report to  
Green Line Committee  
2020 June 01**

**ISC: UNRESTRICTED  
GC2020-0582**

## **Green Line Program Governance**

---

all Council policies and will hold regular meetings which will be open to the public except for those portions of the meetings dealing with confidential or commercially sensitive matters.

The ESC was largely comprised of a subset of ALT members. The ALT will take over ESC's responsibilities in respect of efficient decision making on corporate wide matters, such as corporate wide financial impacts and corporate cross-operational impacts. For the purposes of considering Green Line Program matters, the Director, Supply Management and the Director, Calgary Transit will attend ALT. The City Manager, as a permanent member of the Board, will exercise his discretion in the application and interpretation of Administration Policies if there is a question in regard to whether an Administration Policy (or portions of it) applies to the Program.

The objectives of the bylaw are to enable Council and the Green Line Committee, the Board, and administration to work collaboratively to enable successful execution of the Program for all Calgarians.

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

Calgarians have emphasized the need to carefully manage risk throughout the planning, design, procurement, and delivery of the Green Line Program. Council, the City Auditor, the City Manager, and the General Manager, Green Line have all recognized the need to ensure an optimal governance structure to oversee the successful delivery of the Green Line Program on time and on budget and in accordance with the Council-approved Program vision, outcomes for Calgarians and guiding principles outlined in the Green Line Committee's terms of reference. On 2019 July 29, Council directed Administration to request that the TRC conduct an independent peer review of the suitability and adequacy of current Program governance.

The result of the TRC's review and recommendations were shared with the ESC. ESC members' comments were very helpful in clarifying and crystallizing recommended roles and responsibilities as between Council, the Green Line Committee, the proposed Green Line Program Governance Board, the Green Line Program Team, and ALT, in ensuring that both the required linkages and distinctions between corporate and project governance were recognized and in ensuring a clear mandate and scope for the proposed Board as outlined in the attached proposed bylaw.

### **Strategic Alignment**

The Green Line Program Team is executing on Council's desire to advance the Council-approved RouteAhead transit program and deliver the Green Line Program as noted in the section headed, "Stakeholder Engagement."

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

Improved governance will support the successful delivery of the Green Line Stage 1 Program and ensure the benefits contemplated by the Program overall.

Green Line Report to  
Green Line Committee  
2020 June 01

ISC: UNRESTRICTED  
GC2020-0582

## **Green Line Program Governance**

---

### **Financial Capacity**

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

The recommendations in this report do not impact the current and future operating budget for the Green Line Stage 1 Program.

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

This report has no impact on the \$4.903 billion capital budget for the Program.

### **Risk Assessment**

The risks associated with not implementing an optimal governance framework are significant. The Administration and TRC are of the view that a change in the current governance framework is required to ensure that the Green Line Program will be successfully delivered.

There are however some risks associated with implementing the proposed Green Line Program Board. These risks are identified and addressed in Attachment 2 (Program Governance Board Risk Slide, page 28), and mitigation measures have been considered. This governance framework requires a high level of collaboration between the Board, the Program Team and ALT. If this collaboration is not achieved, the ability to balance Program needs with City corporate needs will be undermined.

### **REASON(S) FOR RECOMMENDATION(S):**

Council directed Administration to request that the TRC, among other matters, carry out an independent peer review of the “suitability and adequacy of the governance and resourcing of the project”. For the reasons outlined in this report the TRC has recommended that this is the optimal time for Council to adopt the recommendations included in this report and establish a new Committee of Council, the Green Line Program Governance Board, and assign to it accountability for the governance and oversight of the successful delivery of the Green Line Program.

### **ATTACHMENT(S)**

1. Attachment 1 – Previous Council Direction
2. Attachment 2 – Options Analysis and Recommended Options
3. Attachment 3 – Draft Green Line Program Governance Board Bylaw Text