




Hamilton

INFORMATION REPORT

TO:	Chair and Members Light Rail Transit Sub-Committee
COMMITTEE DATE:	September 25, 2023
SUBJECT/REPORT NO:	Light Rail Transit Operations Models (PED23166(a)) (City Wide)
WARD(S) AFFECTED:	City Wide
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SIGNATURE:	

COUNCIL DIRECTION

Not Applicable.

INFORMATION

At the July 26, 2023, Light Rail Transit (LRT) Sub-Committee meeting, staff presented Report PED23166 (Light Rail Transit Operations Models), which provided an overview of potential LRT operating models. Report PED23166 included high-level background information on the activities and responsibilities associated with the operations and maintenance of a light rail transit system, identified potential operating models for the Hamilton LRT, and set out how these operating models will be assessed to arrive at a recommendation for the preferred model.

The purpose of this Information Report is to provide Council and the public with staff's preliminary assessment of the potential LRT operating models using the assessment criteria identified in the previous report, and to outline the next steps and analysis staff will undertake prior to bringing forward a recommended operating model to Council in Q4 2023.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

This Information Report also describes how the assessment criteria will be ranked and weighted for the draft recommended operating model in Q4 2023.

Upon receiving Council direction on the City's preferred operating model in Q4 2023, staff will communicate the preferred operating model to Metrolinx. As mentioned in Report PED23166, Metrolinx is the owner of the Hamilton LRT Project and the ultimate decision of selecting the operating model for the Hamilton LRT Project is solely Metrolinx's to make. Once Metrolinx has selected the preferred operating model, Metrolinx and the City will work together to develop the requirements for procurement and execute the legal agreements necessary for the operating and maintenance period in accordance with terms and conditions set forth in the Memorandum of Understanding.

OPERATIONAL ACTIVITIES

Pursuant to the Memorandum of Understanding, the City is financially responsible for the operating costs associated with the LRT system. Staff has worked with Metrolinx to develop a list of operational activities and grouped related activities into three different bundles. These bundles are designed to assess the advantages, disadvantages and/or implications to the City in taking on any of the bundle activities. Details of each bundle were set out in Report PED23166 and included herein as Appendix "A" to Report PED23166(a) hereto ("Operational Activities").

- a)** Bundle 1: Light Rail Transit B Line Operations
- b)** Bundle 2: Light Rail Transit Vehicle Operations
- c)** Bundle 3: Passenger Interface Provider

As presented and discussed at the July 26, 2023 LRT Sub-Committee meeting, in addition to the above, there are operational activities pertaining to facility operations as well as a series of maintenance activities (lifecycle and non-lifecycle) which will be the responsibility of a third party selected through Metrolinx's procurement process.

LRT OPERATING MODELS

As noted in the previous report, based on reviews of other LRT systems in Ontario, there are several models for how the operational activities described above can be performed. Staff have set out four broad operating models for the Hamilton LRT Project for assessment purposes. Staff completed a preliminary assessment of these models with respect to their applicability and pros/cons in order to inform a future recommendation for the City's preferred operating model.

The following four operating models have been selected for review and assessment:

- a) Model 1: Third party performs all ‘Operational Activities.’ Staff are not presently aware of any use of this model for LRT systems in Ontario.
- b) Model 2: City performs ‘Passenger Interface Provider Activities.’ This model is presently used in the Region of Waterloo’s LRT system and will also be used for the Hazel McCallion Line in Peel Region.
- c) Model 3: City performs ‘LRT Vehicles Operations and Passenger Interface Provider Activities.’ Staff is not presently aware of any use of this model for LRT systems in Ontario; however, this model is similar to the operating arrangement used by GO Transit, whereby a third party provides staffing and operates GO under a contract with Metrolinx.
- d) Model 4: City performs all ‘Operational Activities’. This is the approach planned for operating the Eglinton Crosstown and Finch West lines, whereby the TTC will perform all operating functions. This model is identical to Ottawa’s Confederation Line, which is being operated by the City of Ottawa’s OC Transpo.

The table below provides a summary of the four operating models.

Table 1: Light Rail Transit Operating Models

Operational Activities	Operating Model 1		Operating Model 2		Operating Model 3		Operating Model 4	
	City	third party	City	third party	City	third party	City	third party
Bundle 1: LRT B Line Operations		x		X		x	x	
Bundle 2: LRT Vehicle Operations		x		X	x		x	
Bundle 3: Passenger Interface Provider		x	x		x		x	

Consideration for Model 5

Consideration for an additional model, referred to as “Model 5,” in which the City would undertake all operational and maintenance activities of LRT infrastructure, was raised by a number of delegates at the July 26, 2023 LRT Sub-Committee meeting. As mentioned in Report PED23166, Metrolinx states that undertaking facility operations and all maintenance

activities will be the responsibility of a third party selected through Metrolinx's procurement process. In response to the questions raised at the LRT Sub-Committee on July 26, 2023, staff requested that Metrolinx comment on the potential for pursuing "Model 5" and Metrolinx has reiterated its position that Model 5 should not be used in the City's assessment as this responsibility would remain with a third party selected through Metrolinx's procurement process.

Hybrid Models

Though the operating models are being presented in this report as discrete models for the purposes of the assessment, in practice, opportunities exist for some "hybridization" of the models. For example, the City may propose an initial "start-up" period in which certain functions are operated by a third party, with an option for the City to assume responsibility for those functions after an initial period of time. This can be an automatic option, or an optional "opt-in" approach. These types of "hybrid" opportunities will form part of staff's consideration of the models when recommending the preferred operating model in Q4 2023. For example, Waterloo Region's LRT project includes a contract with a third party operator for an initial 10-year operation period, with up to four five-year extensions, which means Waterloo Region has the option to operate LRT after the expiry of an initial period. Similarly, Metrolinx has an agreement with the TTC to operate Eglinton Crosstown LRT for an initial period of 10 years with two successive renewal terms, each for an additional 10-year term.

ASSESSMENT CRITERIA

Staff have applied the following draft criteria in assessing the operating models:

- a) *Customer experience*: To assess a seamless experience between all modes of transit, ease of information, and continuity for the public and to determine if the model fosters opportunities for enhanced Inclusion, Diversity, Equity and Accessibility (IDEA);
- b) *Interface(s) between parties*: To assess the interface(s) between Metrolinx, the City and various third parties and to determine the associated complexities with shared activities. Typically, fewer and less complex interfaces would be preferred, as it leads to clearer accountability. More interfaces often lead to less clear accountability.
- c) *Risks and liability*: To assess the types of risks and liabilities that exist for each model, their likelihood of occurrence, the consequences associated with each risk and the potential for mitigation.
- d) *Cost to the City*: To assess the relative cost impact of each model to determine if this creates an additional funding liability for the City. At this stage, it is likely

this will be a “high-level” qualitative assessment of the relative costs associated with each model.

As presented in Report PED23166, a series of questions are used for each criterion to assist with context and the application of the criterion.

At the July 26, 2023 LRT Sub-Committee meeting, staff were directed to account for Inclusion, Diversity, Equity and Accessibility (IDEA) as part of the model assessment. This is now accounted for as part of the Customer Experience criterion. IDEA is reflected in HSR’s Guiding Principles, and in *HSR Way*, the internal employee engagement and culture change program which aims to transform the customer experience. For example, HSR customer policies are being reviewed and implemented from an IDEA lens.

Furthermore, an issue of accountability was raised at the last LRT Sub-Committee. Staff believe accountability is closely related to the Interface(s) between Parties criterion. For example, any LRT model with more interfaces and a more complex interface will create less clarity on which party is responsible for or accountable, and this would require more effort to ensure accountability provisions are well documented in agreements with all parties involved.

Ranking and Weighing of Criteria

Since the July 26, 2023 LRT Sub-Committee meeting, staff have been working to determine and prioritize the draft assessment criteria and the quantitative importance (weights) of each criterion. From various discussions among the working group, staff developed the following ranking (1 is highest, 4 is lowest) and their associated weights:

1. Customer Experience (35%);
2. Risks and Liability (30%);
3. Costs to the City (25%);
4. Interfaces between Parties (10%).

Based on the above, the first three criteria, i.e. Customer Experience, Risks and Liability, and Costs to the City, are similar in importance. Customer Experience is proposed as the highest in importance, as it fundamentally addresses the success of the system to attract ridership and serve the residents of Hamilton, which in turn contribute to the City’s goals of environmental benefit, economic uplift, and equity. Interfaces between Parties criteria are given lesser importance, as these can be mitigated through carefully planned operations. The above information will be used as a qualitative lens when staff bring forward the City’s preferred operating model to the LRT Sub-Committee in Q4, 2023 (staff are not intending to include quantitative measures, such as numbers or scorings, as part of this assessment, due to the complexity involved with the assessment).

PRELIMINARY ASSESSMENT

Staff have completed a preliminary review of the operating models against the various assessment criteria, which is summarized in Appendices B to E.

Consistent with the feedback received during the July 26, 2023, LRT Sub-Committee meeting, staff have developed three key themes to guide the review of the draft operating models:

- 1) Maximize seamless customer experience with enhanced opportunities for Inclusion, Diversity, Equity and Accessibility;
- 2) Minimize risk exposure and liability for the City with consideration for 'ease of mitigation' of the risk or deficiency; and,
- 3) Maximize accountability.

The above themes are consistent with the draft assessment criteria identified and will assist with a focused review of the models.

NEXT STEPS

Staff are presenting the preliminary assessment of the operating models through this report in order to provide an opportunity for input and feedback from Council, stakeholders and the public. Subject to the feedback received, staff will further refine and validate the preliminary assessment.

Staff intend to bring forward a recommendation on the City's preferred operating model to the LRT Sub-Committee in Q4 2023. Upon receiving Council direction on the City's preferred operating model, staff will communicate the City's preferred option to Metrolinx. The ultimate decision of selecting the operating model for the Hamilton LRT Project will remain solely with Metrolinx. Once Metrolinx has selected the preferred operating model, Metrolinx and the City will work together to develop the requirements for procurement and execute the legal agreements for the operating and maintenance period in accordance with terms and conditions set forth in the Memorandum of Understanding.

APPENDICES AND SCHEDULES ATTACHED

Appendix "A" to Report PED23166(a) – Operational Activities

Appendix "B" to Report PED23166(a) – Preliminary Assessment for Operations Model 1

Appendix "C" to Report PED23166(a) – Preliminary Assessment for Operations Model 2

Appendix "D" to Report PED23166(a) – Preliminary Assessment for Operations Model 3

Appendix "E" to Report PED23166(a) – Preliminary Assessment for Operations Model 4