



## Briefing Note

Date: June 29, 2016

### Issues Relating to Re-introduction of LRT Replacement for Line 3 (SRT)

#### Background

The original proposal - to replace the aging Line 3 Scarborough (SRT) with a 7-stop LRT line, extending to Sheppard Avenue East, is shown in the attached schematic. This note summarises the primary tasks that would have to be undertaken in the event that the LRT solution was re-introduced. It is intended to assist in the event of any questions on this matter at City Council. It is important to note that these figures are estimates only and have been escalated, as noted below.

#### Discussion

The Environmental Assessment (EA) that was approved for the LRT project in 2010 must be updated, and formally amended, to address the following elements:

- i) **Complete Redesign of the EA-Approved LRT Connection at Kennedy Station:** The most complex aspect of the conceptual design work on the LRT was the connection at Kennedy Station. The recommended solution, shown in the attachments in plan and cross-section views, consisted of a large one-way LRT loop with the LRT station directly on top of the Eglinton Crosstown LRT (ECLRT) station. As Metrolinx's plans for the ECLRT were finalised after Council approved subway technology in October 2013, they did not make any provision to protect for the LRT connection. This LRT connection is now physically precluded by the current ECLRT plans and an entirely new design would have to be developed.
- ii) **New Ridership Forecasts:** As with the subway extension, ridership forecasts for the LRT would have to be updated using the City's new forecasting model and reflect changes in the transit network in Scarborough. This would include Smart Track/RER - with several options re service frequency and assumed level of fare integration – and options with and without the Sheppard East LRT and the easterly extension of the ECLRT.
- iii) **Review Potential Conflicts with GO/RER:** A new design concept for a Lawrence LRT station must be developed that incorporates the current plans for a Smart Track Station at Lawrence Avenue. In addition to identifying and resolving any issues at Lawrence Station, the LRT plans would have to reviewed with Metrolinx to and identify and resolve any conflicts as the running structure is in the same corridor.
- iv) **Assess LRT Maintenance and Storage Facility (MSF) Options:** Subject to confirmation of a consistent maintenance/operating/ownership model for three LRT lines in Scarborough, an adequate location for MSF facility would have to be identified. This could mean an interim solution (eg. a Bellamy yard was included in the original LRT EA) with a future consolidation at the previously planned Sheppard/Conlins yard.
- v) **Closure of Line 3:** finalise plans for the bus replacement service when Line 3 is shut down, including the associated temporary bus terminals and storage facility.

- vi) **Re-examine Bus Terminal Concepts at Stations:** The previous number of bus bays to be confirmed for all stations.
- vii) **Update Schedule and Capital Cost**
- viii) **EA Amendment Public Meeting:** It is expected that at least one public meeting would be necessary as part of the process to amend the LRT EA.

**Timing**

From the point Council directs staff to proceed with an LRT solution, a very rough estimate would be that it would take approximately 12 to 18 months to present a revised plan to obtain Council and MOE approval. This is very much dependent upon the time required to identify, and obtain acceptance of, a new connection at Kennedy Station.

The construction at Kennedy Station is the key element on the critical path for the LRT and depending if the preferred design is above or below grade, construction could range from approximately 3.5 to 5 years. If staff are directed to proceed in July 2016 and assuming construction cannot begin before the ECLRT work at Kennedy is completed in 2021, a quick preliminary evaluation suggests the LRT could be operational in early 2026 to late 2027.

**Funding**

With the change in technology, confirmation of contributions from funding partners may be required.

**Order of Magnitude Comparison**

The October 2013 Council report indicated the Province had announced \$1.8B (\$2010) for construction of SRT as LRT, to Sheppard. Of the \$1.8B, the Province committed \$1.48B (\$2010) to the SSE. As a minimum, staff believe the \$1.8B should be the starting point, which would have to be updated through proper design to address the changes noted above.

The \$1.48B has recently been reported as the total cost of a seven stop LRT. To facilitate a high level cost comparison of the current subway estimate to the costs of an LRT at this time, the \$1.8B was escalated to an end of 2025 opening (2% per year from 2011 to 2013 and 4% per year from 2014 to mid-2023), adding SRT Life Extension and SRT Shutdown service.

\$1.8B escalated	\$2.7B
SRT Life Extension	.108
SRT Shutdown	<u>.171</u>
Total	\$2.979B

**Prepared By**

Rick Thompson, Chief Project Manager, Scarborough Subway Extension  
416-590-6870