

**MEETING DATE:** August 29, 2001

**SUBJECT:** Rapid Transit Expansion Study - Screening Of Options

### **RECOMMENDATIONS**

It is recommended that the Commission:

1. Receive the Rapid Transit Expansion Study (RTES) for information recognizing that staff will be proceeding with the next steps defined in the RTES Executive Summary (attached as Appendix A);
2. Confirm that the TTC's basic capital needs – specifically the requirements pertaining to state of good repair, safety and legislative, ridership growth, and transit priorities -- must be met before consideration is given to funding of any rapid transit expansion projects;
3. Confirm that, if all of the TTC's base capital needs were to be fully funded, then the TTC's highest priority for rapid transit expansion would be either a northerly extension of the Spadina Subway to York University/Steeles Avenue, or an easterly extension of the Sheppard Subway (to Victoria Park, CN/CP, or the Scarborough City Centre);
4. Circulate the RTES to the following agencies for comment, requesting their input by November 30, 2001: GO Transit, GTSB, York University, Region of York, City of Vaughan, City of Richmond Hill, Town of Markham, Region of Peel, City of Mississauga, Region of Durham, and Toronto Board of Trade;
5. Forward this report to the City of Toronto's Planning and Transportation Committee.

### **FUNDING**

The TTC's 2001-2005 Capital Budget does not include funds for rapid transit expansion beyond the completion of the Sheppard Subway project in 2002.

### **BACKGROUND**

The TTC faces a huge capital shortfall just to maintain the existing system in a state of good repair. Assuming no rapid transit expansion, the TTC's capital needs in the next decade are \$3.8 billion, and currently the City of Toronto has established a target of \$2.2 billion. With a \$1.6 billion shortfall in its base capital needs, it must be reiterated that the City of Toronto and senior levels of government must fund the TTC's basic capital needs before contemplating funding for rapid transit expansion.

The purpose of the RTES is to examine the needs and priorities for expansion of the TTC's rapid transit system in support of the population and employment growth envisioned in the new City of Toronto Official Plan and in recognition of GTA development trends. It is important for the TTC to have a clear vision on the need and feasibility of the development and expansion of the rapid transit system in the next 10 years and that the Commission be able to articulate a short-term strategy for expansion for discussion with the current term of Toronto City Council (2001-2003), should funding be made available over and above the TTC's other higher priority capital needs.

## **DISCUSSION**

Following a detailed review of a wide variety of rapid transit expansion options, two projects stand out as having the potential to be successful from a ridership, density, financial, development, operational, and policy perspective:

- A northerly extension of the Spadina Subway to York University/Steeles Avenue.
- An easterly extension of the Sheppard Subway from Don Mills Station to one of three terminal locations (Victoria Park Avenue, the interchange of the CN/CP rail lines east of Kennedy Road, or the Scarborough City Centre).

The details of these two projects are outlined below (see also Exhibit 1):

<b>Rapid Transit Project</b>	<b>Length in Kilometres</b>	<b>No. of Stations</b>	<b>Capital Cost * (2000 dollars)</b>
<b>Spadina Subway</b>			
E1 Downsview to Steeles	6.1	4	\$975 M
<b>Sheppard Subway</b>			
A2 Don Mills to Victoria Park	2.1	2	\$420 M
A4 Don Mills to CN/CP	5.5	5	\$1,050 M
A5 Don Mills to Scarborough Town Centre	8.0	7	\$1,535 M

\* Fixed facilities and vehicles but excluding property, yard, and escalation costs.

The RTES Executive Summary attached to this report highlights the rapid transit options considered and the rationale for the short listing of these two projects for more detailed assessment.

The TTC's existing rapid transit system provides passengers with an excellent quality of service in terms of speed, frequency and hours of service. Its success lies in its ability to attract the large numbers of passengers required to make the system cost-effective. The single biggest factor in attracting passengers to a rapid transit line is the density of development in the corridor in which it operates. Eighty-two percent of all of the passengers using the TTC's subway lines start or end their trip within walking distance of a subway station. High densities of development close to stations provide many trip-origin and trip-destination opportunities that can be well served by rapid transit. The operating success of a new rapid transit initiative depends, to a great extent, on the density of development that exists in the corridor today, and the potential increased densities in the future. Transit modal splits in excess of 30% are only possible if the density in the vicinity of stations exceeds 100 employees and/or residents per hectare. At densities below 100, the success of rapid transit cannot be assured and the operational performance of a line may not be financially affordable.

This study focuses on rapid transit initiatives that are at or near the density threshold of 100 population/employment per hectare. The risk of operational losses increases in the initial years of a line's operation if extensive redevelopment must take place to reach this threshold. The opposite is also true; i.e., lines that are at or near the threshold today are less risky from a financial perspective since redevelopment is not needed to ensure operational success in the short term.

## **JUSTIFICATION**

A northerly extension of the Spadina Subway or an easterly extension of the Sheppard Subway have a high probability for success and are cost effective in terms of capital and operating costs.

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August 13, 2001

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Attachments: Appendix A - Executive Summary

Exhibit 1 – Rapid Transit Options Retained for Further Evaluation

