

THE REGIONAL MUNICIPALITY OF YORK

Rapid Transit Public/Private Partnership Steering Committee

February 14, 2008

Report of the

Vice President of the York Region Rapid Transit Corporation

RAPID TRANSIT NETWORK PLAN - ALTERNATIVE FINANCE AND PROCUREMENT SCENARIOS AND PRINCIPLES

1. RECOMMENDATION

It is recommended that Council receive this report for information.

2. PURPOSE

The purpose of this report is to inform Council as to the status of the update to the draft 2007 Rapid Transit Network Configuration Plan, the status of the alternative finance procurement process now underway with Metrolinx and Infrastructure Ontario, and network plan principles that have been developed to form the foundation of our 2008 Network Update report.

3. BACKGROUND

The 2003 York Region Network report documented the analysis that was used to determine the rapid transit configuration that would most efficiently serve York Region's ongoing growth and development. The analysis built on a series of Regional policies, including the Transportation Master Plan, Centres and Corridors Study, and Rapid Transit Plan and recommended a three phase strategy for implementation of the system. The rapid transit corridors and alignments originally proposed through the Transportation Master Plan were confirmed through subsequent environmental assessments (EA's).

The EA's contemplated the potential for conversion of the bus rapid transit (BRT) system to a fixed-guideway technology, such as light rail transit (LRT), once ridership reached levels capable of supporting the capital and operating costs of a fixed-guideway system. The 2003 report assumed that subway technology on the Vaughan North-South Link (Spadina line) would extend to York University by 2021. This segment was identified for a potential ultimate extension to Vaughan Corporate Center (VCC), a commitment that has since been made by the province, TTC and York Region. The 2003 report recognized the Region's long-term plan for extension of the Yonge subway to Langstaff, and considered alternatives with and without the extension. The report advised that an

update to the report prior to 2011 would be important to confirm ridership growth and timing for the Yonge Street Subway extension.

In June 2007, staff undertook to update the draft network plan to reflect the findings of the MoveOntario 2020 announcement, including the impact of potentially earlier timing for the Yonge Street subway extension to Richmond Hill, and the effect of the Toronto Transit City light rail plan. In addition, staff undertook to update the plan to reflect the findings of the 2006 Transportation Tomorrow Survey results, which became available last fall.

4. ANALYSIS AND OPTIONS

4.1 Draft Network Plan

The latest network modelling is underway and the most current 40% Regional growth scenarios are being developed and provided by the Long Range Planning Branch and will be included in the final modelling.

A staff report formalizing the network modelling findings and the network recommendations, based on the network principles, is being drafted for Committee's consideration in March. Following Committee's input, staff will circulate the draft findings to the area municipalities for comment. A formally approved network plan, based on the feedback of all stakeholders, will then be presented to Committee in the spring.

4.2 Network Plan principles

Eight rapid transit principles have been identified to guide the implementation of the rapid transit network

Eight rapid transit network principles have been developed to form the foundation of our 2008 Network Update report as follows:

1) Strategically locate the rapid transit network in the heart of York Region's urban centers and corridors.

This first principle locates the Rapid Transit network in the heart of the Region's Centres and Corridors strategy. The Rapid Transit network is the infrastructure backbone supporting the transformation of York Region into a mature urban area by concentrating growth and development within designated urban areas and along the Rapid Transit corridors that connect them.



2) **Choosing the right technology at the right time for the right cost.**

Phase 1, *Quick Start*, was our early action plan to build ridership and public support. It is a proven success and now needs to be evolved to ensure that momentum is not lost.

Phase 2 includes 67 km of segregated BRT Rapidways, designed to not preclude future conversion to LRT when warranted. Phase 2 also includes the extensions of the TTC Yonge-University-Spadina subway line to Highway 7 to both Richmond Hill Center and Vaughan Corporate Center.

Phase 3 will consider evolving technologies to significantly increase passenger capacity as population, employment and system ridership continue to grow.

3) **Connect inter-regional rapid transit systems.**

Viva Phase 2 will provide convenient links with all of the north/south GO Rail lines crossing Highway 7, the inter-regional proposed 407 Transitway, the TTC subway, Brampton's Acceleride, Durham Region Transit and the City of Toronto's proposed Transit City LRT plans.

4) **Deliver great rapid transit intermodal terminals.**

The planned terminals for Phase 2 include a Highway 50 Terminal, Vaughan Corporate Center, Jane/407, Steeles West Station, Concord, Richmond Hill Centre, Unionville GO Station, Cornell Terminal, Bernard, Green Lane and Main Street Newmarket.

Phase 2 Terminals	Transit Service Provider					
	Viva / YRT	TTC	GO Transit	Brampton Transit	Durham Transit	Private
Richmond Hill Centre	●		●			●
Vaughan Corporate Centre	●		●	●		
Highway 50 Terminal	●	●	●	●		●
Jane/407	●	●	●	●		●
Steeles West Station	●	●				●
Concord	●		●			●
Unionville GO Station	●		●		●	●
Cornell Terminal	●				●	●
Bernard	●					
Green Lane	●		●			●
Main Street Newmarket	●		●			

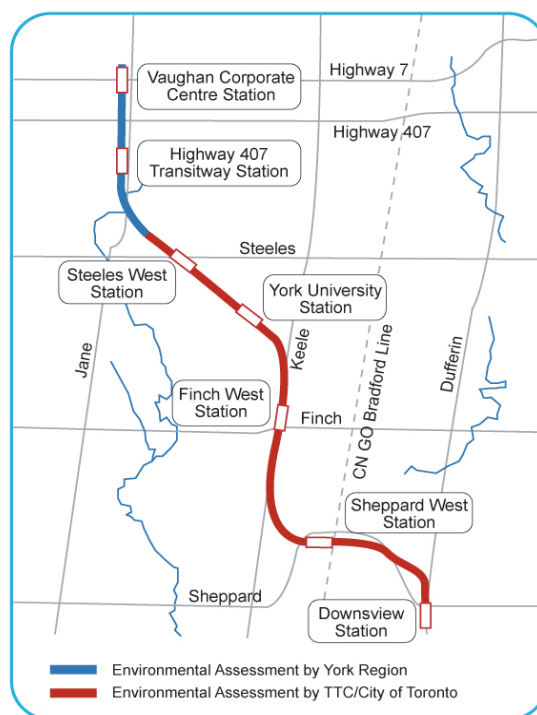
These terminals will play a major role in improving overall transit attraction and travel time savings for passengers. They will also provide significant opportunities to deliver high order transit-oriented development within York Region.

5) Bring the Spadina and Yonge subways to Highway 7.

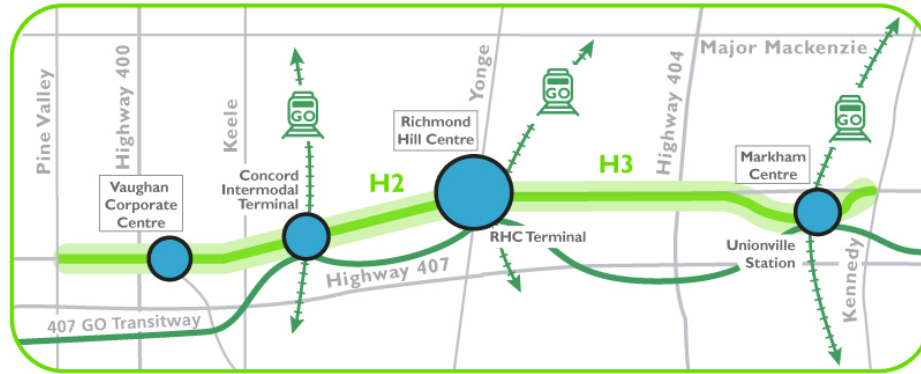
There is a solid business case for extending the TTC Spadina and Yonge Street subway lines to Vaughan Corporate Center and Richmond Hill Center. The Yonge extension alone is projected to carry 27,000,000 trips annually in 2021.

6) Strengthen Viva's core and then extend it.

At the core of the rapid transit system are the Highway 7 and Yonge Street corridors, which converge at the Richmond Hill Center terminal. The south Yonge Street segment (Highway 7 to Finch Avenue) alone is used by 70% of all Viva Passengers.



Highway 7 provides the critical connections between the Regional growth centers of Vaughan, Richmond Hill and Markham. North Yonge provides the critical connection with Newmarket.



7) Address significant pressures along the corridors.

The Y3 segment (north Yonge Street, from Mulock Drive to Green Lane, Green Lane to the GO Transit station, and Davis Drive from Yonge Street to Southlake Regional Health Centre) is critical to support the intensification intended by the Places to Grow plan and the designation of Newmarket Center as an Urban Growth Center. In addition, it provides key support to the continued development of the Southlake Regional Health Center providing services not only to York Region residents, but also residents in adjoining Regions.

The implementation of the BRT Rapidways will improve inter-regional travel and connectivity by providing convenient connections to GO Rail and GO bus routes serving northern York Region, Barrie, Durham Region and Simcoe County.



8) Embrace all modes of transportation movement.

York Region has been active in promoting transportation demand management through such initiatives as the establishment of the Smart Commute program.

Metrolinx is now responsible for the coordination of the transportation management associations that have been formed in the GTA over the past five years.

Opportunities to strengthen the travel demand management programs of Smart Commute 404/7, North Toronto, Vaughan, and Central York will be the subject of future Metrolinx and York Region reports. The Region is nearing completion of the Pedestrian and Cycling Master Plan and opportunities to incorporate this mode of travel in the design of the rapid transit system are being evaluated.

4.3 Rapid transit construction timing

The timing for the construction of the York Region network plan has been updated

In October 2007 Metrolinx requested the Region to provide our timing to construct the rapid transit network. Based on the foregoing principles and armed with our emerging draft network modelling updates the following base map for Viva Phase 2 was developed.

Viva Phase 2 now includes the extension of the Spadina Subway and Yonge University lines north to the Vaughan Corporate Centre and Highway 7 in Richmond Hill, respectively. Viva Phase 2 also includes the development of the balance of the rapid transit system as bus rapid transit.

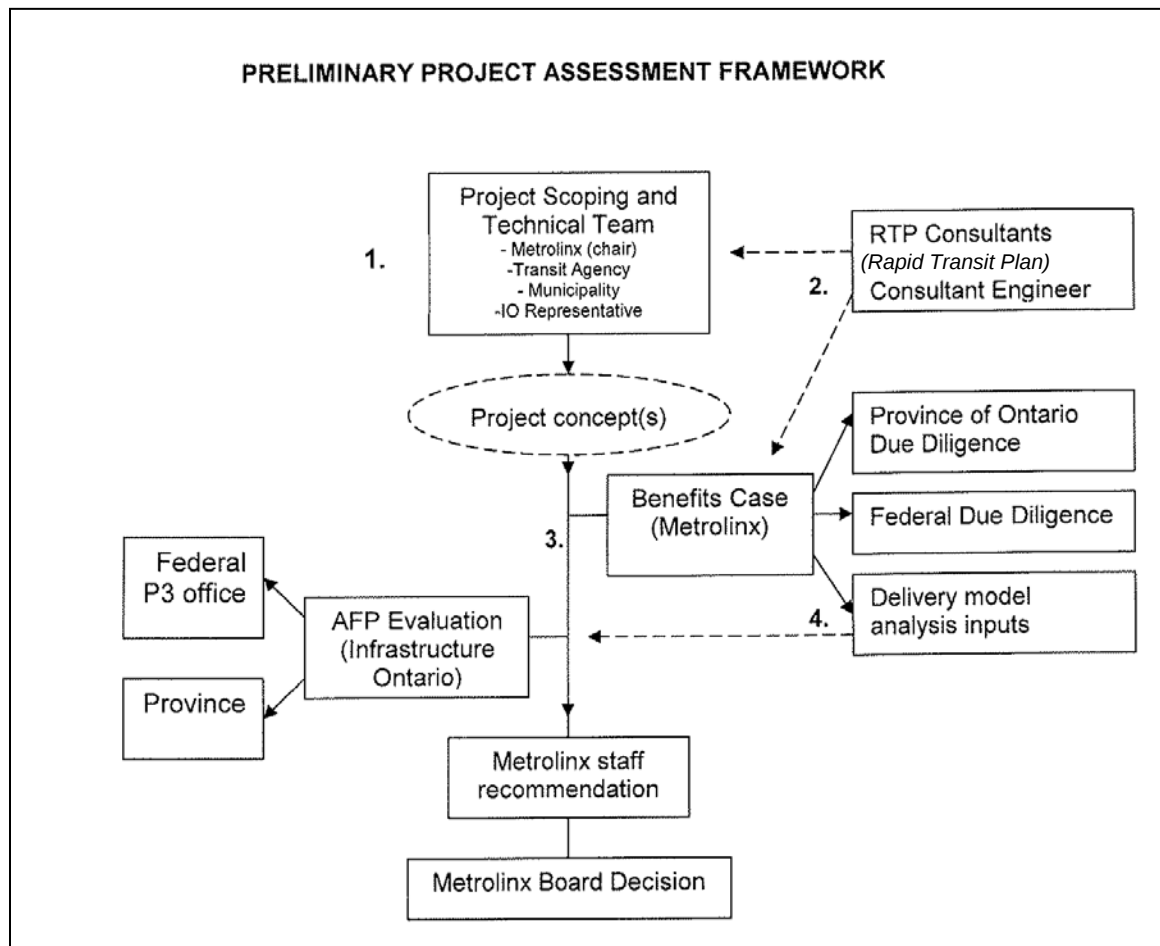


4.4 Network Alternative Finance Analysis

Staff are working with Metrolinx and Infrastructure Ontario on the alternative finance and procurement evaluation for the Yonge Street Subway and the entire Viva BRT network

In order to move from being one of the 52 potential candidate projects for MoveOntario 2020 funding to a capitalized project, the Region's subway and BRT project must be evaluated through the project assessment framework shown in Figure 1 below.

Figure 1



One of the assessment screens is the preparation of an alternative finance and procurement (AFP) evaluation. This evaluation is being carried out jointly by Metrolinx and Infrastructure Ontario in conjunction with the five project candidates listed in the November alternative finance report to Metrolinx. York Region was successful in having both the Yonge Street subway and the entire surface BRT network included in the first round of evaluations. Three meetings have now been held with the working group and staff has prepared a comprehensive submission of the required information to support the

AFP analysis. Staff was asked to supply three scenarios for evaluation as part of the AFP evaluation. The three scenarios are summarized briefly below:

Both the base and moderate scenarios are consistent with the MoveOntario 2020 listed projects and are consistent with the York Region rapid transit network plan analysis to the year 2030 and principles enunciated above.

Base Scenario includes:

- BRT in segregated rapidways on all segments of the rapid transit plan, including Y1.
- The operations and maintenance facility and ridership benefits expected with the Spadina Subway are included in this scenario along with the benefits of having constructed the Cornell Terminal.

Moderate Scenario includes:

- Base case, except with a modified Y1 surface BRT on Yonge Street due to the construction of the Yonge Street Subway extension to Richmond Hill. For this analysis, 4 subway stops are included along with the construction of a major multi-modal terminal at Richmond Hill.

The **Bold Scenario** takes a longer term view and is currently under discussion with Metrolinx. Staff will report back on the bold scenario in March.

It is anticipated that the AFP process will be completed in May or June and the results will be reported back to Council at that time.

5. FINANCIAL IMPLICATIONS

The costs associated with supporting this effort are largely accommodated by the efforts of YRRTC senior and Regional staff; however, support to generate all of the required data is being supplied by YC2002 as a contingency task under the Y2/H3 work program.

Every effort will be made to recover these costs as eligible expenses. The MoveOntario 2020 plan provides for capital costs for the construction of these projects to be borne by the Province (2/3) and Federal government (1/3). Metrolinx has also been tasked with determining the net requirement for the operating costs associated with all of these projects and staff will report back on this activity in future reports.

6. LOCAL MUNICIPAL IMPACT

The deployment of the rapid transit network to serve York Region municipalities is critical to the realization of the Regional and Provincial growth objectives. The funding of the rapid transit network will assure the local municipalities and their constituents that growth will be accompanied by a robust rapid transit network.

7. CONCLUSION

The latest network modelling is underway and current 40% intensification scenarios for the rapid transit corridors will be included in the final modelling. A staff report formalizing the network modelling findings and the network recommendations, based on the network principles described in this report, is being drafted for Committee's consideration in March. Following Committee's input, staff will circulate the draft findings to the area municipalities for comment. A formally approved network plan, reflecting stakeholder feedback, will be presented to Committee in the spring.

Staff is working with Metrolinx and Infrastructure Ontario on the AFP evaluation analysis of candidate projects. York Region was successful in having both the Yonge Street subway and the entire surface BRT network included in the first round of AFP evaluations. Three working group meetings have been held to date.

This report describes the three alternative network scenarios – base, moderate and bold for AFP business case analysis. The bold scenario takes a longer term view and is currently under discussion with Metrolinx. Staff will report back on the bold scenario in March. It is anticipated that the AFP process will be completed in May or June and the results will be reported back to Council. At that time, Council will also be asked to endorse the network plan principles described in this report.

For additional information, please contact Mary-Frances Turner, Vice-President, York Region Rapid Transit Corporation at (905) 886-6767 ext. 2226.

The Senior Management Group has reviewed this report.

Recommended by:

Mary-Frances Turner, MCIP, RPP
Vice President,
York Region Rapid Transit Corporation

Approved for Submission:

Bruce Macgregor
Chief Administrative Officer

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