STAFF REPORT
ACTION REQUIRED

Yonge Subway Extension – Environmental Assessment Submission and Project Update

<table>
<thead>
<tr>
<th>Date:</th>
<th>December 16, 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>To:</td>
<td>Executive Committee</td>
</tr>
<tr>
<td>From:</td>
<td>City Manager</td>
</tr>
<tr>
<td>Wards:</td>
<td>All Wards</td>
</tr>
</tbody>
</table>

SUMMARY

A key purpose of this report is to obtain Council approval to submit the Environmental Project Report (EPR) for the Yonge Subway Extension Project to the Minister of the Environment and authorization to jointly issue, with York Region, a Notice of Completion. York Region initiated the early functional planning work on the Project and, in October 2008, the City/TTC became a co-proponent in the Transit Project Assessment Process (TPAP) process which has resulted in the completion of the EPR as required under the Environmental Assessment Act Regulation 231/08. A summary of the public’s participation in the Project to this point is included in Attachment 1 of this report. The submission of the EPR is only one step in the planning and implementation of the Yonge Subway Extension Project.

This report establishes a number of principles on which subsequent steps in the process should be based. First, the City Manager and Chief General Manager of the TTC should initiate discussions with Metrolinx, the Province, York Region and the Federal government to negotiate funding and service agreements. Key principles include: the Project should incur no additional capital or net operating costs to the City; the TTC will manage, deliver, operate, maintain and largely own the Project; and provision should be made for funding related infrastructure costs, notably the provision of additional storage yards and expansion of the capacity of the Bloor-Yonge subway station.

The City will need to complete the North York Service Road as part of the Yonge Subway Extension Project implementation and undertake an area study for the Yonge corridor between Cummer/Drewry and Steeles Avenue to assess the impacts of new subway service on the future pattern of land use and activities. From a City/TTC perspective the extension of the Yonge subway line is not viewed as a priority transit project but it is key to York Region’s plans for growth and development and is included in the top fifteen transit projects of the Regional Transportation Plan as approved by Metrolinx in November, 2008.
RECOMMENDATIONS

The City Manager recommends that:

1. City Council, as co-proponent with York Region and TTC, approve the submission of the Environmental Project Report for the Yonge Subway Extension Project to the provincial Minister of the Environment and authorize the issuance of a joint Notice of Completion.

2. City Council confirm that the major components of the Project on which the Environmental Project Report is based (and which are more fully described in this report and the accompanying TTC staff report) comprise:
   a. A 6.8 kilometre extension of the Yonge Subway line from its current terminus at Finch Station to the Richmond Hill Centre (Highway 7);
   b. The construction of six new stations at Cummer/Drewry, Steeles, Clark, Royal Orchard, Langstaff/Longbridge, and Richmond Hill Centre, resulting in an average station spacing of 1.13 kilometres;
   c. The provision of major inter-modal bus terminals at Steeles Station and Richmond Hill Centre Station and provision of a bus loop at Cummer/Drewry Station on the north side of Drewry west of Yonge Street;
   d. The provision of sufficient commuter parking facilities at the Langstaff/Longbridge station to serve existing Finch station customers (who will find it more convenient to park further north) and to attract new riders to the subway extension;
   e. The conversion of the existing Finch Station pocket track/tail track to a double ended configuration, a crossover at Steeles Station and a crossover/tail track arrangement at Richmond Hill Centre Station; and
   f. A bridge structure for the subway extension over the East Don River (between Clark and Royal Orchard Stations).

3. City Council direct the City Manager and Chief General Manager of the TTC to commence discussions with Metrolinx, the Province of Ontario, York Region and Government of Canada for the purposes of securing the appropriate funding and service agreements on the basis of the following principles:
   a. Consistent with the MoveOntario 2020 commitments, the City expects the Province of Ontario will be responsible for all capital costs, including property acquisition costs, necessary to implement the Yonge Subway Extension;
   b. Any increases in net operating costs resulting from the operation of the Yonge Subway Extension will be at no cost to the City of Toronto;
   c. TTC will be responsible for project management and delivery of the Yonge Subway Extension Project;
d. TTC will operate and maintain the subway infrastructure (including commuter parking lots) but excluding passenger pick up and drop off and bus terminals in York Region;

e. TTC will own the property, assets and subway facilities within York Region except for bus terminals and passenger pick up and drop off facilities/bus terminals located in York Region;

f. Stations and bus interface facilities used by the TTC will be designed and built consistent with TTC design standards and practices;

g. The Subway Rail Yard Needs Study to support the Yonge Subway Extension and service increases on the Yonge-University-Spadina (YUS) subway, being conducted by the TTC, may identify location options in York Region and may provide for further funding needs beyond those currently reflected in the preliminary budget;

h. The Spadina Subway Extension and Automatic Train Operation/Control (ATO/ATC) system on the YUS line must be in place prior to the opening of the Yonge Subway Extension; and

i. The cost of measures to address potential capacity constraints at the Yonge-Bloor Station and North York Service Road arising from the proposed Yonge Subway Extension are to be included as project costs.

4. City Council provide a copy of this report and Council’s recommendations to York Region, Metrolinx, and Province of Ontario for information.

Financial Impact

The Yonge Subway Extension project is included in the TTC’s 2009-2013 Capital Budget as a “below the line” project. The project can only proceed upon securing full funding from the Province (through Metrolinx) and Council approval.

While it is expected that all capital costs associated with the project will be funded by the Province, there have not been any commitments made to date with respect to responsibility for operating costs. It is proposed that staff commence negotiations to secure appropriate agreements for funding of all capital costs and future net operating costs of the extension. Further reports to Council will provide details on the outcome of these discussions.

The cost of the functional planning study and work on the Transit Project Assessment Process (TPAP) has been funded to date by York Region. The TTC Capital Budget contains $0.3 million to allow TTC staff input to the project to continue to April, 2009 at which time it is anticipated that additional Provincial funding will be available to proceed with initial start up costs. The costs of City staff participation in the project to date have been modest and have been absorbed within program budgets. In future, to the extent that
such costs cannot be absorbed, funding will be sought from Metrolinx for direct project related costs.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At its meeting of October 29/30, 2008, Council adopted the following motions:

1. Confirm the City of Toronto as a co-proponent of the Yonge Subway northerly extension project;

2. Confirm the participation of City and TTC staffs in the necessary public consultation process for the Project and that staff report back on public concerns about the Project as required; and

3. Refer the request for $0.3 Million in funding (to allow the Project to continue until April 2009) through the 2009 – 2013 Capital Program budget process in December 2008.

ISSUE BACKGROUND

The proposal for the Yonge Street Subway Extension has been led by York Region as part of implementing its Official Plan, Infrastructure Master Plan and Transportation Master Plan, along with the development of the VIVA transit network expansion plan. The proposed subway extension was also included in the 52 transit projects identified in the Province’s $17.5 billion MoveOntario 2020 transit vision released in June, 2007. Subsequently, Metrolinx has included the subway extension proposal as one of the top fifteen transit projects for the first phase of the Regional Transportation Plan (RTP) as approved in November, 2008.

In late 2007, Metrolinx included $360 million for capacity improvements to the existing Yonge Subway line, consisting of a new automatic train control system and the purchase of 126 larger and more modern subway cars, as part of the Quick Wins package that was included in the 2008 Provincial Budget. These enhancements should be in place before the opening of the Yonge Subway Extension (planned for 2016/17) to help accommodate the additional ridership the extension is expected to attract. The issue of the need to increase capacity at the critical Bloor/Yonge interchange station will be addressed in a study to be undertaken by the TTC early in 2009. There is also a TTC study underway to assess the requirements for additional subway vehicle storage and servicing facilities.

Over the past fifteen months York Region has retained consultants to undertake functional planning work to select the preferred alignment, station locations and station elements for the extended subway line. TTC and City staffs have provided input to this
process. It is this body of work that provided the basis for advancing to the Transit Project Assessment Process (TPAP) stage as required under the Environmental Assessment Act Regulation 231/08.

York Region initiated the TPAP with a Notice of Commencement published on October 3, 2008 which, given the legislated six-month period for completion, means the latest date for the submission of the Environmental Project Report to the Minister of the Environment is February 2, 2009. As noted above, City Council approved Toronto becoming a co-proponent of the Yonge Subway Extension project at the end of October and issued a Notice of Commencement to this effect on November 19, 2008.

Since the commencement of TPAP, two public meetings have been held in the City: at North York Civic Centre on October 16, 2008 and at Mitchell Field Community Centre on December 3, 2008. Approximately two kilometres of the 6.8 kilometre subway extension are in the City, including the Cummer/Drewry station and a substantial portion of the Steeles station. A summary of public input to date, including additional workshops and stakeholder meetings, is included in Attachment 1 of this report.

The Metrolinx five-year capital plan identifies the Yonge Subway Extension as one of fifteen transit projects that will undergo a Benefits Case Analysis (BCA) in early 2009. BCAs for all top fifteen transit projects are to be completed by the end of summer 2009. The Metrolinx 2009/10 capital budget includes $320 million to support planning, design and engineering work on these transit projects. Budget and capital spending priorities for the 2009/2010 to 2013/2014 budget period will be established in the Fall based on the comparative outcomes of the BCA studies. It is expected that the environmental approvals for the Yonge Subway Extension Project will be in place to meet the Metrolinx timeline.
COMMENTS

The Yonge Subway Extension Project has not been identified as a City/TTC priority project. There are a number of higher transit priorities for the City/TTC, namely, base capital funding for TTC State-of-Good-Repair, purchase of streetcar replacement fleet, timely implementation of the Transit City LRT lines, and addressing passenger capacity issues on the Yonge Subway line (including new Toronto Rocket trains, ATO/ATC implementation and Yonge-Bloor station improvements). Notwithstanding these other transit priorities of City/TTC, the Project is a priority for York Region and has been advanced through a planning/functional design process, led by York Region, to determine an appropriate concept for the Project and Metrolinx endorsement.

The Yonge corridor between Finch and Steeles Avenues is identified in the Toronto Official Plan as a higher-order transit corridor, which allows a range of transit technology including subways to be implemented.

1. Project Description

The Project is a 6.8 km extension to the Yonge Subway line from the Finch Terminal to the Richmond Hill Centre (see Attachment 2). The Project is below grade under Yonge Street for the majority of its length and emerges above grade at a bridge crossing of the East Don River north of Clark Avenue. The extension consists of six new stations at Cumber/Drewry (in Toronto); Steeles Avenue; Clark Avenue; Royal Orchard Boulevard; Longbridge Avenue/Langstaff Road (an integral part of the operating terminal configuration with Richmond Hill Centre); and Richmond Hill Centre, north of Highway 7. Intermodal bus terminals will be located at Steeles Avenue and the Richmond Hill Centre stations. A commuter parking lot with up to 2,000 spaces will be located at the Longbridge/Langstaff station.

Concepts for each of the proposed stations, as well as preliminary construction methods, have been developed as part of the TPAP process and are described in the accompanying TTC staff report.

2. Capital Costs

Based on the project concept defined in this report (and detailed in the TTC staff report), a preliminary estimate of capital costs ($2008) has been developed as summarized below:
<table>
<thead>
<tr>
<th>Major Project Elements</th>
<th>Cost M$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stations and Area Facilities</td>
<td>$650</td>
</tr>
<tr>
<td>Finch Improvements</td>
<td>$5</td>
</tr>
<tr>
<td>Cummer/Drewry</td>
<td>$70</td>
</tr>
<tr>
<td>Steeles</td>
<td>$195</td>
</tr>
<tr>
<td>Clark</td>
<td>$70</td>
</tr>
<tr>
<td>Royal Orchard</td>
<td>$65</td>
</tr>
<tr>
<td>Langstaff/Longbridge</td>
<td>$85</td>
</tr>
<tr>
<td>Richmond Hill Centre</td>
<td>$160</td>
</tr>
<tr>
<td>Tunnels, special structures and operating systems</td>
<td>$600</td>
</tr>
<tr>
<td>Subway Trains</td>
<td>$240</td>
</tr>
<tr>
<td>Storage and Maintenance Facilities for subway trains</td>
<td>$110</td>
</tr>
<tr>
<td>Engineering and other costs</td>
<td>$675</td>
</tr>
<tr>
<td>Property</td>
<td>$125</td>
</tr>
<tr>
<td>Preliminary Project Cost Estimate (2008 dollars) *</td>
<td>$2.4 billion</td>
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</tbody>
</table>

* Note: These costs do not include potential additional costs associated with yards/maintenance facilities and connections, Yonge-Bloor station capacity improvements, and North York Service Road. Studies are under way to assess the proportion of these costs attributable to the subway extension.

From the time of the Province’s announcement of the MoveOntario 2020 transit vision in June 2007, it has been understood that the Yonge Subway Extension, like all the other projects in the vision, would be built without capital funding from the municipal level of government. The Metrolinx RTP, as approved in November 2008, appears to confirm this position.

3. Related Infrastructure Elements:

As discussed more fully in the TTC staff report, the proposed extension of the Yonge Subway line has implications for transit infrastructure requirement elsewhere in the system:

- The commitment of Metrolinx to fund the re-signalling of the Yonge-University-Spadina (YUS) line clears the way for significant capacity increases to the north-south subway system. However, it is important that the full implementation of ATO/ATC upgrades (currently planned for completion in 2015) are in place and operational before the Yonge Subway Extension comes into operation.

- TTC staff is undertaking a Subway Rail Yard Needs Study (SRYNS) to address yard/network requirements to accommodate an expanded subway car fleet to 2030.
• TTC staff is about initiate a study to address the capacity of Yonge-Bloor Station. The study will address capacity issues affecting passenger movements between the upper and lower levels of this transfer station and the dwell time problems of trains loading and unloading passengers.

• The requirement that the Spadina Subway Extension is operational prior to the opening of the Yonge line’s extension in order to help divert transit riders away from the more heavily used Yonge corridor.

Not all the infrastructure elements referred to above are required solely because of the Yonge Subway Extension but it is a contributing factor in all cases.

4. Coordination with York Region

In order to proceed with the Yonge Subway Extension, a coordinating committee should be established comprised of the City Manager, Chief General Manager of the TTC, and senior staff of York Region. The purpose of this committee would be to further develop the Project with the TTC as the project manager and negotiate funding and service agreements with Metrolinx, the Province of Ontario and Government of Canada. Staff reports regarding funding and service agreements or governance for the Project will be submitted to Council for required approvals.

5. Project Delivery Strategy

As is the case in the approved project delivery structure for the Toronto-York Spadina Subway Extension (TYSSE), TTC would be responsible for project management including setting standards, strategies for project delivery and cost control, contracting and administration, and value engineering, reflecting that:
• the TTC has more than 50 years of experience in managing the construction of subways, which is unsurpassed;
• this project is an extension of the existing TTC subway system; and
• there is a need to ensure an integrated subway service, and that consistent standards are maintained that are critical for safety and operational reasons.

6. Operating Costs

Initial service plans on opening day call for every train to operate to Finch Station and every other train to operate through to Richmond Hill Centre Station in the AM rush period. In the PM rush hour all trains would operate through to Richmond Hill Centre Station. TTC, City, and York staff are currently finalizing ridership forecasts for the Yonge Subway Extension which will form the basis for estimating net operating costs for the Yonge Subway extension. These forecasts are expected to be finalized in Spring 2009. Currently, preliminary City/TTC forecasts of AM peak hour volumes show approximately 14,000 passengers southbound at Steeles Station in 2031. The land use assumptions included in the forecast assume some intensification but do not include full build out of subway densities and York Region is currently reviewing these forecasts.
As noted previously, no discussions have been had with regard to responsibility for operating costs for the subway extension. However, a principle of no net operating cost increase to the City is recommended as the Project moves forward into implementation.

7. North York Service Road

The implementation of the North York Centre Service Road from Finch Avenue north to Drewry Avenue on the west side of Yonge Street should be advanced as part of the Traffic Management Plan for the Yonge Subway construction. The Service Road is an EA-approved public street that helps facilitate development and access along Yonge Street in the North York Centre Secondary Plan Area. The implementation of this section of the Service Road should play an important role in helping to mitigate traffic impacts related to the construction of the subway. Since the section of subway between Finch Station and Drewry Station is anticipated to be constructed using the cut-and-cover method, the Service Road would function as an alternate route for Yonge Street traffic. The City continues to acquire property for the Service Road (both east and west of Yonge Street) and has included the completion of the entire Service Road in its five-year capital plan including property acquisition and construction. At this time, there is $25 million allocated to this project in the five-year capital budget to be funded through Development Charges and debt funding, however, it is estimated that an additional $20 million will be required to complete the Service Road. Property is still required to complete the section of the Service Road between Finch and Drewry Avenues.

8. Planning Study Required

With the current plans to extend the Yonge Subway to Richmond Hill Centre, the Town of Markham and the City of Vaughan are conducting planning studies for the Yonge and Steeles corridor area. Markham staff has presented their final report to the Markham Development Services Committee for endorsement. The City of Vaughan is still in the public consultation stage.

Given the level of development anticipated to the north of Steeles Avenue and the development levels in the North York Centre Secondary Plan area south of Cummer/Drewry, City Planning staff will need to undertake land use study for the area along the Yonge corridor between Cummer/Drewry Avenues and Steeles Avenue. Such a study would pay particular attention to planning for development around the proposed subway stations.

9. Yonge Street Busway Project

The Class Environmental Assessment (EA) Study for Surface Transit Improvements on Yonge Street between Finch Avenue and Steeles Avenue was initiated in 2003. This project has been deferred due to the Yonge Subway Extension project status. Following a decision to proceed with the busway project, the EA could be completed in six months.
Assuming that the Yonge Subway Extension Project receives approval to proceed, it is anticipated that the construction for the project would commence in 2011 and be completed in 2016, with the subway operational in 2016/2017. If the subway extension and the associated surface facilities are completed, the anticipated bus usage on Yonge Street between Finch Avenue and Steeles Avenue is expected to be less than 10 buses per hour.

Assuming that the Yonge Street Surface Transit Improvements Class EA Project is completed in 2009, and assuming that all impacts, especially property, could be mitigated within one year the absolute earliest start date for construction would be 2011. The busway could be operational as early as 2012/2013. Given these timelines, the subway construction could begin prior to the busway being completed and the subway construction would require the removal of any portion of the centre median busway that had been constructed by that time. In addition, there is not a justification for a busway south of Steeles Avenue once a subway is in place.

Therefore, at this time, the construction of a busway on Yonge Street is not recommended. However, TTC staff has advised that if the subway extension project is not initiated in the near-term, and is delayed by in the order of 10 years from the above timelines, it would be reasonable to construct the busway to improve transit service in this corridor for an interim period of 8-to-10 years until the subway construction was initiated.

CONTACT
Joanna Kervin
Tel. No. 416-392-8572
Fax No. 416-392-3821
E-mail: jkervin@toronto.ca

Anna Pace
Tel. No. 416-392-8117
Fax No. 416-696-3645
E-mail: apace@toronto.ca

SIGNATURE

_______________________________
Joseph Pennachetti
City Manager

ATTACHMENTS
Attachment 1: Summary of Public Participation
Attachment 2: Project Map
Attachment 1: Summary of Public Participation

### Open Houses

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<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 17/18</td>
<td>PCC 1 (York Region - Premiere Ballroom)</td>
<td>Over 200 (combined)</td>
</tr>
<tr>
<td>Sept 25</td>
<td>PCC 2 (York Region - Premiere Ballroom)</td>
<td>Over 250</td>
</tr>
<tr>
<td>Oct 16</td>
<td>PCC 2 (City of Toronto - North York Civic Centre)</td>
<td>Over 150</td>
</tr>
<tr>
<td>Nov 26</td>
<td>PCC 3 (York Region - Premiere Ballroom)</td>
<td>Over 350, Over 150 via webcast</td>
</tr>
<tr>
<td>Dec 3</td>
<td>PCC 3 (City of Toronto - Mitchell Field Community Centre)</td>
<td>Over 180</td>
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### Stakeholder Consultation

<table>
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<tr>
<th>Date</th>
<th>Event</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 31</td>
<td>Public Workshop 1 (York Region - Premiere Ballroom)</td>
<td>42</td>
</tr>
<tr>
<td>Aug 25</td>
<td>Steeles Workshop 1 (York Region - Premiere Ballroom)</td>
<td>8 (public)</td>
</tr>
<tr>
<td>Aug 26</td>
<td>Public Workshop 2 (York Region - Premiere Ballroom)</td>
<td>Over 80</td>
</tr>
<tr>
<td>Sept 22</td>
<td>Steeles Workshop 2 (York Region - Premiere Ballroom)</td>
<td>Over 15</td>
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<td>Sept 22</td>
<td>East Don River Workshop (York Region - Premiere Ballroom)</td>
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<td>Richmond Hill Centre Workshop (York Region - Premiere Ballroom)</td>
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<tr>
<td>Nov 12</td>
<td>Steeles Workshop 3 (City of Toronto - North York Memorial Hall)</td>
<td>8 (public)</td>
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<tr>
<td>Nov 12</td>
<td>Line Stations Open House (City of Toronto - North York Civic Centre)</td>
<td>44</td>
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<tr>
<td>Dec 2</td>
<td>Langstaff-Longbridge Community Meeting (York Region - Uplands Golf &amp; Country Club)</td>
<td>Over 140</td>
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### Notice of Commencement

<table>
<thead>
<tr>
<th>Date</th>
<th>Notice</th>
<th>Details</th>
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<tbody>
<tr>
<td>October 3/4</td>
<td>York Region Notice</td>
<td>York Region Ad in The Metro, The Star</td>
</tr>
<tr>
<td>Nov 19/Dec 1</td>
<td>City of Toronto/TTC Notice</td>
<td>Toronto Ad in Star/Metro</td>
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Attachment 2: Project Map