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### DOWNSVIEW TO YORK UNIVERSITY TTC BUSWAY

**The Rapid Transit Public/Private Partnership Steering Committee recommends the adoption of the recommendations contained in the following report January 12, 2007, from the Vice President, York Region Rapid Transit Corporation:**

#### 1. RECOMMENDATIONS

It is recommended that:

1. Council provide budget pre-authorization of up to \$100,000 out of the proposed 2007 budget of \$440,000 for the planning, design and construction of the associated works necessary for the Viva Orange Route to utilize the new TTC Busway, relocate existing plant, and provide station locations along the new TTC Busway and at the Downsview Station facilities.
2. Council authorize staff to continue to participate in the planning and design of the TTC Busway as it pertains to the implementation of station stops and facilities within the Downsview Station and the relocation of current station locations on Sheppard Avenue and at the Keele-Finch intersection, and if appropriate to negotiate the necessary design-construction and operating agreements with TTC officials.
3. Council request staff to bring forward a report in Spring 2007 that outlines the proposed modifications to the Viva Orange Route infrastructure within the City of Toronto, as well as principles pertaining to draft cost and operating agreements.

#### 2. PURPOSE

The purpose of this report is to inform Committee and Council about the recent TTC development involving the planned TTC Busway from the Downsview Station (Spadina Subway line) to York University and the potential implications for Viva operations associated with this initiative and seeks Council to provide budget pre-authorization for the planning, design and construction of associated works necessary for the Viva Orange Route to use the new TTC Busway.

#### 3. BACKGROUND

A May 2006 City of Toronto staff report supports the TTC Busway (*see Council Attachment 1*) citing that “the busway will provide a reliable, high-speed connection to the subway for York Region’s VIVA service and for GO Transit”. It describes how the main TTC service available between Downsview Subway Station and York University is one of the busiest in the TTC network, carrying approximately 12,000 passengers per

day, with service as frequent as every 2½ minutes. The report recognizes that the service is slow and unreliable due to chronic traffic congestion, with a one-way trip often taking up to a half hour.

TTC staff estimate that the TTC Busway between Downsview Subway Station and York University will dramatically improve the reliability and speed on this route, reducing a one-way trip to 13 minutes. The TTC has characterized the busway as an important element to maintain and build ridership in the future subway corridor in the immediate term of 2-3 years. The subway when implemented in the longer term is characterized as complimentary, with use of the existing busway continuing for up to four TTC bus routes serving local industrial and commercial areas (*see Council Attachment 1 – Figure 2*).

**Both Viva and GO Transit plan to use the TTC Busway for their services.**

Significant increases in travel in this corridor are expected as a result of ongoing development in York Region and from expansion of the York University campus. The number of travelers is expected to increase to a projected 20,000 per day over the next 10-to-15 years.

At its meeting on August 30, 2006, the TTC approved a contract for engineering design and construction support for a busway from Downsview Station to York University.

The TTC Busway will use existing HOV lanes on Dufferin Street and connect to Keele Street and York University via a portion of the Finch hydro corridor. It is proposed that the route will be accessible to all Viva Orange Route services. Construction is anticipated to commence in the Spring of 2007 with a completion timeframe of 18 months (*see Council Attachment 2*).

#### **4. ANALYSIS AND OPTIONS**

**TTC York University Busway presents significant opportunity to enhance service performance and passenger convenience at Downsview Station**

The development of a busway from the Downsview Station to York University that utilizes dedicated bus lanes within the Finch hydro corridor and on Dufferin Street presents a significant opportunity to improve Viva Orange Route service performance, reducing the current half-hour travel time to 13 minutes and improving reliability. Modifications to the access to the Downsview Station site will provide a dedicated left turn environment for buses entering the terminal southbound on Dufferin Street, shortening the service time.

Within redesigned Downsview Station, a special Viva drop-off bay will be provided outside the TTC paid zone which will allow for easier access for passengers to the subway and eliminate the need for the current drop-off stop on Sheppard Avenue. These

efficiencies are expected to generate as much as \$90,000 in annual operating savings on the Viva Orange Route.

These capital costs, along with an allowance for design are budgeted at \$440,000, and are part of the rapid transit budget request for 2007. The anticipated operating saving associated with use of the new terminal and busway would result in these costs being recovered within 2 years.

With dedicated bus lanes from the Downsview Station to the York University portion of the Viva Orange Route, significant route travel time savings are expected. These additional savings could be as much as \$250,000 in annualized operational time savings.

### **Viva Fare Zone area at Downsview Station needs to be reconfigured.**

The Downsview Station will be reconfigured as part of the busway project. Currently, Viva drops passengers outside the terminal on Sheppard Avenue. Viva picks up passengers within the fare paid zone in the station. Plans call for reconfiguration of the fare zone area and the TTC has advised YRRTC staff that a separate busbay will be provided for Viva operations (*see Council Attachment 3*). This will enhance service to Viva passengers who will off-load within the station. The TTC has indicated that it is expected that York Region will bear the full cost of reconfiguration associated with Viva. It is estimated that the reconfiguration costs are unlikely to exceed \$150,000 plus design. It is hoped the existing fare equipment currently located at Downsview Station will remain in place and Viva will continue to enjoy the current bays at the north end of the terminal.

### **Sheppard Avenue Viva Stop locations will need to be moved**

The current stop location on the south side of Sheppard Avenue currently drops off passengers outside the Downsview Station outside the fare-paid zone. This stop will be rendered redundant through the availability of a drop-off in the station environs.

There is currently a stop location on the north side of Sheppard Avenue in proximity to the north entrance/exit to the Downsview Station. This stop provides for on-street pick-up outside of the TTC fare-paid zone in the terminal. This stop will have to be removed at a cost of \$30,000. The re-establishment of this stop will be assessed in view of the new operating environment and ridership potential. To re-establish this site on the new route on Allen Road or Dufferin Street in the vicinity of the Downsview Station would cost between \$50,000 and \$100,000

### **Keele Street/Finch Avenue Viva Stop will need to be removed**

The Viva Orange Route currently has a stop between York University and Downsview Station, which is located at Keele Street and Finch Avenue. When the Orange Route is realigned to operate on the busway in the hydro corridor, the stop at Keele Street and

Finch Avenue will no longer be used by Viva and it will be necessary to remove the Viva assets; ie. Fin and fare equipment and stop post. The cost to remove the Viva assets is estimated to be \$30,000.

The decision to re-establish a Viva station on the Finch hydro corridor or Keele Street will be evaluated based on the potential for ridership demand. The hydro corridor is almost half a kilometre north of the Keele Street and Finch Avenue intersection and is characterized by open fields and light industrial uses. If the station is relocated to the Finch hydro corridor, there may be additional costs associated with power and communications connections, platform construction and shelter installation. Costs to relocate the assets to the hydro corridor and provide a station platform are estimated to be between \$50,000 and \$100,000.

## **5. FINANCIAL IMPLICATIONS**

Within redesigned Downsview Station, a special Viva drop-off bay will be provided outside the TTC paid zone which will allow for easier access for passengers to the subway and eliminate the need for the current drop-off stop on Sheppard Avenue. These efficiencies are expected to generate as much as \$90,000 in annual operating savings on the Viva Orange Route.

With dedicated bus lanes from the Downsview Station to the York University portion of the Viva Orange Route, significant route travel time savings are expected. These savings could be as much as \$250,000 in annualized operational time savings.

The cost to York Region of reconfiguring the Downsview Station is estimated to be in the order of \$150,000. The estimated cost of removing the Viva assets located at Keele Street and Finch Avenue to an alternate location along the new BRT route is estimated up to \$130,000. Similarly, the costs to reconfigure the on-street station stop along the new route in the vicinity of the Downsview Station from the north side of Sheppard Avenue to Dufferin/Allen Road is up to \$130,000. In summary these improvements may cost on the order of \$440,000.

It is anticipated that projected operating savings from the use of the BRT route as part of Viva Orange and the new Downsview Station arrangement will yield a capital investment payback in under two years. Viva Orange is expected to operate until the anticipated subway operation is in place, at earliest 2013, providing for significant savings over this operational period and greater ridership potential due to shorter trip times.

**Table 1**  
 Cost Implications associated with Downsview to York University TTC Busway

Component	Cost
Downsview Station - reconfiguration	\$150,000
Sheppard Avenue Stop <ul style="list-style-type: none"> <li>• Stop removal</li> <li>• Stop relocation</li> <li>• Maximum cost - removal/relocation</li> </ul>	\$30,000 \$50,000 to <u>\$100,000</u> \$130,000
Keele Street / Finch Avenue Stop <ul style="list-style-type: none"> <li>• Stop removal</li> <li>• Stop relocation</li> <li>• Maximum cost - removal/relocation</li> </ul>	\$30,000 \$50,000 to <u>\$100,000</u> \$130,000
Design Allowance	\$30,000
Total Maximum Cost	\$440,000

## **6. LOCAL MUNICIPAL IMPACT**

There are no local municipal implications associated with this report.

## **7. CONCLUSION**

The development of a busway from the Downsview Station to York University provides a significant opportunity to improve service performance on the Viva Orange Route, by realigning Viva services into the Finch hydro corridor. This realignment will render the current Viva stop at Keele and Finch unusable. One option is to move the Viva assets from Finch Avenue to a point 400 metres north to the Finch hydro corridor. Currently YRT is conducting a forecast to determine if there would be sufficient rider demand at this location to warrant a stop.

Development of the York University busway will also result in a reconfiguration of the Downsview Station surface facilities to provide for a drop-off in proximity to the subway terminal building. This reconfiguration would continue to allow Viva to use a separate bus-bay for Viva in the fare-paid zone for pick-up and to utilize the current location for fare equipment within the terminal building. This will improve service to Viva passengers who are currently dropped at a stop post on Sheppard Avenue. A further determination will have to be made if an on-street station stop environment will be maintained in the Sheppard Avenue and Dufferin intersection area.

The cost of this work, currently estimated at \$440,000 will be recovered through operating cost savings within the terminal and route time savings along the dedicated bus lanes within two years of operation. These savings will be realized at least until the subway extension to Vaughan is in operation.

The Senior Management Group has reviewed this report.

*(The attachments referred to in this clause are attached to this report.)*