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YONGE SUBWAY EXTENSION PLANNING UPDATE

The Transportation Services Committee recommends the adoption of the recommendation contained in the following report dated October 19, 2012, from the Commissioner of Transportation and Community Planning.

1. RECOMMENDATION

It is recommended that the Regional Clerk circulate this report to the Clerks of the local municipalities.

2. PURPOSE

This report provides an overview of the status and need for the Yonge Subway extension.

3. BACKGROUND

The Yonge Subway is and remains in the top 15 projects identified in Metrolinx's "The Big Move"

In November 2008, Metrolinx adopted a Regional Transportation Plan, "The Big Move", laying out nine big moves in terms of priority projects and the 15-year and 25-year rapid transit and highway network plans for the GTHA. The Big Move, with its overall objectives of reducing traffic congestion, connecting key travel centres and keeping people moving, will have a transformational impact on the GTHA when it is fully implemented and will result in a tripling of the rapid transit network currently in the GTHA. Metrolinx is currently developing the investment strategy for implementation of The Big Move, and Provincial legislation requires that Metrolinx table that investment strategy by June 2013.

Specific to York Region, The Big Move included the extensions of the Spadina Subway to the Vaughan Metropolitan Centre and Yonge Subway to the Richmond Hill Centre. The Spadina Subway extension is now under construction and is anticipated to be completed by the end of 2015. The Yonge Subway extension is listed as one of the top 15 project priorities of The Big Move and stands ready for funding.

York Region's rapid transit network implementation is underway and the Yonge Subway extension remains a key unfunded missing link (Figure 1)

Funding for the Spadina Subway extension was announced in 2006, and the \$1.4B program to construct the Yonge Street, Highway 7 and Davis Drive rapidways was announced in 2009. Construction of York Region's rapid transit network – vivaNext – began in 2010.

The Spadina Subway extension is anticipated to be completed by the end of 2015 while the rapidways will be completed in stages by 2018.

Figure 1 Yonge Subway Extension – the Missing Link



The Yonge Subway extension will connect more than 14,000 riders at the “Union Station of the north” at the Richmond Hill/Langstaff Urban Growth Centre

The Yonge Subway extension is a 7.4 kilometre extension of the Yonge Subway from its current terminus at Finch Station in Toronto to the Langstaff/Richmond Hill Urban Growth Centre anchor hub at Highway 7 and Yonge Street in York Region. The approved design includes six stations and two intermodal bus terminals at Steeles and Yonge, and at the major anchor hub at the Langstaff/Richmond Hill Centre urban growth centre, and a 2,000 car commuter parking lot at Langstaff.

The Yonge Subway extension provides significant intermodal connections to GTA transit networks connecting bus rapid transit, conventional transit, heavy commuter rail (Subway and GO transit) and 407 express rapid transit services. The Langstaff/Richmond Hill urban growth centre will be an important hub connecting people to a variety of different transit services across York Region and beyond into the GTA, and will form the most important new anchor hub in the GTA, second only to Union Station in number of riders and scale of new development.

The Richmond Hill Centre station will provide intermodal connections to BRT, heavy commuter rail, Subway and conventional transit in a newly planned community, putting over 48,500 residents and 29,500 employees within walking distance of the station for work, live or play. The latest ridership analysis undertaken as part of the *Yonge Subway Extension Conceptual Design (Final Report March 2012)* forecast a total volume of 14,090 subway riders passing through the Richmond Hill Centre station in the 2031 morning peak hour alone. These ridership numbers take into account GO rail improvements to the Richmond Hill, Bradford and Stouffville lines.

The Yonge Subway extension is a technically sound project which reflects government SmartGrowth and land use policies

The Yonge Subway has undergone comprehensive engineering analysis, public consultation, enjoys extensive community support, and forms a key part of the transportation strategy developed by York Region to manage its mandated growth targets. These targets reflect the direction set out by the Province through the Places to Grow – Growth Plan for the Greater Golden Horseshoe, and the corresponding land use framework and policies developed by the Province and York Region.

These policies have been embraced within York Region, and currently millions of square feet of residential and employment development are unfolding, to meet the burgeoning 50% population expansion to be accommodated by the Region between 2008 and 2031.

The Yonge Subway Extension environmental assessment is approved

The Yonge Subway Extension environmental assessment was completed through the Province's expedited Transit Project Assessment Process (O.Reg. 231/08) and was approved on April 6, 2009. Following completion of the Transit Project Assessment Process, a Conceptual Design and Functional Planning Study was completed and approved.

Toronto Council has directed Toronto planners to develop a new transit plan for 2013

In the past five years, the rapid transit network plan for the City of Toronto has been evolving. In debating the OneCity Transit Plan, Toronto Council did not endorse that plan but instead directed City staff to report back in September 2012 on the work to date arising from City Council decisions in February and March of 2012 on transit expansion matters, and to report in the second quarter of 2013 with a proposed City-wide transit plan to update the Official Plan and a prioritization strategy for all lines.

In September and October 2012, Toronto staff reported to their Planning and Growth Management Committee and to their Executive Committee with an approach to developing a long-term transportation plan and funding (investment) strategy to address the City's comprehensive transportation needs in the context of their Official Plan 5-year review process. City staff were directed to proceed with recommended public consultation on Official Plan transportation policies including transit plans and on funding options.

Regional staff will continue to monitor the situation and report back to Regional Council at the appropriate time.

TTC and Toronto Planning and Transportation have been involved in the development of the Yonge Subway Transit Project Assessment Process and Conceptual Design and are aware of the pressing need for the Yonge Subway extension.

4. ANALYSIS AND OPTIONS

The Yonge Subway extension will deliver the highest transit ridership of any single rapid transit line project within The Big Move

As the City of Toronto's priorities for the transit network within their city have continued to evolve over the last several years, the broader outlines for an interregional GTHA network have not changed. Within this larger network, an unchanging top priority has continued to be the need for a link between the northern half of the GTHA and the transit spine along Yonge Street.

The data to support this project is not in question: the Yonge Subway extension will deliver the highest transit ridership of any single rapid transit line project within The Big Move (ranging between 22,670 at Finch to 14,090 at the Richmond Hill Centre in the 2031 Morning Peak Hour, *Yonge Subway Extension Conceptual Design Report - Final, March 2012*) and the Richmond Hill / Langstaff Gateway anchor hub will deliver more riders and ridership movements than any other anchor hub in the GTHA, apart from Union Station.

Given the volumes, both current and projected, of trips being made in both directions between Toronto – York, the development of new transit systems in the GTHA will not be as effective until the necessary link along the main Yonge Street spine is established.

The urgency of the demand for a high volume rapid transit line on Yonge north and south of Highway 7 will continue to build

Building on both Provincial and subsequent Regional Smart Growth policies and planning direction, and in anticipation of the Yonge Subway being available to their future tenants, significant residential and employment projects are already underway or in various stages of approval for the Richmond Hill/Langstaff Urban Growth Centre and along Yonge Street north of Steeles. This intensification is going to continue to take place along Yonge Street both north and south of Highway 7. The lack of transportation capacity in this corridor will continue to be an impediment to intensification until the subway is built.

Only a subway can meet the projected ridership demands in this corridor

Transit usage in this segment of Yonge Street carries the highest level of transit ridership in York Region, and pressure to meet this need will continue to build with the pending development, as well as from the growing ridership that will be fed by the new vivaNext Highway 7 and Yonge transit corridors.

Yonge Street north of Finch is already facing perpetual gridlock in the peak period. In order to carry existing transit riders, about 136 YRT/Viva vehicles (around 1 bus every 30 seconds) currently operate on Yonge Street between Finch Station and the Richmond Hill Centre Terminal in both directions during the afternoon peak hour. The volume of buses will continue to grow with increasing development along Yonge Street. Buses operating in mixed traffic cannot accommodate the forecasted ridership demand within the Yonge Street corridor.

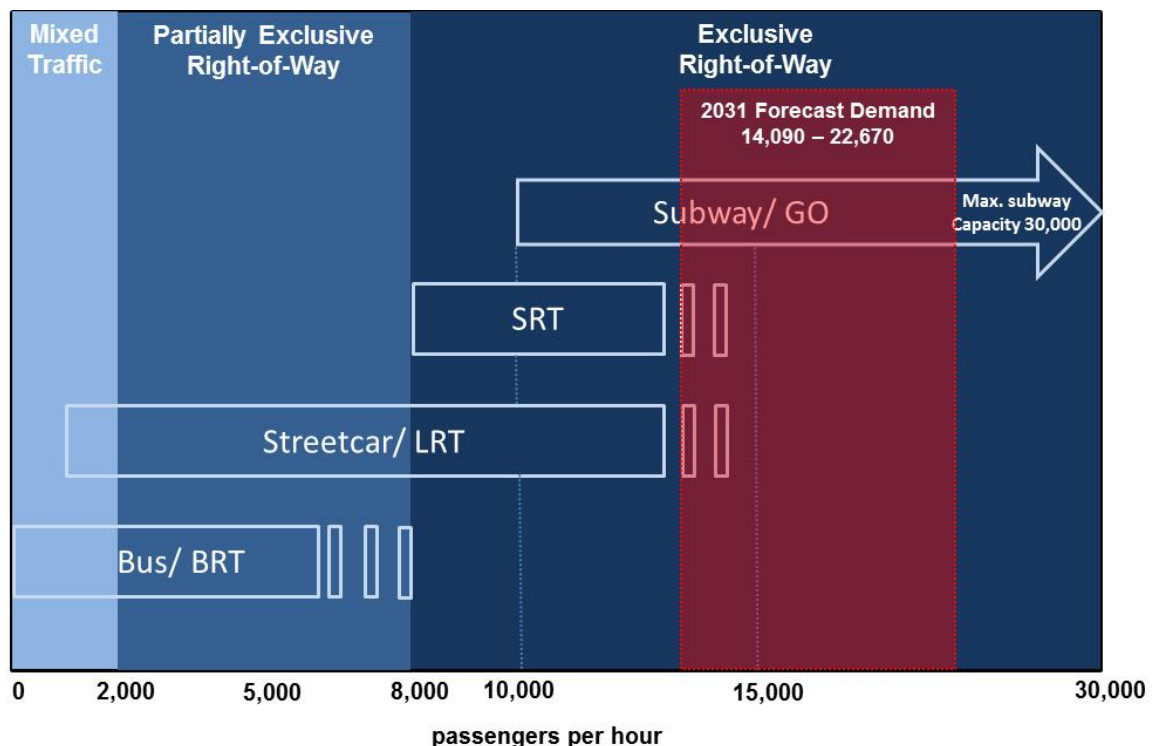
Analysis of ridership levels in the Yonge corridor show that only a subway can meet the 2031 projected demand (Figure 2). By 2031, over 10,000 potential transit riders will be forced to use their cars if the Yonge Subway is not constructed.

Providing incoming commuters with access to the Yonge subway would result in 27 million annual trips between York and Toronto by 2031

Research and ridership statistics show that commuters would enthusiastically switch to transit, if it was convenient. With 74% of the south-bound ridership of a Yonge Subway extension originating north of Steeles, the availability of a rapid transit alternative for this group would significantly improve travel between York and Toronto. The total potential ridership, a collective 27 million trips annually by 2031, would result in a reduction in car travel and concomitant greenhouse gas emissions.

If passengers are left to their own to negotiate their connections to and from York Region, it is much less likely that this potential ridership will in fact materialize. Without the mode shift from car to transit, severe traffic congestion on Yonge Street, parallel streets and GTHA highways will continue to increase, and all levels of government will be much less likely to realize their greenhouse gas reduction objectives and reduce the economic drag on productivity caused by traffic congestion.

Figure 2 Capacity of alternative rapid transit technologies



Addressing the transit needs of the GTHA requires a comprehensive network of rapid transit lines, using a range of technologies reflecting specific circumstances. There is no single line that will provide the relief needed across the region. The important

discussions to be held by Toronto Council in 2013 will establish the priorities to address Toronto's own needs.

The Yonge Subway extension is currently being made shovel-ready

Many of the GTHA's high-volume transit solutions will still need to go through environmental assessment and design phases. With all necessary environmental studies and approvals in place, and conceptual design complete, the Yonge Subway extension is well positioned among unfunded GTHA's high-volume transit projects in that it is being made shovel-ready.

Following completion of the environmental assessment in April 2009, Council authorized the York Region Rapid Transit Corporation to undertake the Yonge Subway Extension Conceptual Design Study as a joint study with the City of Toronto, which was completed in March 2012.

Additionally over the past year, the York Region Rapid Transit Corporation and York Region Transit have been working closely with Metrolinx and TTC to finalize the Benefits Case Analysis for the Yonge Subway extension. This analysis includes extensive consultation on ridership and land use growth analysis to confirm the need for this form of technology. The result of this analysis will form the basis of a comprehensive Business Case Analysis to be finalized by year end and provides a key element for achieving funding support for this project.

Downstream capacity challenges on the Yonge-Bloor Station and Union Station will need to be addressed

Capacity limitations are part of the ongoing analysis of the Toronto transit and Metrolinx GO rail needs at the Yonge-Bloor Station and at Union Station. The TTC is improving capacity along the Yonge-University-Spadina subway line with next generation subway trains that have a "fixed-car" configuration with open gangways that allow passengers to move freely from one end of the train to the other, providing 10 percent more passenger capacity. In addition, the TTC is working to implement Automatic Train Control on the Yonge-University-Spadina subway line which will increase capacity up to 36 percent by reducing distance between trains.

The challenge for the Yonge Subway extension will be in determining the timing for construction of the Yonge Subway relative to these and other downstream capacity improvement project priorities, such as the downtown relief line.

TTC has recommended prioritising the “Downtown Relief Line” in advance of the Yonge subway as one way of addressing the downstream capacity issue

At the time of writing this report, the TTC has not considered a staff report titled “Downtown Rapid Transit Expansion Study – Phase 1 Strategic Plan”. That report recommended that TTC:

“Confirm its support for City Council’s January 2009 direction that Metrolinx be requested to prioritise the Downtown Relief Line in advance of the Yonge North Extension in order to accommodate capacity issues resulting from the extension of the Yonge subway.”

The TTC Commission meeting was to be held on October 24, 2012. Staff are working closely with Metrolinx and TTC to discuss our mutual priorities and will keep Regional Council informed.

The six steps to securing funding and commencing construction for the Yonge Subway extension have been identified

1. Completion of Transit Project Assessment Process for tail-track storage north of Richmond Hill Centre (2013)
2. Completion and approval of Metrolinx Benefits Case Analysis (2013)
3. Completion and approval of Metrolinx Investment Strategy (2013)
4. Prioritization of Yonge Subway for financial investment with the balance of Top 15 priority projects (TBD)
5. Final design and engineering of Yonge Subway (TBD)
6. Construction (TBD)

Link to Key Council-approved Plans

2011-2015 Strategic Plan:

- Continue to prioritise new capital infrastructure projects to support managed growth and optimise community benefit.
- Continue to partner with all levels of government to facilitate the delivery of environmentally-sustainable infrastructure.
- Improve mobility for users on Regional transportation corridors.
- Optimise the transportation capacity and services in Regional Centres and Corridors.

Regional Official Plan:

- To achieve an urban, integrated and connected system of Regional Centres and Corridors.
- To achieve complete, diverse, compact, vibrant, integrated and well-designed

Regional Centres that serve as focal points for housing, employment, cultural and community facilities, and transit connections.

- To provide transit service that is convenient and accessible to all residents and workers of York Region.
- To promote human health and well-being in York Region, where people can live, work, play and learn in accessible and safe communities
- To create high-quality, sustainable communities.

5. FINANCIAL IMPLICATIONS

The Metrolinx Investment Strategy is a key foundation piece to unlock funding for the Yonge Subway extension

Metrolinx is required to have in place an investment strategy for the funding of Metrolinx' "Big Move" projects no later than June 2013. All parties involved, including York Region, are expected to contribute to the upcoming dialogue regarding alternative funding tools.

Until the investment strategy falls into place, funding for the Yonge Subway extension will remain elusive. All of the parties must work together to make the Yonge Subway extension happen.

6. LOCAL MUNICIPAL IMPACT

Rapid transit corridors represent a key element of the York Region growth plan as presented in the Regional Official Plan. Local municipal OPs provide further detailed policies that govern growth along these corridors.

Regional and local municipal staff work very closely to plan and protect for the future implementation of these rapid transit corridors and where appropriate, to integrate the rapid transit infrastructure into the design of land use developments along the corridors.

It should also be noted that without the Yonge Subway extension, growth and density targets would struggle to be met and thus result in lost development charges.

7. CONCLUSION

With the support of both senior levels of government and of other stakeholders such as the City of Toronto, Metrolinx and the TTC, the missing link in the GTHA transit network, the Yonge Subway extension, can be built and the objectives of reducing traffic congestion, connecting key travel centres and keeping people moving can be achieved.

York Region continues to work with Metrolinx to prepare the business case and other supporting technical data and documents necessary to help prioritize funding for the Yonge Subway extension to the Richmond Hill Centre.

For more information on this report, please contact Loy Cheah, Director, Transportation Planning at Extension 5024 or Paul May, Chief Engineer, York Region Rapid Transit Corporation at Extension 1030.

This report has been prepared jointly with the President of the York Region Rapid Transit Corporation. The Senior Management Group has reviewed this report.