

**Yonge Subway Richmond Hill Extension**  
**By Steve Munro**  
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Demand for travel exists between the central part of York Region and many locations within the 416 notably, but not exclusively, the core area. Where do these trips start? Where are they going? We don't know, because nobody has bothered to publish details.

The essential point is that we are designing a network, not one route. Far too much TTC planning has been route-centric, and this leads to "how do we fit it in" rather than "what alternatives might there be" analyses.

Metrolinx already has its regional plan and demand projections. Travel simulations for 2031 show that the combined effect of their proposed network is to lower, not raise, demand on the central part of the YUS and BD subways by 2031.

<b>Route</b>	<b>Status</b>	<b>Characteristics</b>	<b>Projected 2031 Peak Hour Demand<sup>1</sup></b>
<b>Richmond Hill GO</b>	15 Year Plan	Regional Rail Minimum headway 10 minutes	
	25 Year Plan	Express Rail Minimum headway 5 minutes	18,100
<b>Subway Finch to Richmond Hill</b>	15 Year Plan		8,800
<b>Don Mills LRT Danforth to Hwy 7</b>	15 Year Plan		5,000
<b>Downtown Subway</b>	25 Year Plan		17,500
<b>Yonge Subway</b>	Existing	2008 demand is 28,500 Design capacity is 25,500 (25.5 trains/hr)	25,400
<b>Bloor-Danforth Subway</b>	Existing		15,400

These are not the scribbles of some wild-eyed transit critic, these are Metrolinx official proposals and projections from "The Big Move". Clearly, the network of new lines completely eliminates the need for substantial capacity upgrades on the Yonge line by way of more frequent trains, longer trains or station reconstruction.

<sup>1</sup> Source: *Modelling Backgrounder to The Big Move*, December 2008

The TTC's estimates for opening day ridership on the Richmond Hill line derive from the Metrolinx figures, but these assume that both GO and the DRL are present to divert riding from the Yonge Subway. The TTC claims that no additional service would be required on the existing line, but this makes no allowance for riding growth over the next eight years. The TTC's own Subway Fleet plan's states<sup>2</sup> that the Yonge line is running about 10% less capacity than demand today and foresees growth at 1.35% yearly.

The Downtown line provides a new route from the core to the BD subway (and possibly beyond) to disperse demand. Recent events have shown the problems that arise when one major link in a network is lost, and the more potential routes a system has, the more resilient it will be to disruption of one component.

The Don Mills corridor is a special case because the logical break between subway and LRT technology may not be Bloor Street, but further north at a major node, Don Mills and Eglinton. An early proposal for the DRL extended north to Eglinton, but the DRL itself fell out of favour, and this option was not considered in any recent plans. It should be revived, and the demand model rerun to see the effect on network flows in the corridor.

Metrolinx projects that demand on VIVA north from Richmond Hill will reach 5,800 per peak hour by 2031. This will strain the capability of a bus-based system, but it is nowhere near the level needed to justify further extension of the subway. This is LRT territory, a planned future service level for VIVA, and I must ask whether the appropriate changeover point from LRT to subway is at Richmond Hill or at Steeles.

A North Yonge LRT line could be built partly underground as we already plan for Eglinton, but this has not been examined as an alternative. Moreover, such a line could be the spine of a future York Region LRT network, not simply a stub hanging off of the Yonge Subway.

What's missing in "The Big Move" is a description of how we get from now to 2031, and what demands will look like as various new services are implemented over the years. Current TTC plans for capacity increases could be obsolete once the full Metrolinx plan is in place.

Vital work is needed on various staging options for routes serving the Yonge and Don Mills corridors. We need to see demand models for other configurations for year 2021 (corresponding to the Metrolinx 15 year plan) such as in the table below.

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<sup>2</sup> Subway Fleet Plan 2009, 2009-2013 Capital Program, Page 3.

Line	Base	Opt A	Opt B	Opt C	Opt D
Subway to Richmond Hill	*	*			
Subway to Steeles			*	*	*
GO Regional Rail to Richmond Hill	*		*	*	*
GO Existing Service to Richmond Hill		*			
LRT Steeles to Richmond Hill			*	*	*
Downtown Subway East to Danforth Don Mills LRT Danforth to Hwy 7	*			*	
Downtown Subway East to Eglinton Don Mills LRT Eglinton to Hwy 7					*

The “base” option above is the Metrolinx 15-year plan. Other options include:

- A: Only the subway extension would be built.
- B: A subway to Steeles plus GO and LRT improvements in York Region.
- C and D add two configuration of the Don Mills LRT and Downtown Subway (east branch).

We need to understand how various options would affect the need for

- additional service and capacity on the Yonge and Bloor subways
- fleet and carhouse requirements
- capacity improvements and reconstruction of downtown stations and the Bloor/Yonge interchange.

The list of options is not exhaustive. Other permutations and construction sequences are possible. The problem today is that nobody is looking at those options.

This is contrary to the very principles on which Metrolinx was ostensibly founded -- regional planning, careful study of the network as whole, consideration of alternatives, and planning for a fiscally responsible implementation of services.

Let me be clear: I do not oppose expansion of the transit system. I oppose spending billions when there are better alternatives worth looking at. We need more transit, not less, and we need options that make the best use of whatever funds might be available.

Reviewing the alternatives will not harm the timelines for any short-term construction projects. Neither the Don Mills LRT nor the Richmond Hill subway is close to the start dates for construction or vehicle procurements.

We will achieve a better, stronger network if only we will give the Yonge and Don Mills corridors the alternatives evaluation they deserve.