June 2025

The Sheppard Subway Problem

All of Toronto is facing a road congestion problem that will worsen as the population of the GTA core increases rapidly over the next 30 years. It is a brutal situation that must be met head-on by attracting many more people to public transit. Unfortunately, planned rapid transit expansions contained in the government of Ontario's Greater Golden Horseshoe Transportation Plan and incremental transit efforts by local municipalities, and increases in walking and cycling, will likely not be enough to reduce traffic congestion.

Highway 401 is being widened in Peel Region, and the GGH plan includes a stated priority to add road capacity to the highway in Toronto. This now includes a vision for a new highway tunnel under the existing Highway 401, for which a feasibility study is underway. Unfortunately, adding road capacity will result in more traffic in Toronto that will clog city streets that cannot be widened, resulting in longer periods of traffic gridlock and misery. The solution to road congestion is to provide transit alternatives.

Getting quickly across the northern half of Toronto by rapid transit is where the focus of funding needs to be. People must be able to easily and seamlessly traverse all of Toronto by rapid transit from east to west, and be able to make connections to north-south transit. The Eglinton LRT will try to do that for the southern half of Toronto. For the northern half of Toronto, a single new rapid transit line needs to be built that is cross-boundary, from Pickering and into Mississauga. The **401RT Express** is a concept for rapid transit that has evolved over several decade to provide that kind of service. It is envisaged as a 90-kilometre rapid transit line, with up to 50 stations, that can compete directly and effectively with Highway 401. The 401RT Express would be aligned above grade (elevated) along the south edge of Highway 401 from Liverpool Road in Pickering to Derry Road in Mississauga, with a branch extending west of Islington Avenue to Pearson International Airport and its surrounding employment megazone.

Unfortunately, there has been no indication that such a rapid transit line across the core of the GTA is being considered. Instead, a great deal of time and money will be spent on incremental projects, such as extending the much shorter **Sheppard Subway**, which will generate few new transit users in Toronto.

Scarborough residents should have access to more and better rapid transit. However, extending the Sheppard subway is far from the best solution for Toronto. West to east, the northern half of Toronto is 40 kilometres wide. The Sheppard Subway, if extended eastward to Scarborough Centre, will be just 14 kilometers long, and may cost \$5.3 billion to extend. Extending it to the Sheppard West subway station would add just 4.4 kilometres (approx. \$3 billion).

Importantly, the Sheppard Subway will fail to provide seamless service to destinations such as Pearson International Airport and its huge adjacent employment areas, or to Mississauga or Pickering, all of which are very significant trip origins and destinations in the Toronto area. For points east of the planned Sheppard Subway extension, Toronto is planning to rely on the Eglinton East LRT to improve transit service, principally to the University of Toronto's Scarborough campus and to the Malvern community.

Even after the Sheppard Subway extensions and Finch West LRT are built, a trip by transit from Scarborough to the Pearson airport will be brutal. For example, a person traveling from Markham Road at Finch Avenue

would have to ride a bus to Sheppard Avenue, wait for a Sheppard bus (or LRT), take it to the Sheppard subway, wait for a train, ride the train to the Line 1 subway, wait for a train, ride it to Finch, wait for the Finch LRT (if extended to Yonge), ride the Finch LRT to Highway 27, and wait for a bus to the final destination. All in all, almost a two-hour trip. That is not acceptable.

New rapid transit must enable Scarborough residents <u>and all Torontonians</u> to quickly and comfortably access myriad destinations across <u>all</u> of Toronto, and not be largely focused on Scarborough. It is <u>not enough</u> to give Scarborough residents more comfortable and faster rides within Scarborough or to get to/from the Line 1 subway, the Ontario Line, or to the planned Line 2 subway at Scarborough Centre. That is especially so when it is possible for a single continuous city-wide 401RT Express (or similar east-west rapid transit line) to give travelers all of the key benefits that the Sheppard extension would do for them, almost everything the Eglinton East LRT will do for them, and much, much more.

The effects of the **401RT Express** would be transformative. Its speed of service, connectivity across the region, affordability and high visibility would produce massive modal shifts to transit. It would draw enough ridership to rescue Highway 401, 427, the Don Valley Parkway, the Pearson airport area, and many streets in Toronto from worsening congestion. It would reduce congestion in downtown Toronto. It will significantly increase employment opportunities across the core of the GTA for Scarborough residents, and create rapid access to 100+ north-south transit services in the region.

An extended Sheppard Subway will not be able to do that. Nor will it be affordable to tunnel the Sheppard subway west of the Sheppard West subway station through the planned Downsview community and beyond; moreover, it would not be near the jobs and services that are located along Highway 401. Tunneling the Sheppard Subway to the 401RT Express at Highway 401 would be a diversion that slows the 401RT Express's overall speed of travel – the 401RT Express would be designed to travel at relatively higher speeds between stations than the Sheppard Subway.

The 401RT Express would have the capacity to absorb all travel demand growth for Highway 401 for decades beyond 2051. Overall, by 2051 it could be carrying close to 400 million transit trips per year. A full description of the 401R Express concept is at www.401rt.ca.

People need and deserve the kind of relief from road congestion that the 401RT Express can provide, and that the Sheppard Subway and Eglinton East LRT cannot provide.

The Sheppard Subway extension to McCowan Road, the Eglinton East LRT, plus a Sheppard Subway extension to Sheppard West subway station may cost approximately \$14 billion (illustration below). For that amount, the 401RT Express can be built from the Yorkdale shopping mall and Yorkdale subway station to Port Union Road (29 kilometres), and include an extension of the Eglinton LRT to Kingston Road.

With a 401RT Express, the Malvern community would continue to be served by bus routes that would connect to the Neilson, Morningside, Markham, and McCowan 401RT stations; this would create superior access to all of Toronto for Malvern residents.

Highly important is that, for the rapid transit segments identified above, and based on the approximate number of new transit trips estimated (*the most appropriate measure of success*), the 401RT Express would be more than twice as cost-effective as the Sheppard subway extensions and the Eglinton East LRT (table below). Notably, modal shifts to transit would increase geometrically as the 401RT Express is extended farther east and west from Port Union and from Yorkdale, respectively.

The cross-boundary 401RT Express or similar rapid transit line across the core of the GTA is **essential** if there is to be any hope of reducing road traffic congestion from today's unacceptable levels. It must be a higher priority than local rapid transit improvements, including the Sheppard Subway.

Therefore, the question is, to what degree will the Sheppard Subway be necessary, or be duplicative and a hindrance to the development of a 401RT Express?

The 401RT Express will draw significant volumes of ridership from the Sheppard Subway – transit users on north-south bus routes would opt to ride to the closely parallel 401RT rather than to the Sheppard Subway. Travelers who are projected to use the proposed Eglinton East LRT to access

Comparing Effectiveness:	Infra Cost	New	Cost per	Kms.
	(\$m)	Trips/Yr	New Trip	Track
Sheppard Sbwy - Sheppard		(m)		
West Stn to McCowan Rd.	\$9,600	29.0	\$331	13.8
Eglinton East LRT	4,700	11.0	\$429	19.1
Total for Current Plans	\$14,300	40.0	\$358	32.9
401RT Express - Yorkdale to				
Pt. Union Rd.	\$12,200	82.7	\$148	29.2
EELRT to Kingston Rd. only	1,700	3.3	\$515	4.5
Total for 401RT Alternative	\$13,900	86.0	\$162	33.7

Cost effectiveness advantage for 401RT Express is **2.21** times current plan, based on cost per new transit trip per year

Malvern or the University of Toronto Scarborough campus from west of Scarborough would more easily use the 401RT. Extending the Eglinton East LRT to the Eglinton/Kingston Road intersection would render the remainder of the Eglinton East LRT unnecessary. Other points to consider:

- 1. The extended Sheppard Subway from Yonge Street to McCowan Road will continue to be too short to be of use to the great majority of commuters in Scarborough.
- 2. A proposed integration of subway Lines 4 (Sheppard) and 2 at or north of Scarborough Centre would be a mistake. It would terminate the possibility of further subway extensions to east of McCowan Road and into Pickering as travel demand between Pickering and Toronto increases. It will also preclude the possibility of extending Line 2 to Finch Avenue East.
- 3. Line 4, Line 2, and the proposed Eglinton East LRT will not reduce traffic congestion on Highway 401. This is important because dependence on travel by automobile on Highway 401 is a principal cause of traffic congestion in downtown Toronto and across all of Toronto. Moreover, the functionality of the highway is essential for the transport of goods/freight.
- 4. Because of its relatively slow speed compared to travel by automobile, the Eglinton East LRT extension to UTSC and Malvern will not generate magnitude of modal shifts to transit that would reduce road congestion in Scarborough.
- 5. The 401RT Express will attract a much larger modal shift to transit than the Sheppard Subway.
- 6. Because it would be almost entirely above ground, the pace of construction of the 401RT Express per kilometre would be faster than for tunneled Sheppard subway extensions.

A danger is that the \$14 billion Sheppard Subway extension and Eglinton East LRT will proceed to be built, only to be realized too late that once the essential 401RT Express is built, the Sheppard subway and Eglinton East LRT will have become expensive "white elephants" – operationally non-viable. Although it is a dramatic change from current plans and processes, I suggest that the entire Sheppard Subway should be closed once the 401RT Express is completed between Yonge Street and McCowan Road.

A mixture of express and local bus services along Sheppard Avenue could serve Scarborough residents just as well as the subway, and could include seamless/continuous services from Port Union Road to Weston Road.

Land no longer used for the Sheppard Subway can be repurposed for high density housing for seniors, low-income households, and people who need health and social supports. This would be a benefit as a contribution to reducing the housing affordability crisis.

This is a discussion for the public that should happen. The Sheppard and Eglinton East initiatives are still in investigative stages. The 401RT Express or similar rapid transit concept should be introduced to the public. The public should not be kept unaware of the drawbacks of proceeding with current plans, and aware of the transformative benefits of the alternatives; the choices are highly different and highly significant. A potential \$14 billion mistake must be avoided.

John Stillich

Please contact me for more information; I'd be delighted to speak with you. Please, also access www.401rt.ca for a detailed description of the 401RT Express concept.

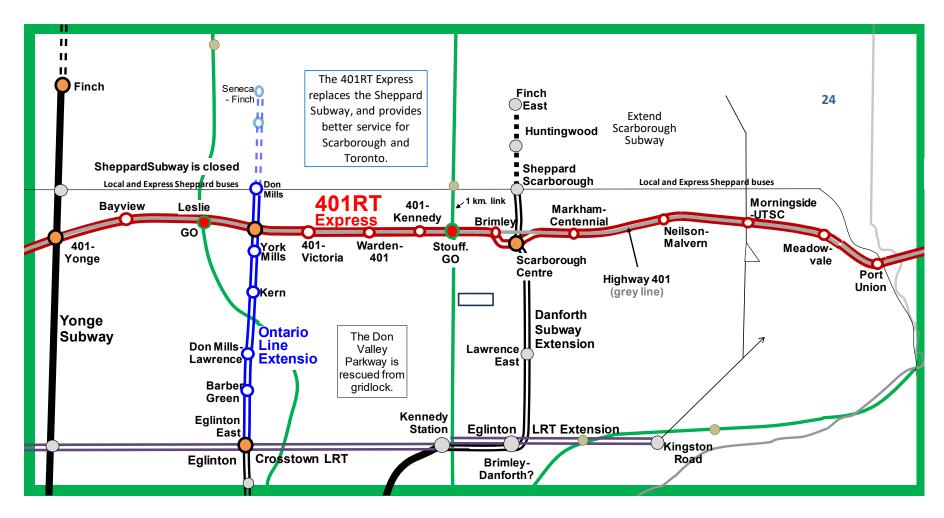
About me: My background until retirement was a career as a corporate financial analyst at Queen's Park for the Ministry of Community and Social Services (MCSS) and the Ministry of Health and Long-Term Care, focusing on program expenditure analysis and planning, budgeting for several ministry programs, and coordinating budget processes. After my retirement, I have focused my attention on sustainable transportation and land use planning, including having worked with a small (no longer active) organization called the Sustainable Urban Development Association. I also produced a document entitled "Newburg: Embracing High Density at the Urban Fringe". In 2018, my wife and I moved from Mississauga to Innisfil, where we live near our daughter and her family.

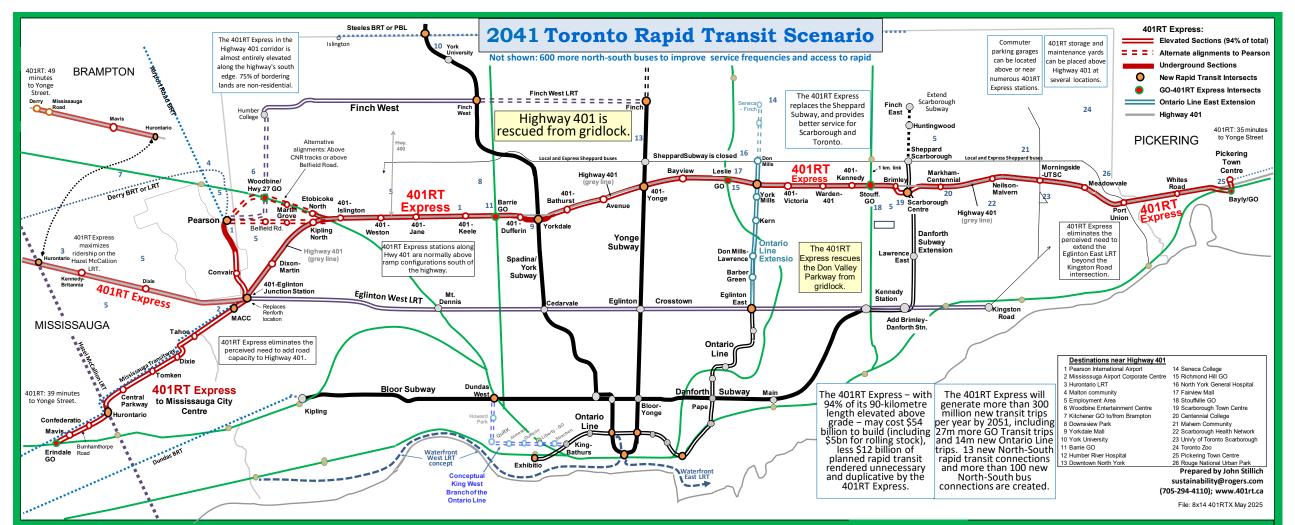


(Illustrations next pages)

401RT Express As Better Rapid Transit For Scarborough And Toronto

401RT Express replaces the Sheppard Subway.







30+ years from now, ther will be a million more people living in Toronto. The **401RT Express** is essential if highways and local streets in Toronto are to be decongested. Currently-planned rapid transit expansions will struggle to keep up with travel demand growth, and will not reduce overall use of motor vehicles on city streets. Adding road capacity to Highway 401 is not a solution; its impact will be to encourage driving and to increase congestion on local roads.

The 401RT Express should be recognized as inevitable and urgent. The 401RT Express's seamless length, speed of service, connectivity, and high visibility will make it a success. It will render numerous current rapid transit initiatives unnecessary and operationally nonviable: the Eglinton West LRT Phase 2 extension to Pearson International Airport, the Sheppard Subway extn (and the Sheppard Subway itself), most of the Eglinton East LRT, and the Jane Street LRT. Spending on these will waste an estimated \$12 billion.

The \$54 billion **401RT Express** (including \$5bn rolling stock) is highly affordable, and is estimated to be three times as cost-effective as rapid transit initiatives currently being implemented, based on new transit trips generated. Its net cost to build would be as low as \$42 billion (after cost avoidances of aforementioned initiatives). Federal cost sharing can be 40%. The 401RT Express (or similar) would be transformative for transportation in Toronto, and is essential for achieving climate change goals. It is essential for tens of thousands of households that struggle with the high costs of automobile ownership and use. Visit www.401rt.ca for more information. Call John Stillich at 705-294-4110 or visit www.401rt.ca for more information.

