401RT Express

1247 Mary-Lou Street, Innisfil, Ontario L9S 0C2; T: 705-294-4110; www.401rt.ca

Transforming Transportation in Toronto

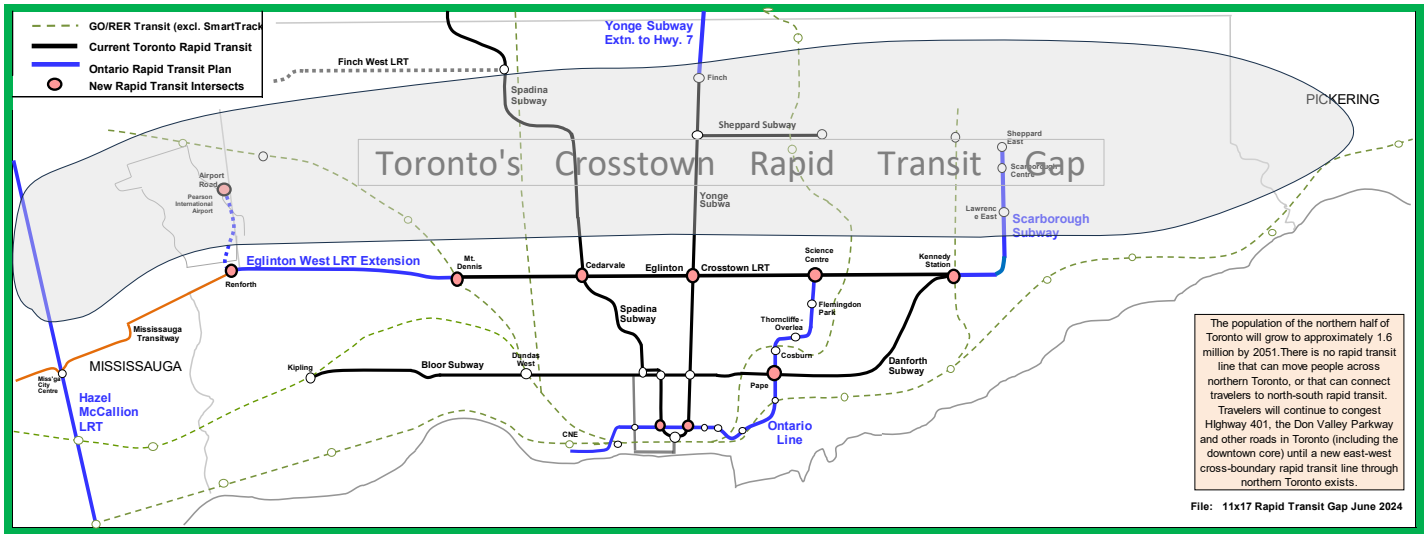
February 5 ,2026

The 401RT Express: Rescuing Transportation in Toronto

By 2055, a million more people will call Toronto home, and many thousands more will commute into the city from neighbouring municipalities. Travel demand growth will offset the expected transit ridership growth of transit initiatives identified in the Ontario Government's Greater Golden Horseshoe Transportation Plan for Toronto.

Achieving a sustainable transportation system in Toronto must recognize that most of Toronto's traffic problems originate in the suburbs, including in the northern half of Toronto, where 1.3 million residents and 300,000 jobs today will increase by approximately a third or more by 2055. Highway 401 in the core of the Toronto area is at high risk of becoming non-functional due to traffic gridlock. The Premier of Ontario has recognized the danger and has proposed to add highway capacity by way of a tunnel under Highway 401. The end result may be better traffic flow on Highway 401 where the tunnel exists; however, the tunnel's effect will be to increase the use of, and dependency on, using personal automobiles, and will add to congestion on municipal roads, many of which will already be congested and cannot be widened.

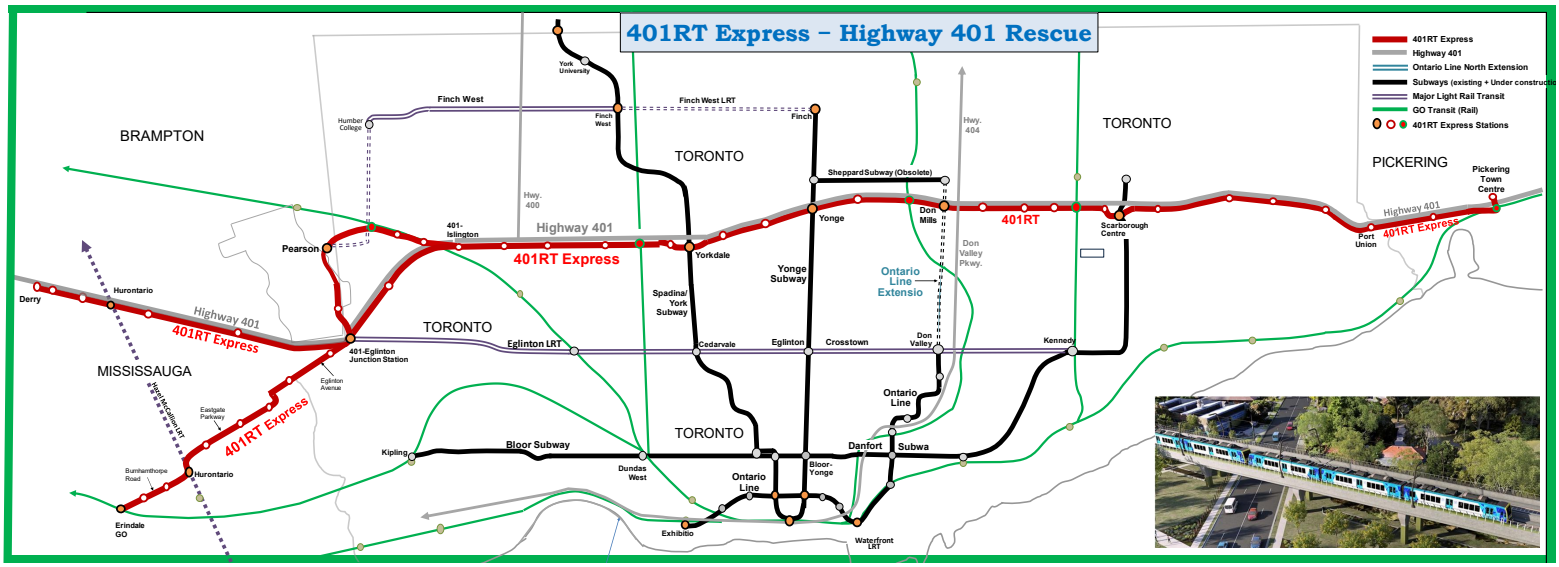
Gridlock on highways and municipal roads must not be allowed to happen. A principal reason for congestion in the core of the Toronto area, and particularly on Highway 401, is the lack of practical public transit options across the enormous rapid transit gap in northern Toronto. There is simply no practical alternative to driving.



Fixing the gap requires a continuous east-west rapid transit line from Mississauga to Pickering through the underserved northern half of Toronto.

The rapid transit line illustrated below – the ***401RT Express*** – is a full-scale 85 kilometre rapid transit line with up to 50 stations that extends from Pickering Town Centre through northern Toronto to Islington Avenue at Highway 401, and westward from there consisting of two divergences, one continuing along Highway 401 into northwestern Mississauga, and the other to Pearson International Airport and south to Mississauga's City Centre.

Without this rapid transit line, or something very similar, there is no hope of achieving the level of reductions in automobile traffic necessary to avoid increases in traffic congestion in Toronto, and little hope of avoiding the construction of the Highway 401 tunnel.



The 401RT Express would connect to up to 13 north-south rapid transit lines and 100+ municipal bus routes. It would transform transportation in the core of the Toronto area and increase quality of life significantly. The 401RT Express would ease the financial burdens of many thousands of householders struggling with costs of a second or third automobile, which may cost between $11,000 to $20,000 per year or more to own and use. The mobility of almost 20% of adults in the Toronto area would be dramatically improved. A list of more than 60 general benefits is available at www.401rt.ca.

The 401RT Express is likely to be extraordinarily successful. Major shifts from driving to the 401RT Express will occur because travel on Highway 401 and on alternative local roads will often be slower than traveling on the 401RT Express for the east-west segment of most trips. Added to this basic modal shift, other factors will increase transit ridership by 2051:

- GO Transit's six intersects with the 401RT Express will generate approximately 27 million new GO Transit trips and 24 million new 401RT Express trips.
- The Islington-to-Pearson-to-Erindale GO branch of the 401RT Express will generate additional trips to and from downtown Mississauga, the Mississauga Airport Corporate Centre, and points in Toronto.
- The transit modal share of trips to and from Pearson International Airport and its adjacent employment area will be multiple times higher than is currently the case.
- Additional municipal buses on north-south routes intersecting with the 401RT Express will generate transit ridership travelers whose destinations are not the 401RT Express; an estimate is 52 million new transit trips per year by 2055.
- Some urban development in the form of high density housing and office uses at and near the 401RT Express will have higher than average rates of transit usage.
- High costs of automobile ownership and use will accelerate the shift of trips to the 401RT Express.
- The growth in truck movements will also affect gridlock and encourage shifts to transit for commuters.

Without the 401RT Express, those additional transit trips will not occur. Overall, the 401RT Express will generate more than 400 million new transit trips per year by 2055.

Key destinations directly served by the 401RT include Pickering Town Centre, Scarborough City Centre, the Line 1 subway, Yorkdale, Pearson International Airport and its surrounding employment area, and the

Mississauga City Centre area. The northwestern arm of the 401RT Express would reduce dramatically the highly congested portion of Highway 401 between Dixie Road and Highway 400.

The rapidly-increasing use of artificial intelligence will have an effect on both transit ridership and travel by automobile. Based on one scenario, a 50% net loss of office jobs and a 20% net loss of non-office and transport jobs would result in Highway 401 traffic remaining at 2025 levels by 2055, and reduce 401RT Express and GO Transit by ridership by up to half. Ridership would be slightly less per station than for the Line 2 subway; operating revenue-to-cost ratios among the three affected municipalities would exceed 50%. However, estimates of AI's effect on employment and job creation vary widely, and are highly uncertain.

The 401RT Express would require an extension of the Ontario Line from Eglinton Avenue East to the 401RT in order to prevent an overloading of the Line 1 subway on Yonge Street; an extension of the Ontario Line to Sheppard Avenue East is in the Government of Ontario's plans for future rapid transit.

The 401RT Express is proposed to be almost entirely elevated above ground – 85 kilometres from end to end, including 64 kilometres along the Highway 401 corridor.

The 401RT Express would render some existing transit expansion plans unnecessary. The 401RT Express would attract significant ridership from the Eglinton East LRT extension to Malvern and the Sheppard Subway, rendering them non-viable. The Sheppard Subway should be eliminated entirely, and be replaced by enhanced bus services from Port Union Road to Weston Road. The Eglinton West LRT extension from Renforth to Pearson would be replaced by the 401RT Express. In total, a cost avoidance of approximately $13 billion can be realized (view illustration below).

The 401RT Express would cost an estimated $62.5 billion to build, plus approximately $6 billion for rolling stock. It would very likely be cost shareable with the Government of Canada; the Highway 401 tunnel, which could cost $90 billion, would not be shareable. Overall, the 401RT Express could be $50 billion less expensive for Ontario to build than the highway tunnel.

When compared to the recently-approved Toronto-to-Quebec City high speed rail service, the 401RT Express would be many times as cost effective, based on cost per transit user (comparison table below). Importantly, the 401RT Express is an immediate need to maintain the functionality of Highway 401 and to reduce congestion in the Toronto area; the HSR is not as critical.

The 401RT Express, as an elevated rapid transit line, can be built relatively quickly, with six to ten independent crews working simultaneously on 401RT Express segments, stations, operating systems, and maintenance yards at various locations, once preconstruction planning is completed. Overall, up to 40,000 jobs per year can be created for up to ten years of construction. Visit www.401rt.ca for more information in the downloadable file "Rapid Transit Rescue".

The 401RT Express should be seen as a continuation of current rapid transit expansion activities. Given future growth and road congestion in the Toronto area, the construction of the 401RT Express should begin as current rapid transit projects begin to wind down, with advance planning and evaluations beginning as soon as possible.

Note 1 : Current and planned rapid transit initiatives rendered obsolete by the 401RT Express:

1. The $5.3 billion Eglinton East LRT to Malvern (+rtn. to McCowan), less a useful $1.7bn extension of the LRT to Kingston Road. Access to Malvern and the University of Toronto Scarborough Campus is faster for many travelers via the 401RT than the LRT.
2. The $1.3 billion Eglinton West LRT Renforth to Pearson. The Line 1 subway and 401RT combination would deliver most downtown trips to Pearson as fast as the Eglinton West LRT and provide direct transit trips to Pearson from northern Toronto.
3. The $7.5 billion Sheppard Subway extension to Scarborough Centre station. The Sheppard Subway is closely parallel to the 401RT, which would draw users of the Sheppard Subway, to the point that the subway would be operationally non-viable.
4. Savings would be partially offset by decommissioning costs of the Sheppard Subway.

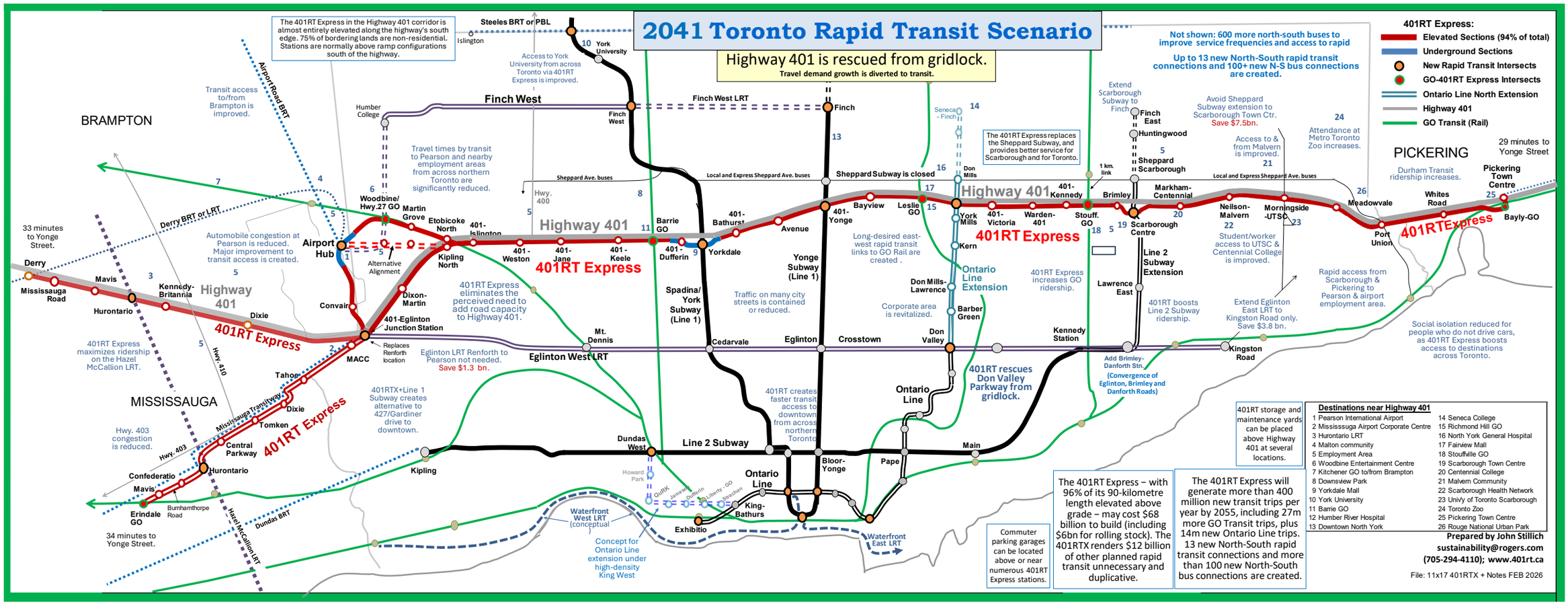
401RT Express Summary	**Infra-structure Cost $m**	**2055 Trips per Year Millions**	**Cost per New Trip**	**Kms. Of Track**	**Cost per Km. of Track**
401RT Express - Erindale GO to Islington	12,400	70	178	31.7	$391
401RT Express - Derry to Pickering	41,700	205	203	53.3	$782
401RT Express - Rolling Stock (trains+buses)	6,100				
Maintenasnce and storage yards	8,250				
Bus ridership increases (non-401RTX trips)		52			
401RT Express Effect on GO Transit	($ by GO)	51			
Other (Pearson, urbanization, Sheppard Sbwy, Other)		60			
Total Recommended Infrastructure	68,450	438	$156	85.0	$805
N.B. The 401RTX requires an extension of the Ontario Line northward from Eglinton; this is already in MTO's Greater Golden Horseshoe Transportation Plan.					
Planned rapid transit rendered obsolete by the 401RT Express:					
Sheppard Subway Extn. to Scarboro Ctr.	7,500	6		9.0	$830
Less Decommissioning Sheppard Sbwy; net	-800		$626		
Eglinton West LRT - Renforth to Pearson	1,300	4		7.6	$171
Eglinton E LRT - Kndy to Malvern to McCowan	5,300	11		19.1	$278
Eglinton E LRT - Kndy to Kingston Rd (optional)	-1,700	-3	-$515	-4.5	$378
Total Cost avoidances*	11,600	18	$647	31.2	$371

* The 401RT draws ridership from these higher-order transit routes, rendering them operationally non-viable. Overall, these trips are not lost; they would be served by existing bus services or trips are diverted to the 401RT Express.

N.B. Excludes shortening of the planned Durham-Scarborough BRT to east of Liverpool Rd. (not itemized)

Comparing Rapid Rail Concepts	**Millions of Trips/year 2051**	**Gross Infra. Cost ($Mil)**	**Cost per User**	**Kms.**	**Cost to Gov't. of Canada**
Alto HSR Toronto to Quebec City					($m)
- Recent Estimate	40	$90,000	$2,250	1,000	unknown
401RT Express*	438	$62,400	$142	85	$37,440
Cost effectiveness advantage of 401RT Express:			**15.8**		

* Excluding rolling stock



30+ years from now, there 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 close to $12 billion.

The $68 billion **401RT Express** (including $6 bn 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. 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.