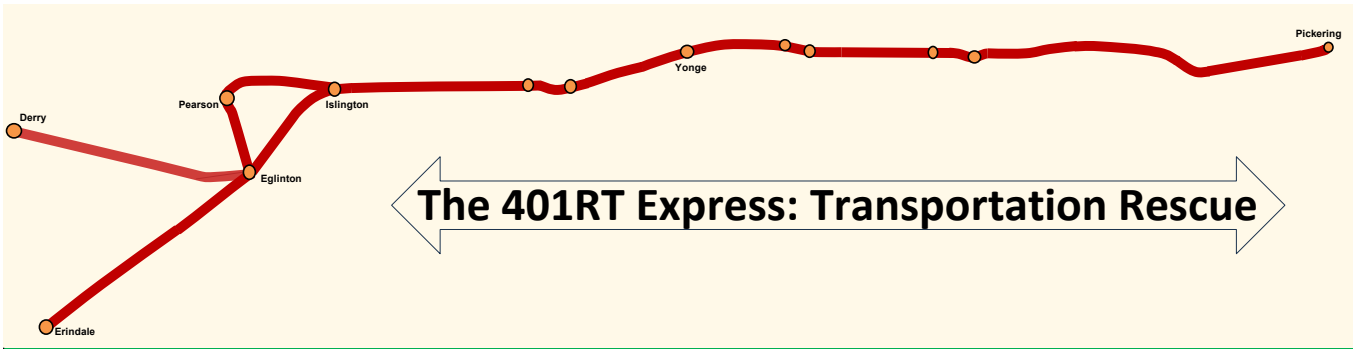


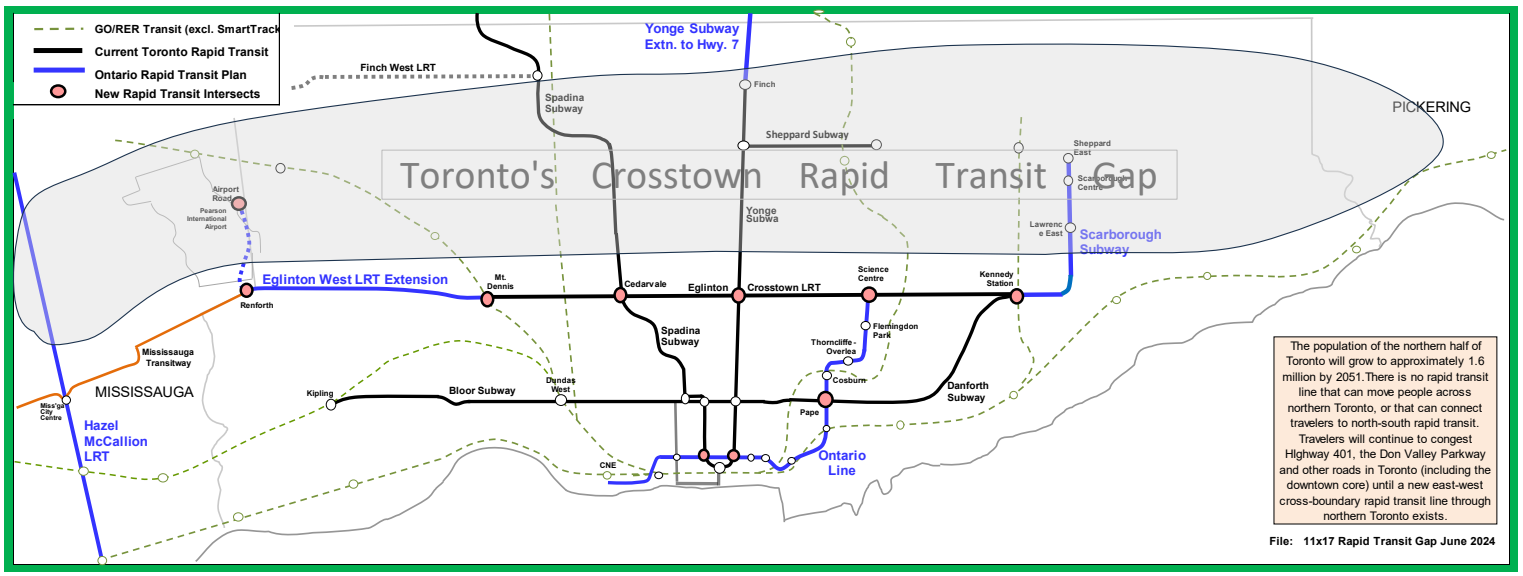
June 2025

The 401RT Express: Rescuing Transportation in Toronto

By 2051, 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.

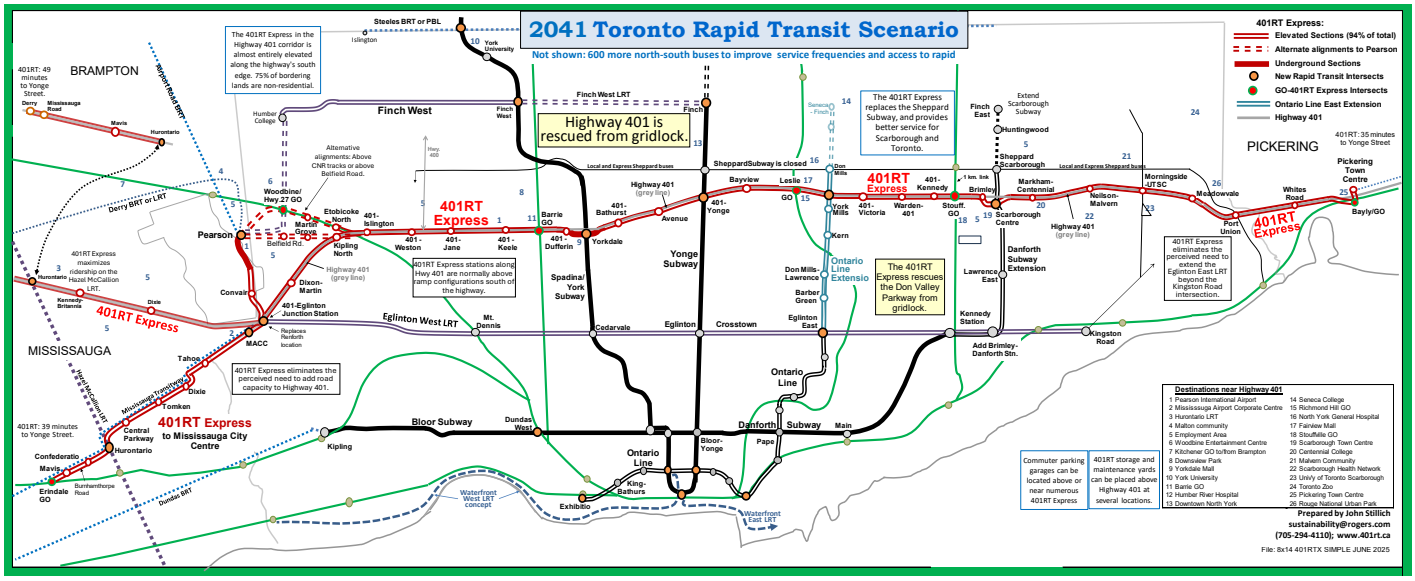
Achieving a sustainable transportation system in Toronto must recognize that most of Toronto's traffic problems originate in the suburbs, including in the northern half of Toronto, where 1.3 million residents and 300,000 jobs today will increase by approximately 30% by 2051. Until there is a practical public transit alternative to driving across northern Toronto or to/from northern Toronto, congestion on Highway 401, the Don Valley Parkway, and many other roads will worsen. The number of cars and trucks that use Highway 401 between Derry Road and Liverpool Road – more than a million every day – will increase to the point of gridlock for long periods each day. That must not be allowed to happen.

The enormous rapid transit gap across northern Toronto must be resolved.



The most significant piece of public transit infrastructure preventing major modal shifts to public transit is the absence of 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 rapid transit line with 50 stations that extends 90 kilometres from Pickering Town Centre through northern Toronto to Islington Avenue at Highway 401, and westward from there consisting of two divergences, one to Pearson International Airport and to west of Mississauga's City Centre, and the other continuing along Highway 401 into northwestern Mississauga.



Without this rapid transit line, or something similar, there is no hope of achieving levels of reductions in the use of automobiles necessary to reduce or end road traffic congestion in Toronto by 2051. The 401RT Express would connect to up to 13 north-south rapid transit lines and 100+ municipal bus routes. Its impacts 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. While a car costs between $11,000 to $20,000 per year or more to own and use, a TTC transit pass in 2024 cost just $1,900 per year.

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 significantly 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 401RT Express 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 other points;
- 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 buses on north-south routes intersecting with the 401RT Express will carry more travelers whose destinations are not the 401RT Express; an estimate is 52 million new transit trips per year by 2051;

- 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 movement 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 2051.

Key destinations directly served by the 401RT would be Pickering Town Centre, Scarborough City Centre, the Line 1 subway and the Ontario Line, 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 401RT Express would require an extension of the Ontario Line from Eglinton Avenue East to the 401RT; this extension is already in the Government of Ontario's rapid transit plans.

The 401RT Express is proposed to be almost entirely elevated above ground – 90 kilometres from end to end, including 64 kilometres over the Highway 401 corridor. It would cost close to $49 billion to build, plus approximately $5 billion for rolling stock.

The gross cost of the 401RT Express can be significantly reduced, because it would render some currently planned rapid transit initiatives unnecessary and operationally non-viable: Most of the Eglinton East LRT extension, the Eglinton West LRT extension from Renforth to Pearson, and the Jane LRT.[Note 1] Moreover, the 401RT Express would divert most Sheppard Subway users; the Sheppard Subway would not connect well to the 401RT Express, and should be eliminated entirely and replaced by enhanced bus services from Port Union Road to Weston Road. Not building the planned Sheppard Subway extensions and eliminating the Sheppard Subway would save approximately $5.5 billion, net of subway decommissioning costs. In total, $12 billion can be saved. In this scenario, the 401RT Express would be five times as cost-effective as the recommended offsets, based on cost per new transit user.

Among its many benefits, the 401RT Express will reduce highway and road congestion in Toronto, provide the northern east-west link to up to 13 north-south rapid transit lines, boosting their ridership, and reduce the financial and social costs of dependency on travel by automobile for tens of thousands of households. A list of more than 60 general benefits is available at www.401rt.ca.

When compared to the recent push for a Toronto-to-Quebec City high speed rail service, the 401RT Express can be more than ten times as cost effective as the HSR, based on cost per transit user (comparison table below). Importantly, the 401RT Express is an immediate need to maintain the functionality of Highway 401; the HSR is not as critical.

The 401RT Express should be seen as a continuation of current rapid transit expansion activities. Given the rapidity of growth and road congestion in the Toronto area, the construction of the 401RT should begin as current rapid transit projects begin to wind down (by 2030), with advance planning beginning as soon as possible. Construction will be challenging, due to the speed that the 401RT must be built to overcome the congesting effect of growth in travel demand. Highway 401, the Don Valley Parkway and other roads will benefit somewhat from the Ontario Line, the Eglinton LRT and enhanced bus services, but their effects will be inadequate, and temporary.

John Stillich

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

1. The $4.5 billion Eglinton East LRT to Malvern, less a useful $1.8 bn 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 $2.6 billion Jane Street LRT. The 401RT, Finch West LRT, and Eglinton LRT (extended to Jane) would offload many longer-distance trips from Jane buses. LRTs will be in mixed traffic south of Hwy 400.
3. The $1.2 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.
4. The $6.3 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.

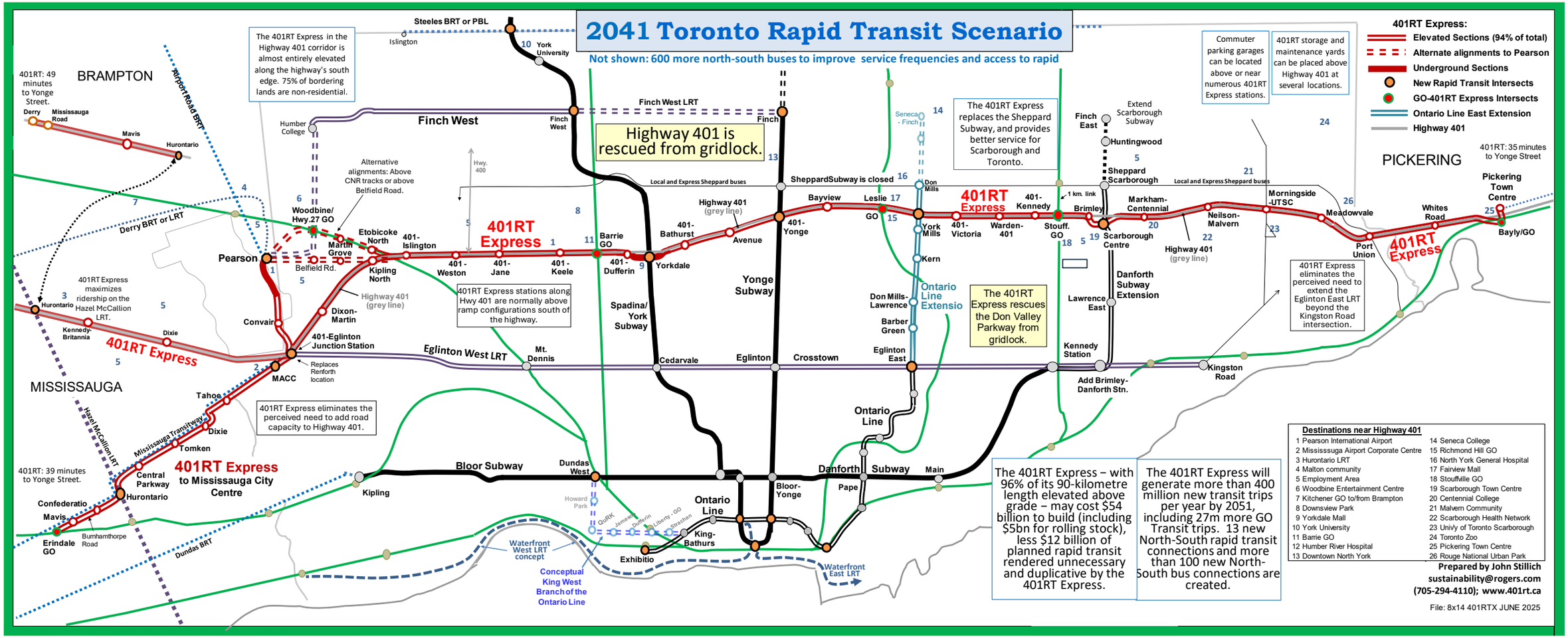
Comparing Rapid Transit Effectiveness	**Infra-structure Cost $m**	**2051 Trips per Year Millions**	**Cost per New Trip**	**Kms. Of Track**	**Cost per Km. of Track**
401RT Express - Pickering to Erindale GO	37,200	303	123	137.9	$273
401RT Express - Derry to Islington/401	10,300	61	168	16.0	$3,994
401RT Express - Rolling Stock	4,900		16		
401RT Express Effect on GO Transit	400	27			
Bus ridership increases	800	52			
Total Recommended Infrastructure	53,600	443	$121	153.9	$348
Recommended Expenditure Offsets:					
Sheppard Subway Extn. to Scarboro Ctr.	6,900	6		9.0	$675
Decommissioning Sheppard Sbwy; net	-800				
Eglinton West LRT - Renforth to Pearson	1,000	4	$479	7.6	$724
Eglinton E LRT - Kndy to Malvern to McCowan	4,500	11		19.1	$141
Eglinton E LRT - Kndy to Kingston Rd (build)	-1,800	-3		-4.5	$400
Jane Street LRT - Steeles to Bloor	2,600	8		16.5	$909
Total Expenditure Offsets*	12,400	26		47.7	$260
Net New Cost Commitment	41,200		$93		
Potential Gain in New Trips per Year		443			

* 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.

Comparing Rapid Rail Concepts	**Millions of Trips/yr by 2051**	**Gross Infra. Cost ($Mil)**	**Cost per New User**	**Kms.**
HSR Toronto to Quebec City				
Recent Cost Estimate	40	$90,000	$2,250	1,000
401RT Express (excl. rolling stock)	443	$48,700	$110	90
Cost effectiveness advantage of 401RT Express:			**20.5**	

2041 Toronto Rapid Transit Scenario

Not shown: 600 more north-south buses to improve service frequencies and access to rapid



Destinations near Highway 401

1 Pearson International Airport	14 Seneca College
2 Mississsuga Airport Corporate Centre	15 Richmond Hill GO
3 Hurontario LRT	16 North York General Hospital
4 Malton community	17 Fairview Mall
5 Employment Area	18 Stouffville GO
6 Woodbine Entertainment Centre	19 Scarborough Town Centre
7 Kitchener GO to/from Brampton	20 Centennial College
8 Downsview Park	21 Malvern Community
9 Yorkdale Mall	22 Scarborough Health Network
10 York University	23 Univ of Toronto Scarborough
11 Barrie GO	24 Toronto Zoo
12 Humber River Hospital	25 Pickering Town Centre
13 Downtown North York	26 Rouge National Urban Park

The 401RT Express – with 96% of its 90-kilometre length elevated above grade – may cost $54 billion to build (including $5bn for rolling stock), less $12 billion of planned rapid transit rendered unnecessary and duplicative by the 401RT Express.

The 401RT Express will generate more than 400 million new transit trips per year by 2051, including 27m more GO Transit trips. 13 new North-South rapid transit connections and more than 100 new North-South bus connections are created.

Prepared by John Stillich
sustainability@rogers.com
(705-294-4110); www.401rt.ca

File: 8x14 401RTX JUNE 2025

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 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.