

April 22, 2026

An Implementation Scenario for Rescuing Highway 401 in Toronto

This document presents a scenario for the construction of a rapid transit line across the core of the Toronto area at a pace necessary to prevent Highway 401 from becoming gridlocked and non-functional.

What's happening

Highway 401 from Highway 410 to east of Highway 404 is at risk of becoming non-functional due to traffic congestion brought on by rapid population and travel demand growth in the region. Much of highways 400, 404, 410 and 427 will also be operating at or over capacity within a decade. There is no plan for public transit that can reduce the travel demand for Highway 401 in Toronto – not the Sheppard Subway, not the Finch West LRT, not the Eglinton LRT; they are all too short, their operating speeds are too slow, or they're not well located to do the job.

The transportation crisis is a multi-billion annual drain on economic productivity and social wellbeing of Toronto. The costs and everyday travel misery will worsen, and Toronto's reputation as an attractive place to live or to do business will fall short of its potential.

To resolve the prospect of total gridlock on Highway 401, the government of Ontario is proposing to add road capacity to the highway by means of a highway tunnel (up to four lanes in each direction), or perhaps by double-decking the highway. Unfortunately, the end result of the tunnel will be to encourage more travel by personal automobile, and by 2055 may add up to 400,000 more trips per day by automobile to, and 400,000 trips from, Highway 401. Moreover, the project won't be completed until several decades from now, after gridlock on the 401 has arrived. The Highway 401 tunnel may cost \$90 billion to construct. The rapid transit component of the tunnel plan will not be operationally viable; limited stops and problems with access and egress will minimize its ridership.

Moving Travel Demand to Transit

Growth in travel demand by automobile needs to decline and to end. That will require enhancements to public transit well beyond what's in current plans by governments.

There is a **short-term measure** that can be taken while longer-term solutions are implemented. The government of Ontario can offer 100% capital grants to municipalities (province-wide) for expanding transit services, principally buses and supportive facilities. To encourage municipalities to maximize participation in the program, the capital grants should be coupled with an open-ended 50% annual subsidy for all transit operating deficits. These measures would be broadly welcomed.

However, that is far from enough. The more effective alternative to the government of Ontario's Highway 401 tunnel is more rapid transit. This should include a rapid transit line that can compete directly with Highway 401 across the core of the Toronto area, from central Mississauga to Pickering. The 401RT Express, a 65-kilometre east-west rapid transit line that follows the Highway 401 corridor from Derry Road to Liverpool Road, would do just that. It would be supplemented by a seamless 20-kilometre branch line that takes travelers to Pearson International Airport and its large adjacent employment area, and to downtown Mississauga.

The 401RT Express would have the ability to offset all travel demand for the 401 from Derry Road in Mississauga to Liverpool Road in Pickering. The 401RT Express is proposed to be almost-entirely elevated, and is estimated to cost approximately \$70 billion to construct, and is likely to be cost-



shareable with the government of Canada (historically at up to 40%). It will employ 40,000 workers at a time when unemployment is likely to be high, as a result of revised trade agreements with the U.S.A. and impacts of artificial intelligence.

Implementation Is A Race Against Time

The rapid march to gridlock on Highway 401 and other highways, and heightened unemployment, means that a wartime-like effort is needed to rescue the 401. During World War II, warships were built in a week or two, and warplanes rolled off the assembly line every hour. Given the seriousness of the Toronto area's transportation crisis, today's ten-year timeframes to build extensions of Toronto's subway lines are no longer good enough. According to the scenario below, the 401RT Express – almost all 85 kilometres of it elevated above grade – can be completed by 2039 – the expertise exists, the labour force can be trained to construct it, and underused industrial spaces can be put to work. It's a massive project comparable to, but much more effective than, the Premier's proposed Highway 401 tunnel.

The 401RT Express will require multiple partners working simultaneously on segments of the 401RT Express – a team of designers, teams of station builders (up to 50 stations of basic design), a team to build several maintenance and storage yards, perhaps eight+ separate teams to build the segments between stations, and several teams to construct the rail tracks and operational systems to make it work. Additionally, the 401RT Express concept includes more buses, and almost 800 Ontario-built rail cars.

The Timelines for Success

2026 – The 401RT Express and its benefits become widely known. Consultations with communities, First Nations, and other levels of government occur. There is acceptance that a feasibility study of the 401RT Express is warranted; it begins late in 2026. The highway tunnel feasibility study is completed by year end, and awaits the outcome of the 401RT Express study. The Ontario Government initiates a plan to provide 100% funding for municipal transit infrastructure, and 50% funding for municipal operating deficits.

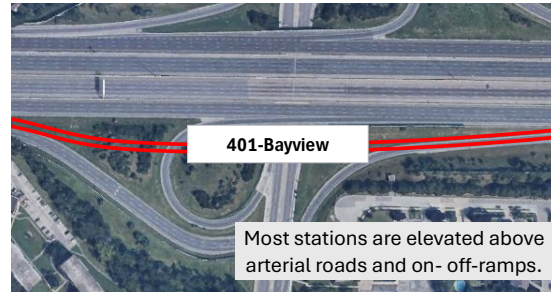
2027 – By year end, the feasibility study of the 401RT Express is completed; the decision is made to forgo the Highway 401 tunnel due to its congestion impacts on municipal roads, and its permanent environmental costs. Negotiations with the government of Canada regarding cost sharing succeed. Legal issues are addressed, and enabling legislation for the 401RT Express project proceeds through the Legislature. A single coordinating organization and decision centre is established. Speed of construction is set as a high priority, to keep pace with travel demand growth. GO Transit becomes a partner in building the six GO Rail stations that intersect with the 401RT Express. Facilities are acquired for modular construction of 401RT Express stations and rail beds.

Planning for the \$7.5 billion Sheppard subway extension to Scarborough Centre is paused. The City of Toronto reevaluates the necessity of the \$4.65 billion Scarborough LRT. The Eglinton LRT extension from Mt. Dennis station to Renforth Drive is completed by year's end. Consultations with the City of Mississauga regarding the 401RT Express alignment above Burnhamthorpe Road are concluded.

Detailed construction planning begins. Bus manufacturers have scaled up production for hundreds of new buses as a result of the Premier's capital and operating grant programs. Railcar manufacturers in Thunder Bay and elsewhere in Ontario gear up for the production of 130 six-car trains.

2028 – Planning & design for the 401RT Express is completed by year's end; contracts with construction partners are completed. Recruitment and training of workers by construction companies proceeds. The Greater Toronto Airports Authority modifies its plans for parking requirements and rail access alignments. The 401RT Express segment between Renforth Drive and Pearson International Airport replaces the redundant Eglinton LRT extension. Overall, the 401RT Express is estimated to create 40,000 jobs per year during the planning, design, and construction period.

2029 – Construction begins in the Spring; multiple crews work simultaneously on stations, maintenance facilities, and track segments between stations. Because almost all of the 401RT Express is elevated above ground, work proceeds faster than if it were underground or at grade. Tunneling begins at the Pearson and Yorkdale segments of the 401RT Express.



During construction, the rightmost eastbound collector lane and shoulder of the 401 is closed, and ramp access is adjusted where necessary for station construction. Highway traffic congestion worsens, and more people avoid Highway 401, or use the newly-enhanced bus services, or drive in ever-shorter off-peak periods. Construction of the Islington-to-Erindale GO segment begins.

2030 – The location of an Alto HSR stop at the 401RT Express is determined. The Line 2 subway extension to Scarborough Centre becomes operational, and includes an intersecting station for the 401RT Express. Each of multiple (8+) crews working separately on segments of the 401RT Express complete an overall average of 1.2 support pillars and modularly-constructed (where possible) elevated rail bed sections per week; numerous segments include intermittent emergency bypass tracks. Most stations are built using modular construction; some stations are built by urban development companies who are offered air rights over stations in exchange for funding and constructing stations. All of the work is within transportation corridors, avoiding almost all community concerns. New buses continue to be put into service.

2031 – The extensions of the Finch West LRT to Yonge Street and to Pearson begin. Enhanced bus services are implemented on Highways 401, 410/403, 427/Gardiner, and 400 (to Keelesdale station at Eglinton), and the 404/Don Valley Parkway. The Ontario Line south of Eglinton Avenue East is completed. Its builders begin to extend the Ontario Line northward to Sheppard Avenue East.

2033 – By this year, a few other transit enhancements will have been completed or are near completion, such as the Scarborough LRT to Kingston Road (and no farther), several BRT routes (Steeles Avenue, Airport Road, others), and GO Rail enhancements.

2035 – Highway 401 capacity is reached, moderated by shifts to enhanced bus services and the effects of artificial intelligence on employment. The high visibility of 401RT Express construction brings hope for relief. Many tens of thousands of car drivers have been waiting to give up the frustrations and costs of driving, and plan to shift to rapid transit for their commutes. Rail cars begin to be delivered and are stored until the 401RT Express comes into service.

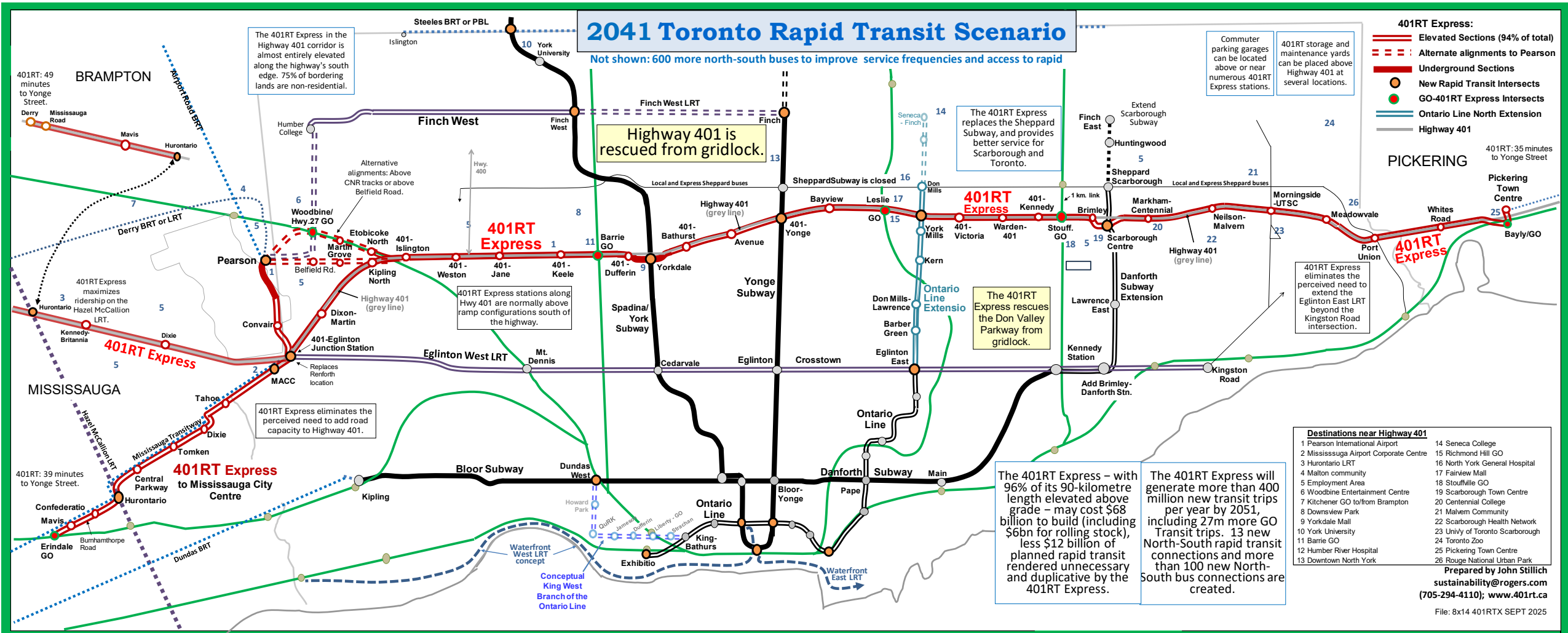
2037 – Some segments of the 401RT Express are completed and begin testing. By year end, some are brought into service (for example, the Yorkdale-to-Pearson segment; the Yonge-to-McCowan segment). Construction workers from these are reallocated to the long stretches of the 401RT Express along Highway 401 from Derry Road to Islington Avenue at Highway 401, and the 401RT Express segment from McCowan Road to Pickering Town Centre.

2038 – 401RT Express construction is complete, including the segment through downtown Mississauga. Full-length testing begins and operational systems are finalized. Corrections and adjustments are made. Transit operators and other service staff are hired. The almost-entirely elevated Ontario Line extension to the 401RT Express, needed to prevent 401RT Express users from overcrowding the Line 1 subway at Yonge Street, is complete.

2039 – The 401RT Express begins full operations, ten years after construction began. Construction employment drops rapidly, partly offset by operations staff increases. Ridership on the closely-parallel Sheppard Subway plummets, and the subway is closed. GO Transit's six links to the 401RT Express increase GO ridership. The extended Ontario Line becomes highly used, including for travel between Scarborough and downtown Toronto via the 401RT Express. Major modal shifts to transit occur, and Highway 401 congestion is contained. A modal equilibrium is established, with user shifts between the 401 and the 401RT Express occurring depending on which is faster. Buses on arterial roads that intersect with the 401RT Express become heavily used. Toronto becomes renowned as the premier example of sustainable city-building in North America.

Visit www.401rt.ca for more information about the 401RT Express, including benefits, alignments, ridership, Sheppard subway impacts, costs and affordability, and more.

John Stillich



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 \$68 billion **401RT Express** (including \$5bn rolling stock) is highly affordable, and is estimated to be more than twice 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 \$57 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.

