

HIGHWAY 7 EXTENSION

TRUCK PARKING ROLLOUT

SMART SIGNALS ROLLOUT

SUPER EXPRESS

GTA WEST CORRIDOR

NEW RAIL FREIGHT CORRIDOR & EXPANSION OF RER



COST
\$\$\$\$

TIME TO IMPLEMENT
⌚⌚⌚

IMPACT ON REDUCING CONGESTION
MODERATE

COST
\$\$\$\$

TIME TO IMPLEMENT
⌚⌚⌚

IMPACT ON REDUCING CONGESTION
MODERATE

COST
\$\$\$\$

TIME TO IMPLEMENT
⌚⌚⌚

IMPACT ON REDUCING CONGESTION
HIGH

COST
\$\$\$\$

TIME TO IMPLEMENT
⌚⌚⌚

IMPACT ON REDUCING CONGESTION
HIGH

COST
\$\$\$\$

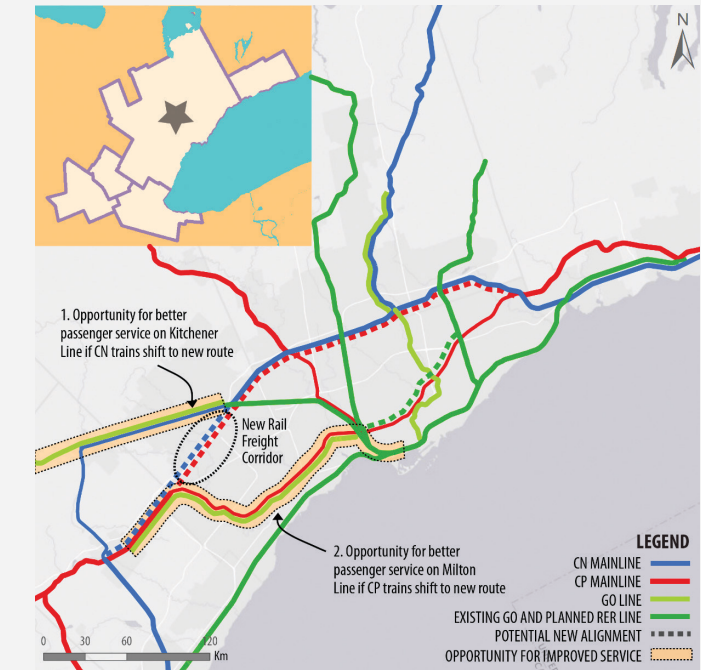
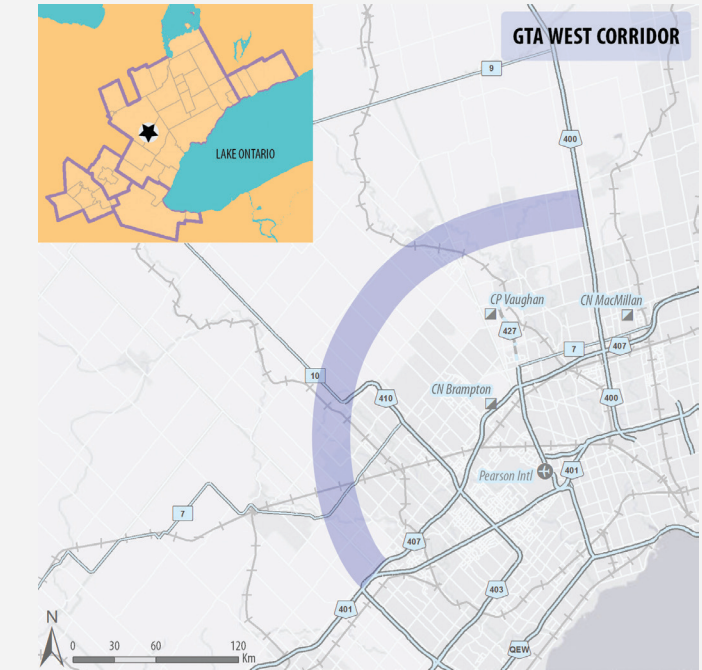
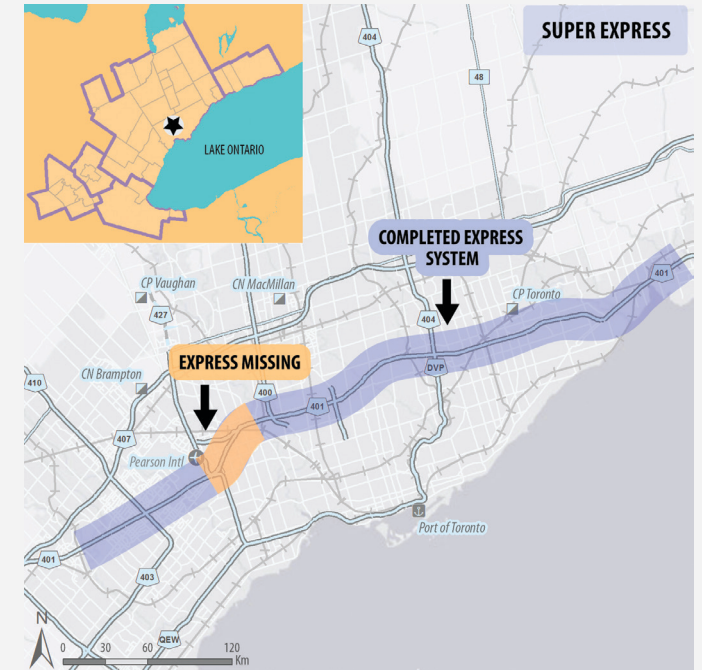
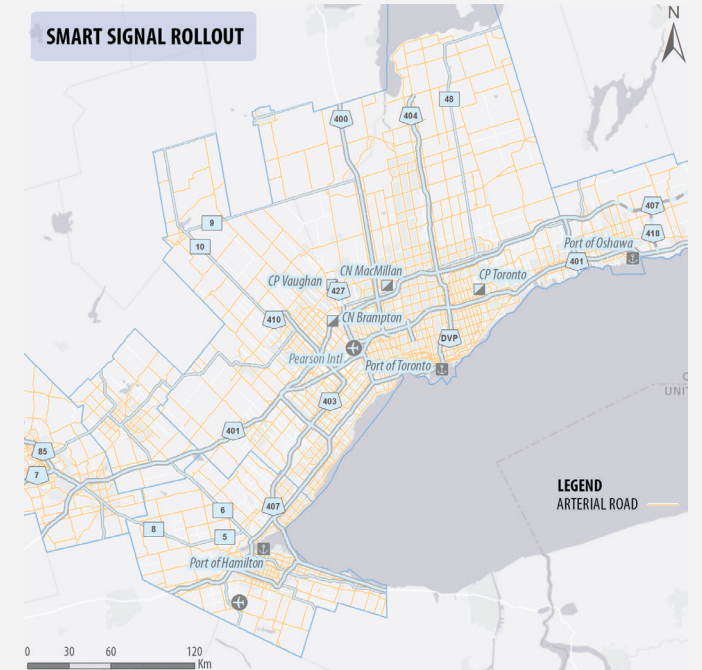
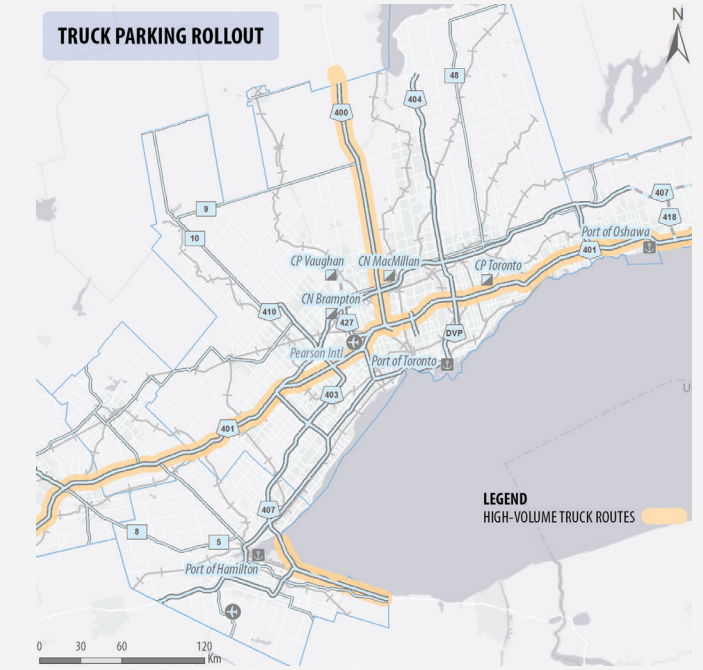
TIME TO IMPLEMENT
⌚⌚⌚

IMPACT ON REDUCING CONGESTION
HIGH

COST
\$\$\$\$

TIME TO IMPLEMENT
⌚⌚⌚

IMPACT ON REDUCING CONGESTION
TRANSFORMATIONAL



The planned 19-km new freeway would serve as a high-speed corridor linking Guelph and Kitchener-Waterloo. This project would connect growing municipalities that currently lack a direct highway link. The existing Highway 7 in this area only has two lanes, is undivided and has no access control.

This project would improve regional truck parking infrastructure along key truck corridors such as Highways 401, 400 and QEW, subject to a full review of truck parking needs and availability. Truck drivers may need to stop en route to meet legislated rest requirements. Increasing attention to 'hours of service' arising from electronic logging device requirements is going to exacerbate current gaps in the number and spacing of truck parking facilities – leaving drivers with little alternative but to park in unauthorized and potentially unsafe locations within the Corridor, such as vacant lots, side streets, or highway on-ramps.

A large-scale rollout of smart traffic lights across the arterial and collector road network throughout municipalities in the Corridor. Modern smart signals use video technology and machine learning to communicate with each other and optimize traffic flow in real-time. Video technology can also produce much richer traffic insights to support long-term planning. The City of Toronto has launched a smart signal pilot at 10 intersections on Yonge St in Midtown and 12 intersections on Sheppard Ave in Scarborough, testing two different technologies.

Highway 401, between Highways 409 and 427 – near Pearson Airport – is an 8-km stretch in which the highway width drops from 16 to 10 lanes. Super Express would complete the express lane network on Highway 401 by double decking and/or expropriation, giving priority to trucks, buses and high-occupancy vehicle/high-occupancy toll (HOV/HOT) users to maximize cargo and passenger throughput.

Proposed new freeway, approximately 50 km in length, that would provide added east-west capacity connecting Highway 400 in Vaughan to Highway 401 near Milton. The largest goods movement cluster in Canada is located on the Milton-Mississauga-Brampton-Vaughan axis and is steadily moving north and west over time. This project would pass through municipalities where job growth is rapid and outpacing the rest of the Corridor.

Under Metrolinx's Regional Express Rail (RER) plan, the GO train network will be transformed with train electrification and 15-min two-way, all-day service, although not on the Milton, Kitchener (past Bramalea station) and Richmond Hill corridors. The proposed new 15-km freight rail link in Halton Region would enable CN and/or CP freight trains to re-route away from in-demand passenger lines and thereby provide improved opportunities to implement RER on the Milton and Kitchener corridors, while supporting or improving freight capacity.

COST
~\$1.5 billion.

COST
Likely < \$50 million (pending final locations).

COST
~\$500 million for the Corridor's 7,000 traffic signals.

COST
~\$2 billion.

COST
~\$5 billion.

COST
~ \$2 billion for completing the 'missing link' between the Milton and Kitchener lines, and an additional \$3 billion for expanding the CP mainline for a potential new alignment.

TIMELINE
Short-term project. Supporting engineering work is underway.

TIMELINE
Short-term. Currently under study by the Province.

TIMELINE
Medium-term project. Currently at pilot stage with the City of Toronto.

TIMELINE
Medium-term project. Currently in early conceptual stage.

TIMELINE
Medium-term project. Previous provincial government announced earlier in 2018 that it will not proceed with the EA as it did not align with policy priorities.

TIMELINE
Long-term project. Currently conceptual.

IMPACT
The new divided, limited-access freeway would add four lanes of capacity at faster speeds and serve as an east-west alternative to Highway 401, which has pockets of regular congestion such as near Highway 8 in Kitchener/Cambridge.

IMPACT
More frequent and better-designed parking areas will increase safety and efficiency and improve opportunities for staging, allowing more flexibility in delivering goods at more opportune times in between traffic peaks.

IMPACT
Pilot projects of modern adaptive traffic signals elsewhere (e.g. Pittsburgh) have found reductions in travel time by 25%, braking by 30% and waiting time by more than 40%. Assuming at least 25% time savings, cars and trucks would save 15 minutes for every hour in traffic.

IMPACT
This project would directly address what is currently the most congested highway bottleneck in Canada and among the top ten in North America. The current gap in the collector-express lane system results in cars and trucks averaging 30 km/h in the AM peak.

IMPACT
The central part of the Corridor, where most goods movement activity takes place, has a deficit of east-west capacity. A new GTA West highway would provide a parallel route for the movement of goods through the most congested part of the Corridor and directly serve a large and growing goods movement cluster.

IMPACT
New and expanded highways alone are not enough to meet the demands of a rapidly growing region. Continuing to segregate freight and passenger trains will help increase the capacity to absorb growing demand for both passengers and freight.

MORE INFO: www.newhighway7.ca

MORE INFO: Three Bold Solutions for the Toronto-Waterloo Corridor, Toronto Region Board of Trade, June 2018.

MORE INFO: www.gta-west.com

MORE INFO: "The Missing Link - Final Report," Town of Milton, September 14, 2015.



PROPOSED INFRASTRUCTURE OPTIONS

To Improve Goods Movement in Canada's Innovation Corridor

Why These Projects?

Embracing a Multimodal Lens

Many of the top capacity constraints in the Corridor are on the highway network which is critical not only for the trucking industry but for the air, rail, and marine ports that rely on trucks for access and first- and last-mile connectivity.

Bringing in the Public and Private Sectors

These projects will improve the competitiveness of the Corridor, and many will require significant public expenditure. But we have also included privately funded projects like the Milton Logistics Hub – where the public role is approvals rather than funding. We also see a potential role for the Canada Infrastructure Bank in supporting many of these projects as a supplement to public funding.

Taking a Wide View

Two priority transit projects recognize the importance of investing in high-speed, high-capacity public transit for commuters in order to free up highway and road capacity for trucks.

Looking to the Future

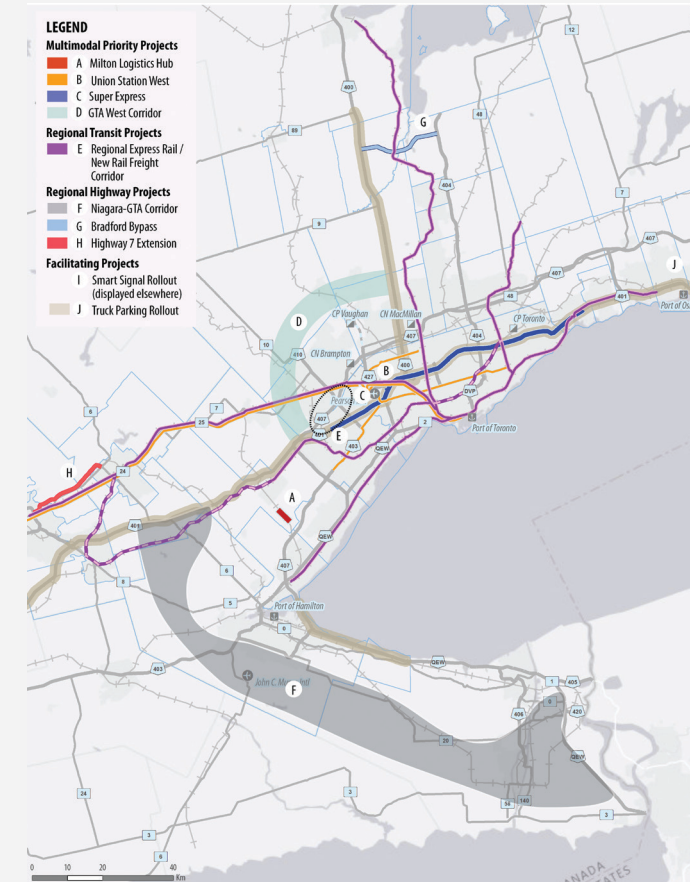
The projects on this list can be implemented, or at least initiated, in the near or medium term. Yet we also draw attention to opportunities to use new and emerging technologies to make these projects happen.

Your input is essential in determining how we prioritize these projects.

During the Board's 4th Annual Transportation Summit on November 21, please cast your vote by visiting our Movement of Goods poll on Slido.

Event Code: #BoardEvents

Proposed Infrastructure Options to Improve Goods Movement in Canada's Innovation Corridor



Canada's Innovation Corridor is the largest transportation hub in the country. Congestion in the Corridor is the number one challenge to the effective movement of goods cited by industry stakeholders, harming the speed and reliability of shipments to stores, restaurants, and just-in-time manufacturers. Building a fluid national freight network means addressing bottlenecks not only along the border, but also in large urban areas.

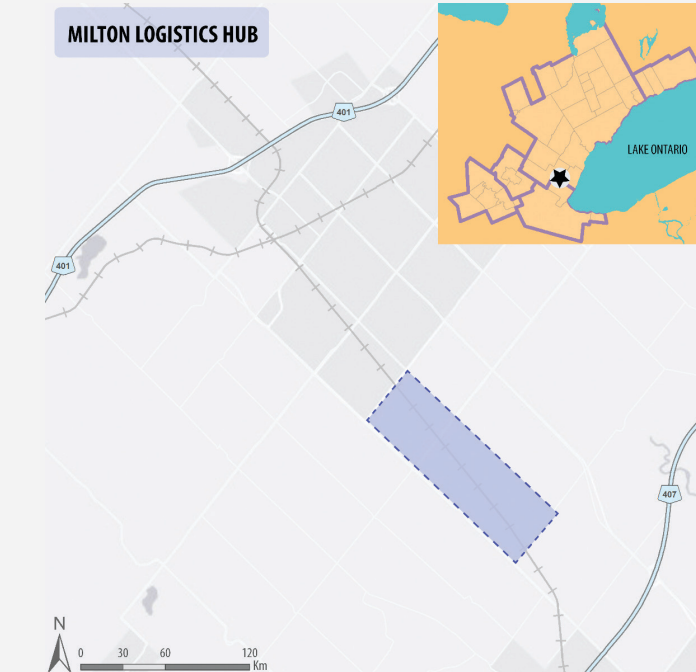
This list of projects was developed in several rounds of consultations with leading stakeholders from across the goods movement industry – with a view that large, high-impact projects that would significantly improve the movement of goods in the Corridor.

MILTON LOGISTICS HUB

COST
\$\$\$\$\$

TIME TO IMPLEMENT
⌚⌚⌚

IMPACT ON REDUCING CONGESTION
HIGH



CN is proposing to build and operate an intermodal hub on CN-owned land in Halton Region that will add 450,000 container units of annual capacity to supplement its existing intermodal terminal in Brampton. This project is driven by the growing demand for containerized goods in the Corridor and across Canada. With the federal government investing heavily in coastal ports, there is an equally important need to increase inland capacity.

COST
\$250 million – entirely private funds.

TIMELINE
Short-term project. Currently in approvals stage.

IMPACT
Without this additional infrastructure, the Corridor risks becoming the bottleneck of key Canadian trade corridors. Moving goods by rail rather than highways is also environmentally friendly and reduces traffic congestion. Freight rail is on average four times as fuel efficient as trucking, and CN's intermodal network removes approximately 2 million long-haul trucks off Canadian highways annually.

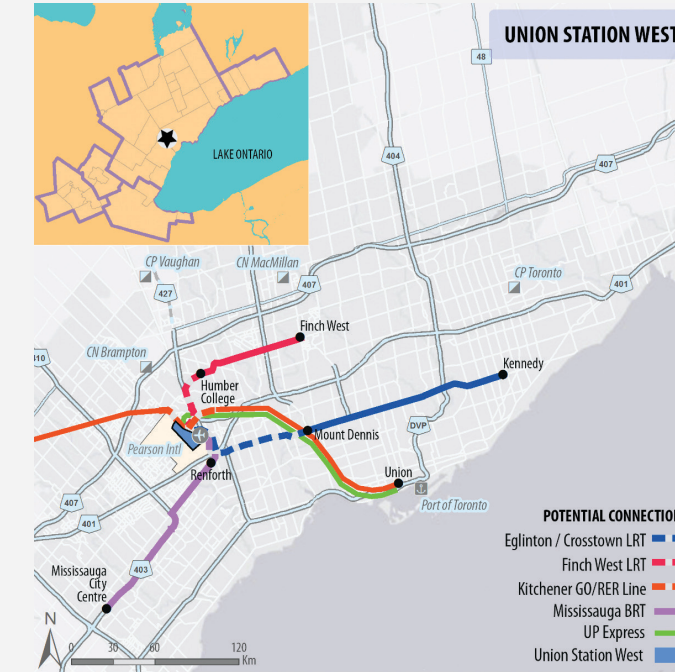
MORE INFO: www.cn.ca/en/about-cn/milton-logistics-hub

UNION STATION WEST

COST
\$\$\$\$\$

TIME TO IMPLEMENT
⌚⌚⌚

IMPACT ON REDUCING CONGESTION
TRANSFORMATIONAL



Toronto Pearson's operator, the Greater Toronto Airports Authority (GTAA), has proposed a multi-modal transit and mobility hub at the airport to serve as a second major ground mobility hub in the Corridor next to Union Station. The airport area, with its central location, existing employment base and global air connectivity, is well-situated as a second hub to expand the capacity, reach and frequency of the regional transit network. Pearson already provides direct access to 70% of the world's economies through daily direct flights.

COST
~\$11-12 billion – including extensions of possible transit lines.

TIMELINE
Long-term project. Currently in an early design stage.

IMPACT
This area is the central freight cluster and most congested part of the Corridor. A multi-modal transit and mobility hub will benefit the movement of goods by shifting single-occupancy automobile commuters off congested highways onto transit and by supporting Pearson's growth as a global hub, benefiting shippers across the Corridor through more direct flights to cities around the world.

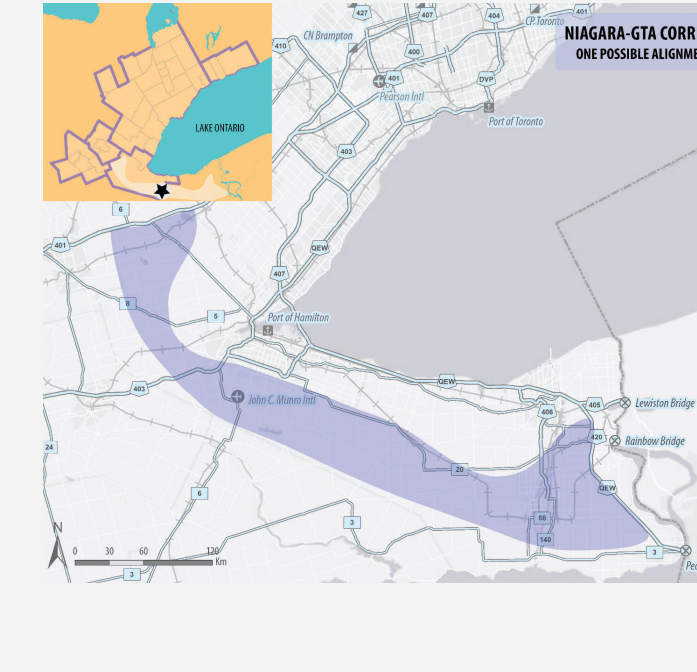
MORE INFO: www.torontopearson.com/regionalgrowth

NIAGARA-GTA CORRIDOR

COST
\$\$\$\$\$

TIME TO IMPLEMENT
⌚⌚⌚

IMPACT ON REDUCING CONGESTION
HIGH



The proposed new freeway would traverse the central part of Niagara Region, parallel to the Queen Elizabeth Way (QEW). One possible alignment of the full Niagara-GTA (NGTA) Corridor could stretch up to 100 km near the Canada-U.S. border to Highway 401.

COST
~\$10 billion.

TIMELINE
Long-term, currently at conceptual design stage.

IMPACT
The NGTA would serve as a key trade corridor and improve resiliency in the event of incidents, delays and closures on the QEW. In connection with the GTA West Corridor, the NGTA would provide a nearly continuous new highway route connecting most of the Corridor to the border.

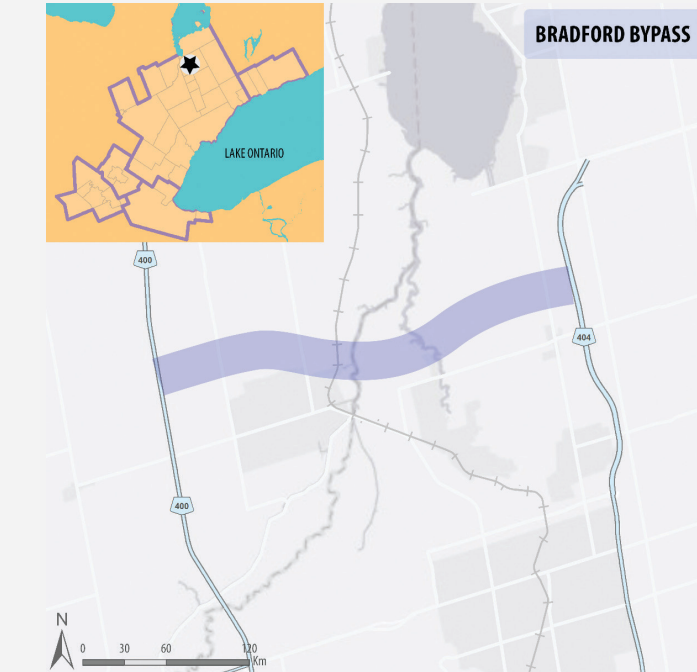
MORE INFO: www.ontario.ca/page/niagara-greater-toronto-area-corridor

BRADFORD BYPASS

COST
\$\$\$\$\$

TIME TO IMPLEMENT
⌚⌚⌚

IMPACT ON REDUCING CONGESTION
MODERATE



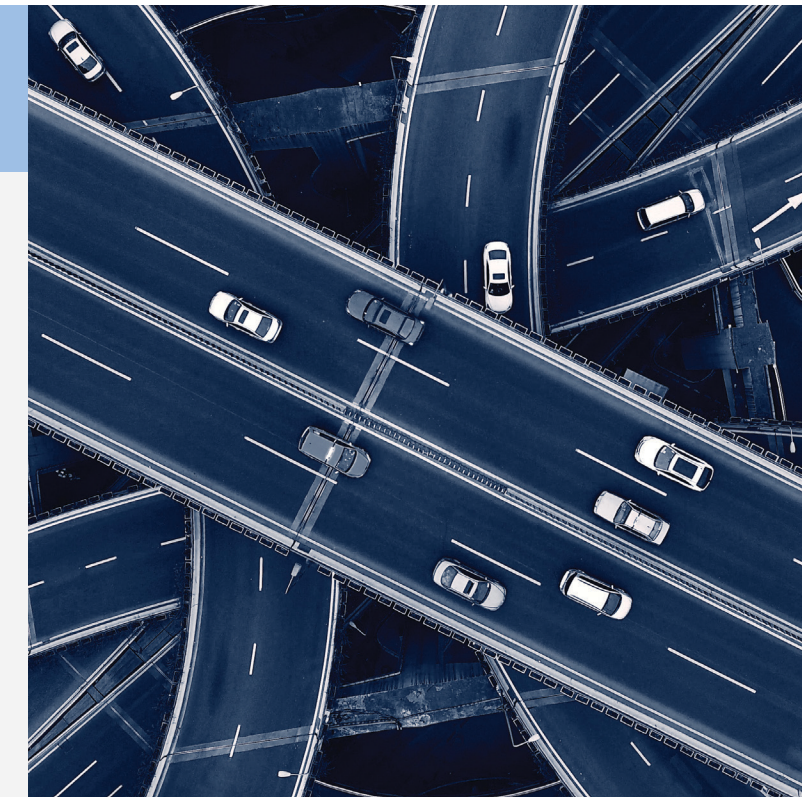
The proposed 16-km new freeway, also known as the "Connecting Link," would link Highways 400 and 404 in the Bradford area north of Toronto. Currently, the nearest east-west freeway linking Highways 400 and 404 is about 40 kilometres south at Highway 407, which is also a toll road.

COST
~\$1.5 billion.

TIMELINE
Medium-term project. Added to the Province's official Growth Plan in 2017.

IMPACT
The project would address a pressing shortage of east-west connecting routes and make more effective use of Highways 400 and 404, easing congestion on the two and on the connecting Hwy 401.

MORE INFO: www.ontario.ca/page/highway-400-highway-404-extension-link-bradford-bypass



HOW TO VOTE

- 1 Go to **Slido** on your phone, tablet or laptop
- 2 Enter event code
- 3 Click on the polls tab to cast your vote

