

Initial Business Case

Updates:

Kitchener and Niagara Falls

GO Rail Service Extensions

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STATUS UPDATE

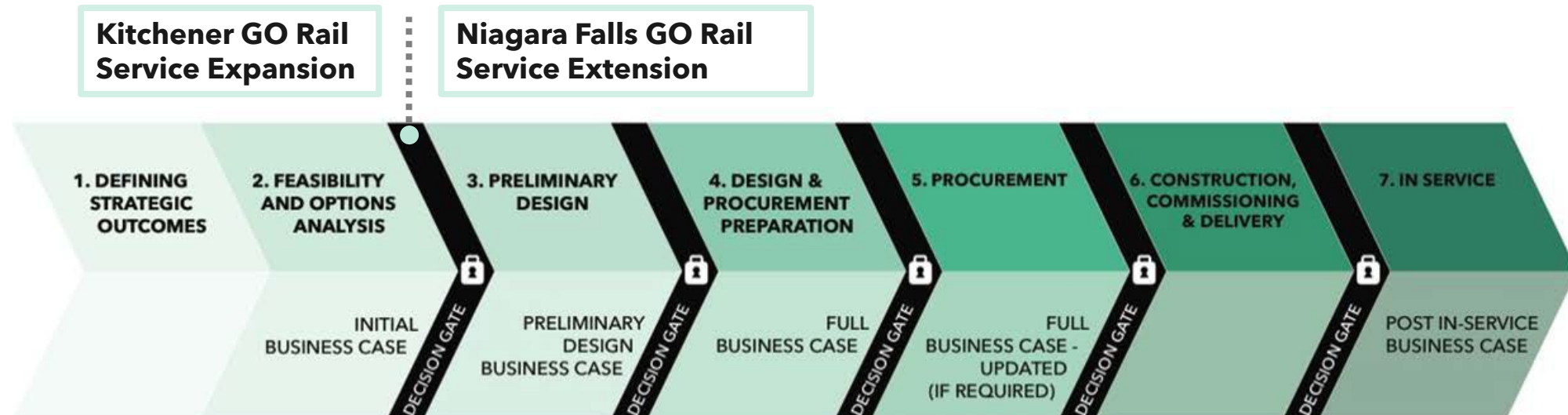
- Metrolinx is looking to expand GO Rail Service to Niagara and Waterloo Regions. The Initial Business Cases (IBCs) have examined various options consistent with GO Expansion and are now enabling us to select a single option for further development for each corridor
- Updates to the Kitchener and Niagara Falls IBCs have been completed to meet Metrolinx standards as published in the Business Case Guidance and reflect changes in the project approach
- The Updated Kitchener GO Rail Service Expansion Initial Business Case:
 - Examines two options for the implementation of year-round GO Rail services between Toronto and Kitchener;
- The Updated Niagara Falls GO Rail Service Extension Initial Business Case:
 - Examines three options for the implementation of year-round GO Rail services between Toronto and Niagara Falls via Hamilton;
- Standard sensitivity analysis was completed for each of the business cases and has been included in the updated IBC documents

RECOMMENDATION

- **THAT**, based on the report prepared by the Chief Planning Officer, entitled “Initial Business Case Updates: Kitchener and Niagara Falls GO Rail Service Extensions,” and any further amendments directed by the Board at its meeting on November 22, 2019, the Board pass the following resolution:
- **THAT** the results of the updated Initial Business Cases for the Kitchener GO Rail Service Expansion and Niagara Falls GO Rail Service Extension be endorsed;
- **AND THAT**, based on the updated Initial Business Case for the Kitchener GO Rail Service Expansion, Option 2 be advanced to the Preliminary Design stage and be evaluated through a Preliminary Design Business Case;
- **AND THAT**, based on the updated Initial Business Case for the Niagara Falls GO Rail Service Extension, Option 2 be advanced to the Preliminary Design stage and be evaluated through a Preliminary Design Business Case.

BACKGROUND

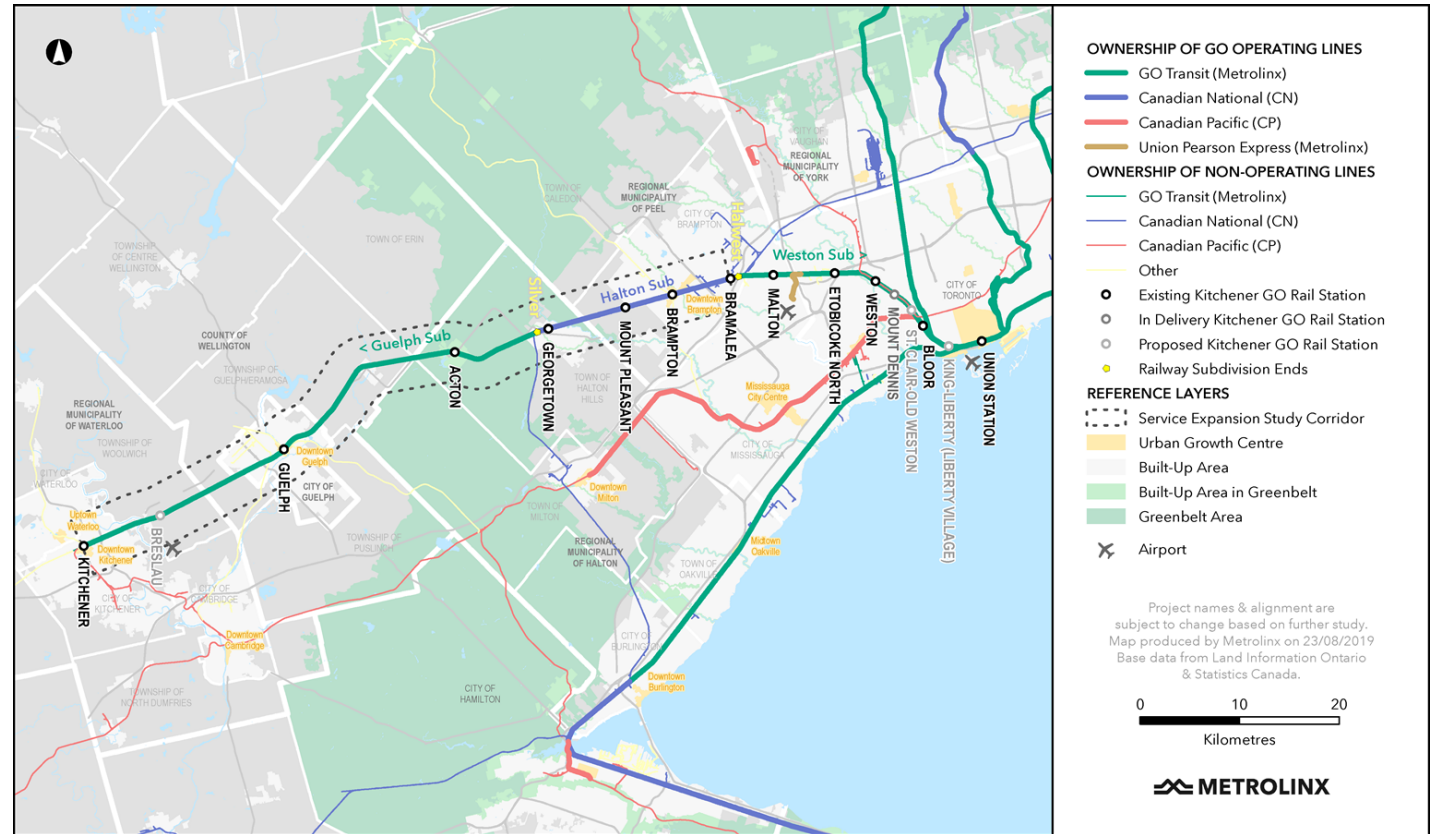
- The GO Expansion Full Business Case, released in November 2018, identifies significant investments that will transform transit access across the Greater Toronto and Hamilton Area (GTHA)
- IBCs were completed for the Kitchener and Niagara Falls GO Rail Service Extensions in 2015, examining a single option for each of the extensions. Updates to the IBCs were initiated in 2018 as a result of:
 - GO Expansion program development;
 - Enhanced relationship and commercial negotiations with freight partners since the original options analysis; and
 - New Business Case Guidance and benefits management process



Kitchener GO Rail Service Expansion IBC

KITCHENER CORRIDOR OVERVIEW

- Significant public demand for improved rail service on the Kitchener corridor, due to:
 - Rapid population growth projected in the western Greater Golden Horseshoe
 - Employment growth within the Toronto-Waterloo Innovation Corridor
 - Connections to major regional destinations, such as post-secondary institutions and airports



IBC RESULTS

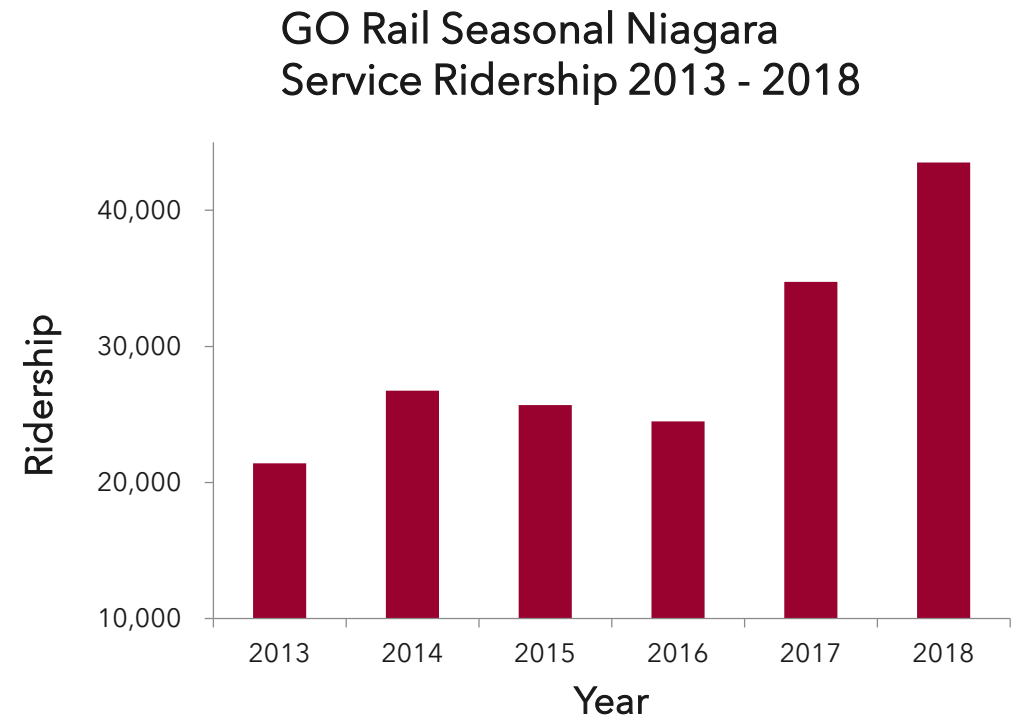
Case	Option 1 (Freight Bypass)	Option 2 (Minimal Infrastructure)
Strategic Case	<ul style="list-style-type: none"> • Delivery of counterpeak and all-day two-way service to Kitchener • 8.2M annual boardings in 2031* 	<ul style="list-style-type: none"> • Delivery of counterpeak and all-day two-way service to Kitchener • 8.2M annual boardings in 2031*
Economic Case	<ul style="list-style-type: none"> • Benefit Cost Ratio: 0.5 	<ul style="list-style-type: none"> • Benefit Cost Ratio: 1.0
Financial Case	<ul style="list-style-type: none"> • Capital Cost: \$(3,689M) • Operating & Maintenance Costs: \$(1,137M) 	<ul style="list-style-type: none"> • Capital Cost: \$(927M) • Operating & Maintenance Costs: \$(970M)
Deliverability & Operations Case	<ul style="list-style-type: none"> ✓ Constructible ✓ Operable ✓ Separating freight rail services provides greater service reliability and flexibility for expansion ✗ Long lead time for delivery and service increases 	<ul style="list-style-type: none"> ✓ Constructible ✓ Operable ✗ Mixed traffic with freight rail services may impact reliability and flexibility for expansion ✓ Service increases can be phased in as section of the corridor are completed

* Ridership may be underestimated due to the limitations of the model used to complete the IBC. The model is not responsive to major reductions in journey time. More detailed ridership modelling will be completed in the PDBC.

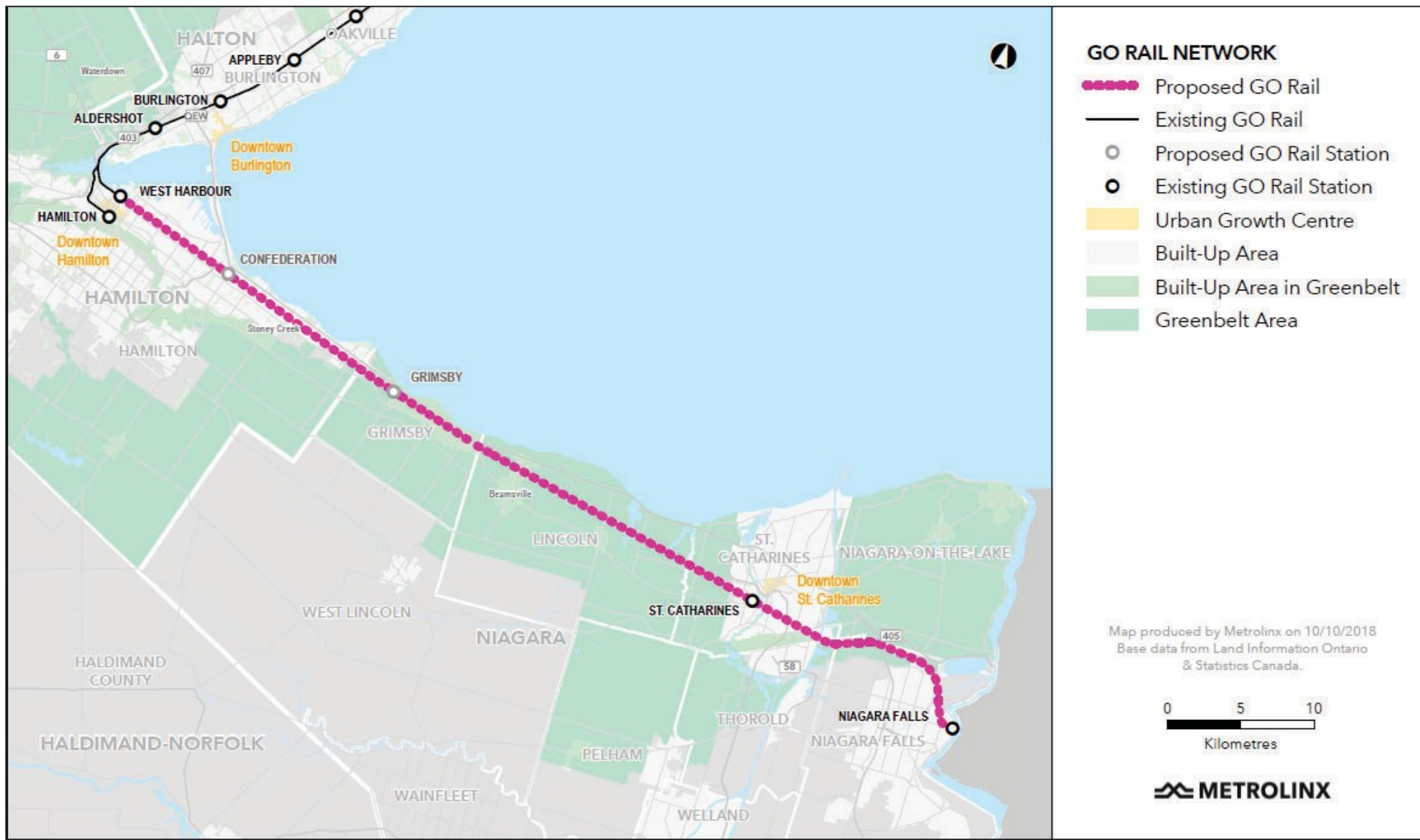
Niagara Falls GO Rail Service Extension IBC

NIAGARA FALLS GO SERVICE OVERVIEW

- The implementation of year-round GO rail services between Niagara Falls and Toronto has been a long-standing goal of Niagara Region and local municipalities
- Niagara Region's population along with the ridership of GO bus services in the region have shown consistent growth
 - Growth will need to be accommodated through the provision of improved and expanded GO service to reduce auto-dependency and further encourage growth and tourism in the region.
- Enhanced rail service is forecasted to generate demand from the commuter and tourist markets, as it would better connect both markets alike to their destinations
 - Extension of frequent service to Confederation Station is projected to result in a large growth in ridership



STUDY AREA



IBC RESULTS

Case	Option 1	Option 2	Option 3
Strategic Case	<ul style="list-style-type: none"> Delivery of eastbound and westbound GO rail trips between Union and Niagara Falls operating year-round 1.6M annual boardings in 2031 	<ul style="list-style-type: none"> Delivery of eastbound and westbound GO rail trips between Union and Niagara Falls operating year-round + two-way all-day GO rail service to Confederation GO Station 1.8M annual boardings in 2031 	<ul style="list-style-type: none"> Delivery of increased two-way all-day GO rail service between Union and Niagara Falls 3.4M annual boardings in 2031
Economic Case	<ul style="list-style-type: none"> Benefit Cost Ratio: 1.1 	<ul style="list-style-type: none"> Benefit Cost Ratio: 1.2 	<ul style="list-style-type: none"> Benefit Cost Ratio: 1.1
Financial Case	<ul style="list-style-type: none"> Capital Cost: \$(312M) Operating & Maintenance Costs: \$(234M) 	<ul style="list-style-type: none"> Capital Cost: \$(312M) Operating & Maintenance Costs: \$(366M) 	<ul style="list-style-type: none"> Capital Cost: \$(374M) Operating & Maintenance Costs: \$(1,200M)
Deliverability & Operations Case	<ul style="list-style-type: none"> ✓ Constructible ✓ Operable Requires agreement with CN, VIA/ Amtrak and the SLSMC 	<ul style="list-style-type: none"> ✓ Constructible ✓ Operable Requires agreement with CN, VIA/ Amtrak and the SLSMC 	<ul style="list-style-type: none"> ✓ Constructible ✓ *Operable Requires agreement with CN, VIA/ Amtrak and the SLSMC * Successful delivery of proposed service plan contingent on extensive operating agreement with the SLSMC at the Welland Canal

Next Steps

NEXT STEPS

- Refine infrastructure scope and service patterns for the recommended options through preliminary design, operational modelling and negotiation with third party stakeholders
 - Kitchener IBC: Recommend to advance Option 2
 - Niagara IBC: Recommend to advance Option 2
- Initiate Preliminary Design Business Cases to analyze refinements and optimizations to the recommended options
- The Preliminary Design Business Cases will be brought back for formal resolution and endorsement

