

Appendix 5

Metrolinx Public Meeting Material on New
Stations and Station Access

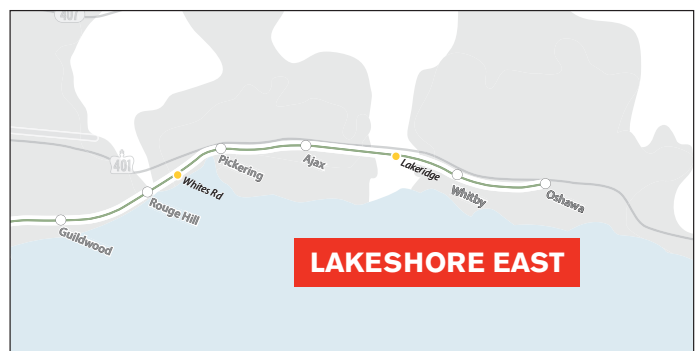
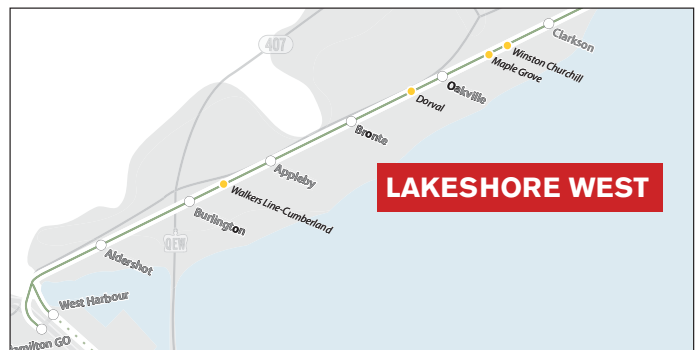
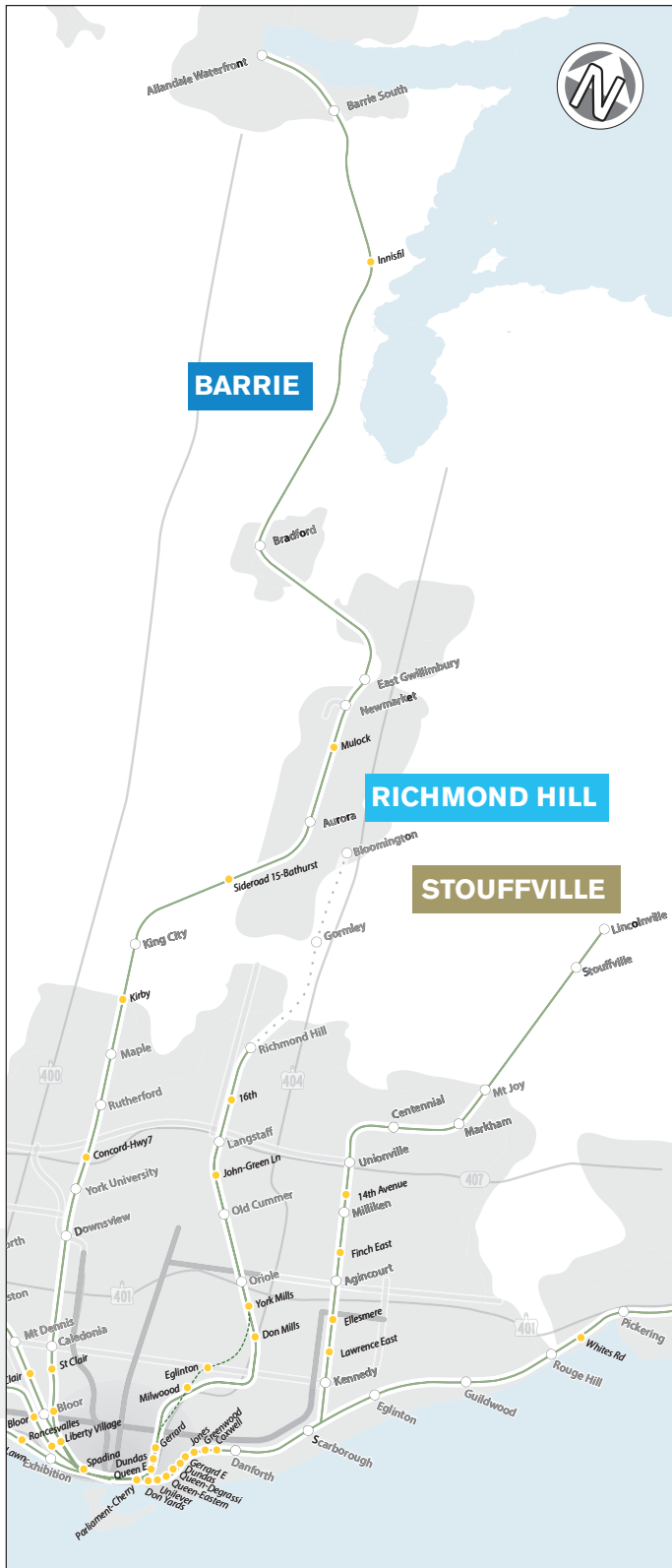
NEW STATIONS ON THE GO RAIL NETWORK

Our plan to reduce gridlock and commute times will transform the GO rail network by providing all day, two way electrified service every 15 minutes or better across most of the system. This will create more transit options and connections to the network through

integration with new Light Rail Transit (eg. Eglinton Crosstown and Hurontario LRT) and Bus Rapid Transit (eg. Viva and Mississauga Transitway) across the region. Today, there are 64 rail stations with 6 more already underway. As part of the plan we want to

add even more stations so more people can access the transit network.

We are seeking your input on how to choose the locations of those new stations.



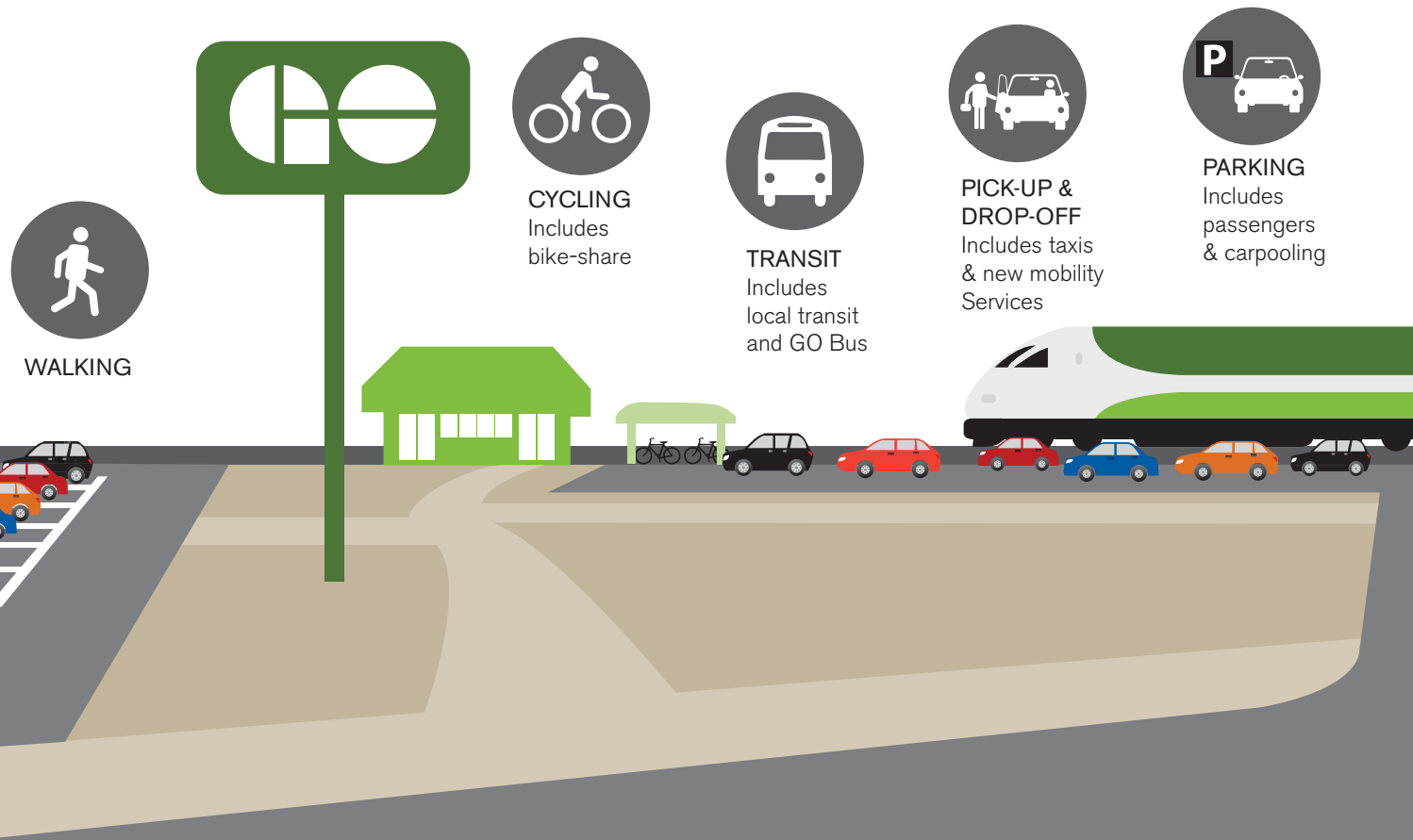
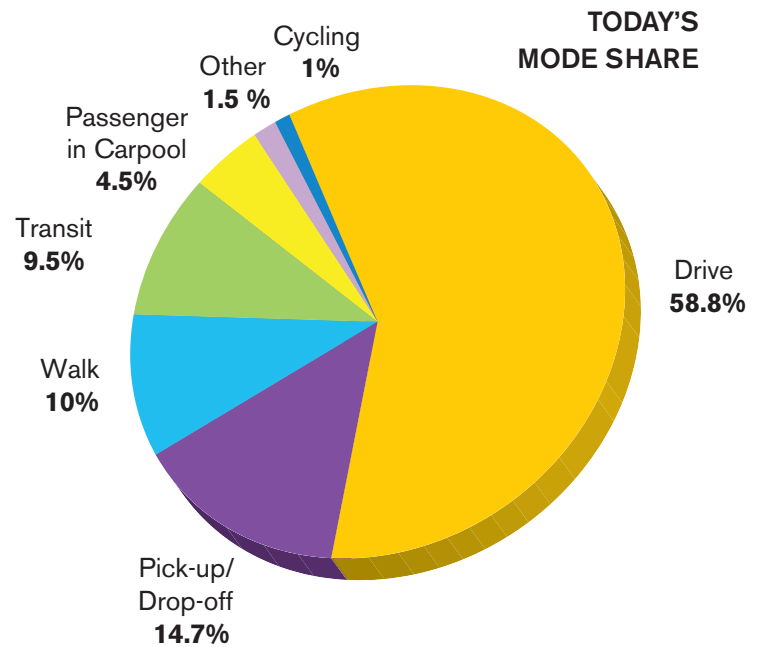
LEGEND

- Existing GO Stations
- Review locations
- GO corridors
- GO corridor extension
- Existing Subway
- Future rapid transit

STATION ACCESS

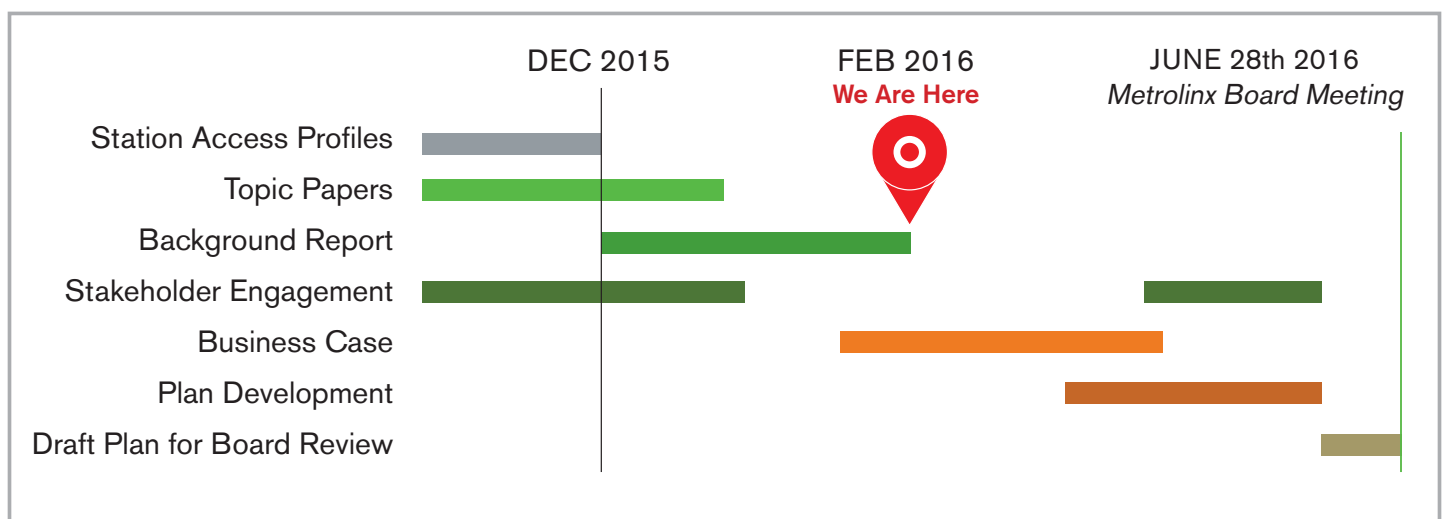
The “first mile” and “last mile” is how GO passengers connect to our regional transit network, using a wide range of travel modes.

We are updating the GO Rail Parking & Station Access Plan (2013) to accommodate more GO service, including 15 minute or better, all day, two way service. We also have the opportunity to look at investments that will encourage more customers to walk, cycle or take public transit to GO stations.



Your feedback at this stage will help us understand access issues experienced at your local GO station. You can provide your comments today or participate online at metrolinxengage.com

- What is your local GO station and how could access to it be improved?
- If you drive to a GO station today, what would need to happen for you to shift to a more sustainable travel mode?



NEW STATIONS ANALYSIS

Recent investments in the transit network in the Greater Toronto and Hamilton Area provide an opportunity to consider new stations and the expansion of existing stations on the GO network. In support of this work, we have developed a methodology and are completing an analysis of potential new stations.

The next stage of analysis will lead to a refined list of stations for business case assessment. In June, Metrolinx will provide a list of recommended stations that will be determined following municipal and public engagement, and based on business case assessments.

THIS IS AN OVERVIEW OF:



- The role of new stations and their impact on the GO network
- The criteria used to identify 120+ potential locations and to focus on the 50+ sites which are undergoing the second stage of analysis

OBJECTIVES OF NEW STATIONS

- Improve service and add riders
- Minimize impact on trip time for existing customers
- Maintain appropriate station spacing for the vehicle technology
- Support existing regional and municipal plans
- Consider the different roles and needs of each location, adapt to urban and suburban context

CONSIDERATIONS WHEN PLANNING FOR NEW STATIONS

1

Transportation Connectivity

- e.g. connection with other transit modes that work together to improve overall service on the corridor

2

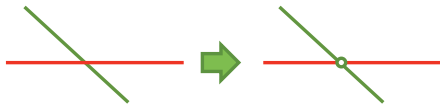
Plans and Land Use

- e.g. proximity to urban growth centre
- e.g. mix and scale of surrounding development, and potential destinations

3

Technical Feasibility

- e.g. track geometry
- e.g. property availability for appropriate station typology



4

Station Spacing

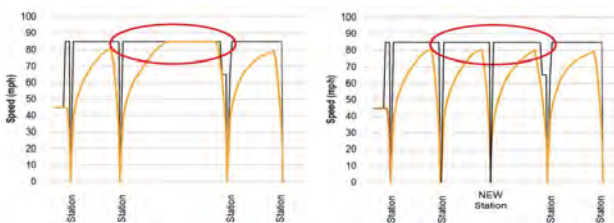
- Locating stations too close together will reduce travel speeds.

5

Journey Time

- Each new station increases journey time by 2-3 minutes, however, electrification will reduce travel time. For example: an electrified train from Oshawa GO can reach Union Station

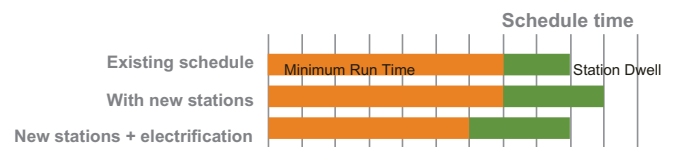
5 minutes faster, which could either save existing customers 5 minutes, or allow for additional stations and maintain the existing travel times. These impacts and benefits are analyzed across the network.



Larger station spacing means trains cover distances at higher speeds

Adding stations mean trains need to stop and accelerate again, slowing travel along the corridor

— Max. track speed — Train speed




■ Minimum Run Time (MRT): travel time accounting for vehicle and track speeds and distance; allowances and buffering

■ Station Dwell: time stopped at station for boarding/disembarking

Meeting Material on New Stations and Station Access

STAGE 1: SELECTING POTENTIAL NEW STATION LOCATIONS

An aerial photograph of a rural landscape with green fields and a large dark lake on the right. A black line representing a proposed transit route runs from the bottom left towards the top right. Along this line, several potential station locations are marked with black dots. One specific location near the bottom left is highlighted with a white circle.

- We identified over 120 possible locations.

STAGE 2: FOCUSING ANALYSIS

How did we move from 120+ locations to 50+? We scored and compared the sites based on the three key site considerations:



Transportation Connectivity

Criteria:

- (Potential) connection to high order transit (subway, LRT, streetcar)
- Connection to high quality active transportation route or facility
- Highway connection
- Good local transit connections

High: meets all criteria

Medium: meets at least 2 criteria

Low: meets only 1 or no criteria



Plans and Land Use

Criteria:

- Proximity to urban growth centres, regional centres
- Supportive land use and density
- Number of destinations in proximity
- Land availability

High: meets all criteria

Medium: meets at least 2 criteria

Low: meets only 1 or no criteria



Technical

- **High:** few obvious difficulties in building a platform and connecting
- **Medium:** some challenges constructing platform or adjacent connections, which may require higher than usual investment to overcome
- **Low:** obvious challenges with platform location or connections, may require undue effort to overcome

This analysis was completed in March 2015 and 50+ sites moved forward for additional analysis.

STAGE 3: EVALUATING 50+ SITES

Lakeshore East	Lakeshore West	Barrie
[Parliament-Cherry] [Don Yard] [Unilever (DVP-Eastern)] [Queen (Queen-Degrassi)] [Dundas-Logan] [Gerrard (Gerrard-Carlaw)] [Jones] [Greenwood] [Coxwell] Whites Rd Lakeridge Rd	Spadina (Bathurst-Spadina) Roncesvalles Park Lawn* Kipling Winston Churchill Maple Grove Dorval Walkers Line-Cumberland	[Spadina (Bathurst-Spadina)] [Liberty Village (King West)] [Queen W-Dufferin] [Dundas W] Bloor-Davenport St. Clair Hwy 7-Concord* Kirby Sideroad 15-Bathurst Mulock Innisfill

Barrie	Stouffville	Kitchener
[Spadina (Bathurst-Spadina)] [Liberty Village (King West)] [Queen W-Dufferin] [Dundas W] Bloor-Davenport St. Clair Hwy 7-Concord* Kirby Sideroad 15-Bathurst Mulock Innisfill	Parliament-Cherry Don Yard Unilever (DVP-Eastern) Queen (Queen-Degrassi) Dundas-Logan Gerrard (Gerrard-Carlaw) Jones Greenwood Coxwell Lawrence East Ellesmere Finch East 14 th Av	Spadina (Bathurst-Spadina) Liberty Village (King West) Queen W-Dufferin Dundas W St. Clair Islington* Hwy 27-Woodbine Heritage Rd Breslau

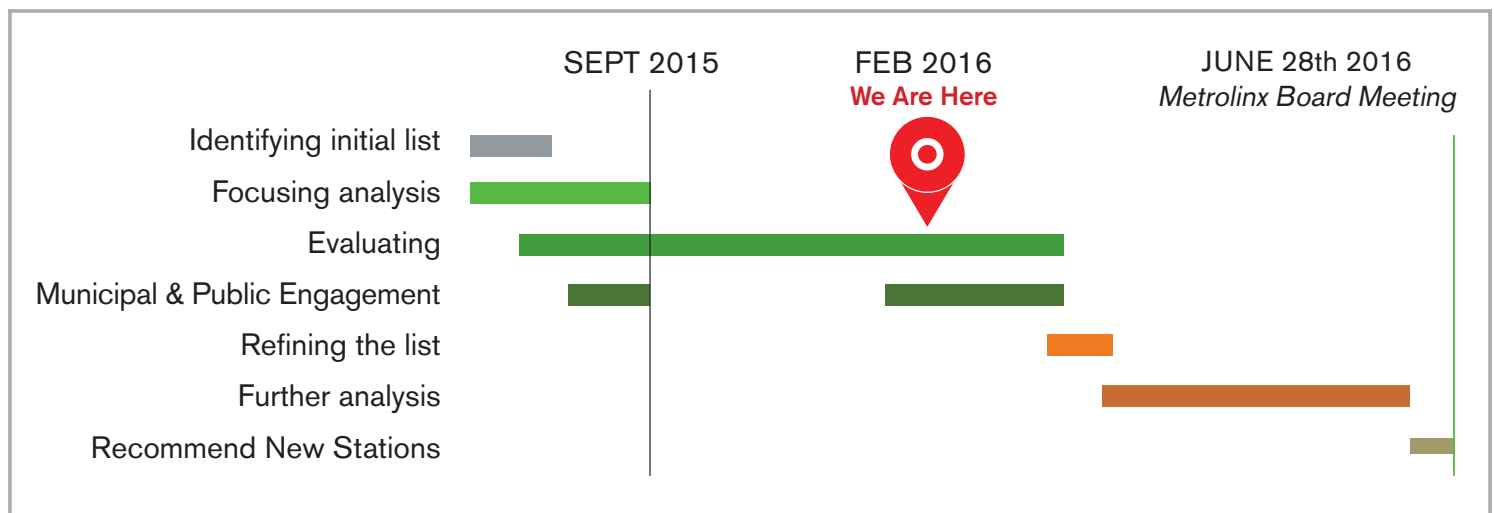
Richmond Hill	Milton	Selected sites
Parliament-Cherry Queen East Dundas East Gerrard East Don Mills-Bond Millwood Eglinton York Mills John-Green 16 th Av	[Spadina (Bathurst-Spadina)] [Liberty Village (King West)] [Queen W-Dufferin] [Dundas W] East Mall West Mall Cawthra-Dundas Trafalgar	[] - location reviewed under other corridor *Considered in comparison to existing neighboring stations

APPLYING KEY CRITERIA

Of the 38 business case measures compiled, the following key criteria differentiate stations from each other and are better predictors of location performance:

Category	Objective	Criteria	Measure/Metric
Strategic/ Economic Planning	Connectivity and Ridership Drivers	How many trips will start and end at this station?	Sum of boardings + alightings
		Does the station connect to other higher order transit modes and have potential to improve network and/or corridor service?	Distance to existing and planned routes
		Does the station connect to key destinations?	Number of nearby destinations and places of interest
	Travel Time Savings	What are the time savings associated with the new station?	Ratio for time penalty of existing riders to minutes saved for new station users
	Market Potential	How well situated is the station in relationship to future market demand?	High level assessment of market potential
	Development Potential	Can the station support future development and intensification? What is the likely timing?	Soft sites; number and scale of recent development proposals
	Policy Alignment	Does the station area align with Growth Plan policy?	Location relative to urban growth centre, built up area, or rural area
Financial/ Technical	Affordability	What is the cost to construct the station?	Relative expected cost
	Ease of construction	Can the required facilities be constructed ?	Degree of site constraint

Process for New Stations

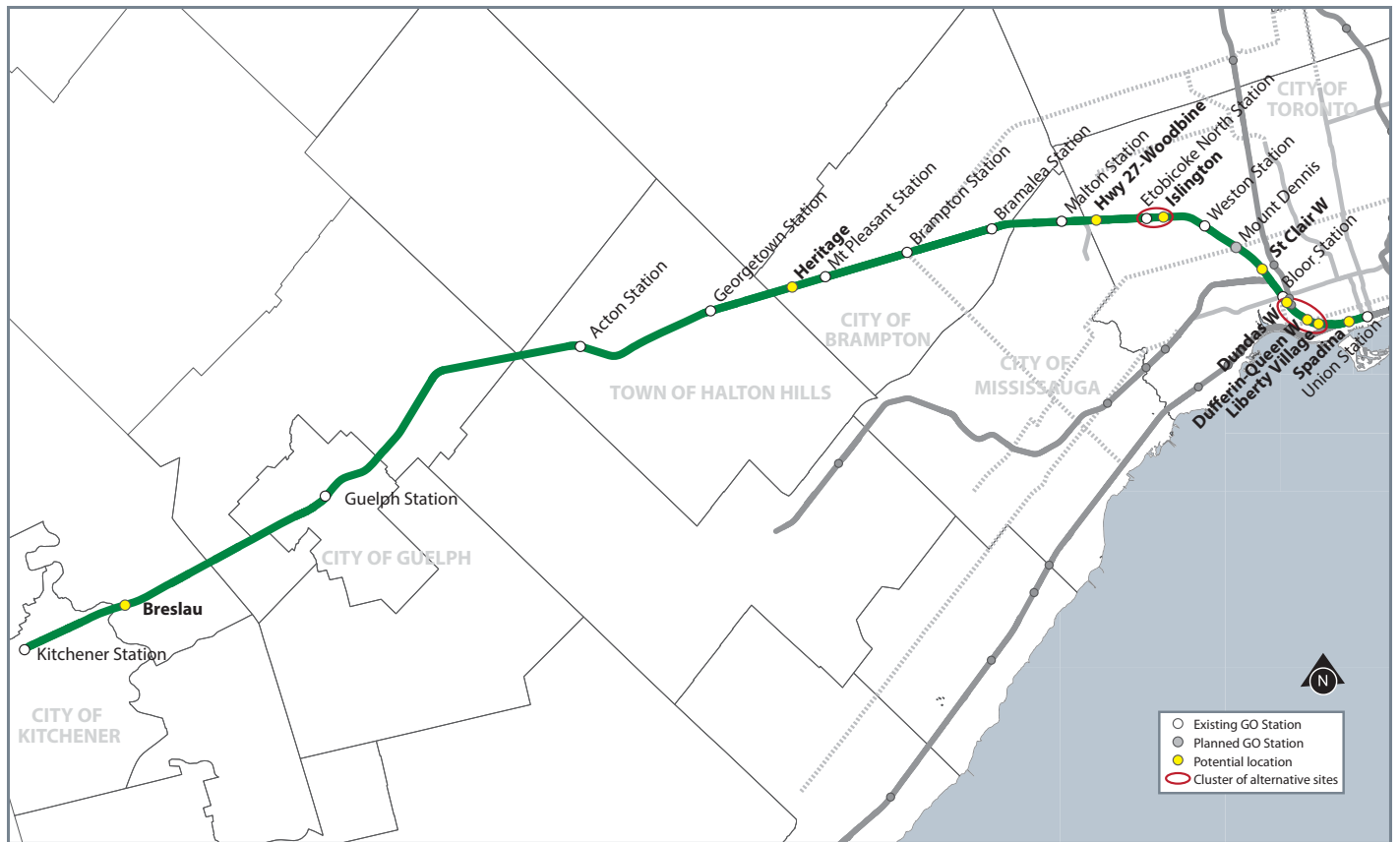


These key criteria have been applied to all 50+ stations and the results are here for you to review. Your feedback at this stage will help ensure that we have not overlooked any site-specific considerations. You can provide your feedback today or participate online at metrolinxengage.com

Have we missed anything?

Are there additional criteria we should consider?

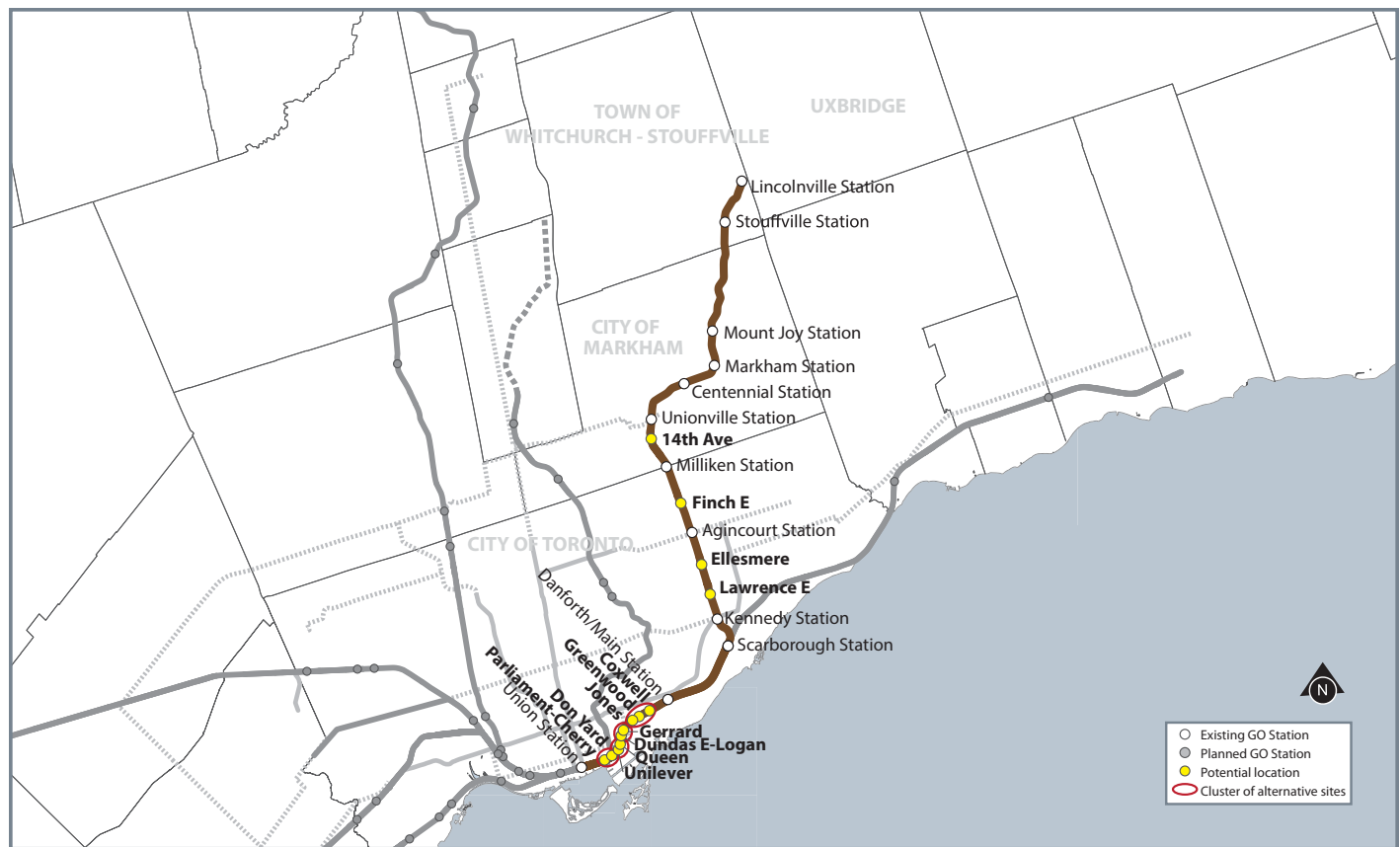
KITCHENER CORRIDOR



LOCATIONS/CLUSTERS	CONNECTIVITY AND RIDERSHIP DRIVERS	TRAVEL TIME SAVINGS	MARKET POTENTIAL	DEVELOPMENT POTENTIAL	POLICY ALIGNMENT	CONSTRUCTION AFFORDABILITY	EASE OF CONSTRUCTION
Spadina	●	●	●	●	●	●	●
Liberty Village	●	●	●	●	●	●	●
Dufferin/Queen West	●	●	●	●	●	●	●
Dundas West (Kitchener/Milton Line)	●	●	●	●	●	●	●
St. Clair West (Kitchener Line)	●	●	●	●	●	●	●
Islington	●	●	●	●	●	●	●
Hwy 27-Woodbine	●	●	●	●	●	●	●
Heritage	●	●	●	●	●	●	●
Breslau	●	●	●	●	●	●	●

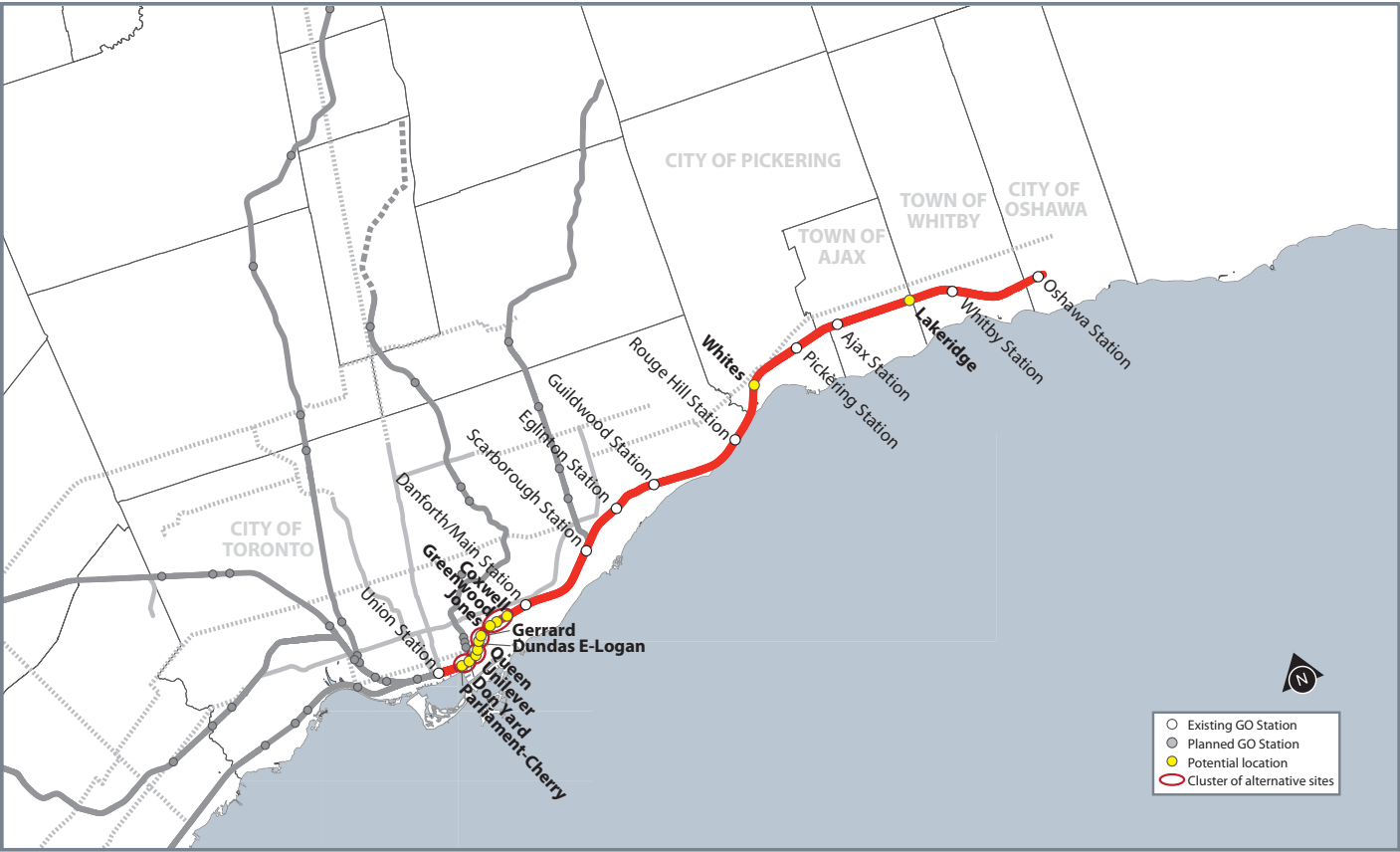
Legend	● High	● Medium	● Low	— Potential locations or clusters of alternative sites
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STOUFFVILLE CORRIDOR



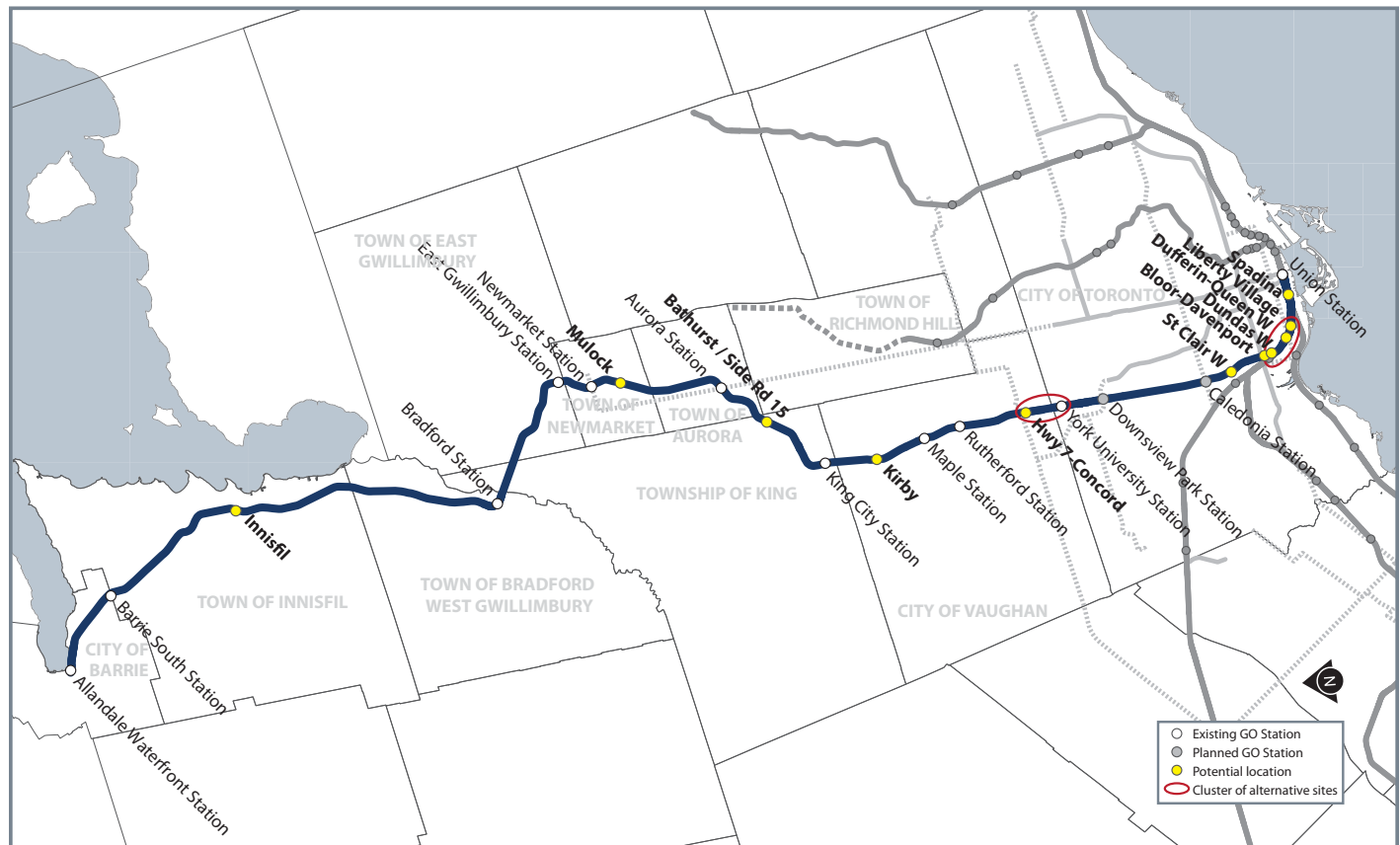
LOCATIONS/CLUSTERS	CONNECTIVITY AND RIDERSHIP DRIVERS	TRAVEL TIME SAVINGS	MARKET POTENTIAL	DEVELOPMENT POTENTIAL	POLICY ALIGNMENT	CONSTRUCTION AFFORDABILITY	EASE OF CONSTRUCTION
Parliament-Cherry	●	●	●	●	●	●	●
Don Yard	●	●	●	●	●	●	●
Unilever (DVP-Eastern)	●	●	●	●	●	●	●
Queen (Queen-Eastern)	●	●	●	●	●	●	●
Dundas East-Logan	●	●	●	●	●	●	●
Gerrard	●	●	●	●	●	●	●
Jones	●	●	●	●	●	●	●
Greenwood	●	●	●	●	●	●	●
Coxwell	●	●	●	●	●	●	●
Lawrence East	●	●	●	●	●	●	●
Ellesmere	●	●	●	●	●	●	●
Finch East	●	●	●	●	●	●	●
14th Avenue	●	●	●	●	●	●	●
Legend ● High ● Medium ● Low — Potential locations or clusters of alternative sites							

LAKESHORE EAST CORRIDOR



LOCATIONS/CLUSTERS	CONNECTIVITY AND RIDERSHIP DRIVERS	TRAVEL TIME SAVINGS	MARKET POTENTIAL	DEVELOPMENT POTENTIAL	POLICY ALIGNMENT	CONSTRUCTION AFFORDABILITY	EASE OF CONSTRUCTION
Parliament-Cherry	●	●	●	●	●	●	●
Don Yard	●	●	●	●	●	●	●
Unilever (DVP-Eastern)	●	●	●	●	●	●	●
Queen (Queen-Eastern)	●	●	●	●	●	●	●
Dundas East-Logan	●	●	●	●	●	●	●
Gerrard	●	●	●	●	●	●	●
Jones	●	●	●	●	●	●	●
Greenwood	●	●	●	●	●	●	●
Coxwell	●	●	●	●	●	●	●
Whites	●	●	●	●	●	●	●
Lakeridge	●	●	●	●	●	●	●
<div>Legend</div> <div>● High ● Medium ● Low — Potential locations or clusters of alternative sites</div>							

BARRIE CORRIDOR



LOCATIONS/CLUSTERS	CONNECTIVITY AND RIDERSHIP DRIVERS	TRAVEL TIME SAVINGS	MARKET POTENTIAL	DEVELOPMENT POTENTIAL	POLICY ALIGNMENT	CONSTRUCTION AFFORDABILITY	EASE OF CONSTRUCTION
Spadina	●	●	●	●	●	●	●
Liberty Village	●	●	●	●	●	●	●
Dufferin-Queen West	●	●	●	●	●	●	●
Dundas West (Barrie Line)	●	●	●	●	●	●	●
Bloor-Davenport	●	●	●	●	●	●	●
St. Clair West (Barrie Line)	●	●	●	●	●	●	●
Hwy 7-Concord	●	●	●	●	●	●	●
Kirby	●	●	●	●	●	●	●
Bathurst/Side Road 15	●	●	●	●	●	●	●
Mullock	●	●	●	●	●	●	●
Innisfil	●	●	●	●	●	●	●

Legend

- High
- Medium
- Low
- Potential locations or clusters of alternative sites

LAKESHORE WEST CORRIDOR



LOCATIONS/CLUSTERS	CONNECTIVITY AND RIDERSHIP DRIVERS	TRAVEL TIME SAVINGS	MARKET POTENTIAL	DEVELOPMENT POTENTIAL	POLICY ALIGNMENT	CONSTRUCTION AFFORDABILITY	EASE OF CONSTRUCTION
Spadina	●	●	●	●	●	●	●
Roncesvalles	●	●	●	●	●	●	●
Park Lawn	●	●	●	●	●	●	●
Kipling	●	●	●	●	●	●	●
Winston Churchill	●	●	●	●	●	●	●
Maple Grove	●	●	●	●	●	●	●
Dorval	●	●	●	●	●	●	●
Walkers Line-Cumberland	●	●	●	●	●	●	●

Legend

- High
- Medium
- Low
- Potential locations or clusters of alternative sites

RICHMOND HILL CORRIDOR



LOCATIONS/CLUSTERS	CONNECTIVITY AND RIDERSHIP DRIVERS	TRAVEL TIME SAVINGS	MARKET POTENTIAL	DEVELOPMENT POTENTIAL	POLICY ALIGNMENT	CONSTRUCTION AFFORDABILITY	EASE OF CONSTRUCTION
Parliament-Cherry	●	●	●	●	●	●	●
Don Yard	●	●	●	●	●	●	●
Queen East (West of Don)	●	●	●	●	●	●	●
Dundas East (West of Don)	●	●	●	●	●	●	●
Gerrard East (West of Don)	●	●	●	●	●	●	●
Millwood (CN Leaside)	●	●	●	●	●	●	●
Eglinton (CN Leaside)	●	●	●	●	●	●	●
Don Mills-Bond	●	●	●	●	●	●	●
York Mills	●	●	●	●	●	●	●
John-Green	●	●	●	●	●	●	●
16th Avenue	●	●	●	●	●	●	●

Legend

● High ● Medium ● Low — Potential locations or clusters of alternative sites

MILTON CORRIDOR



LOCATIONS/CLUSTERS	CONNECTIVITY AND RIDERSHIP DRIVERS	TRAVEL TIME SAVINGS	MARKET POTENTIAL	DEVELOPMENT POTENTIAL	POLICY ALIGNMENT	CONSTRUCTION AFFORDABILITY	EASE OF CONSTRUCTION
Spadina	●	●	●	●	●	●	●
Liberty Village	●	●	●	●	●	●	●
Dufferin-Queen West	●	●	●	●	●	●	●
Dundas West (Kitchener/Milton Line)	●	●	●	●	●	●	●
East Mall	●	●	●	●	●	●	●
West Mall	●	●	●	●	●	●	●
Cawthra-Dundas	●	●	●	●	●	●	●
Trafalgar	●	●	●	●	●	●	●
Legend ● High ● Medium ● Low — Potential locations or clusters of alternative sites							