



Capital Projects Update

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Chief Capital Officer

Metrolinx Board of Directors Meeting
June 25, 2015

Executive Summary

- This update is submitted to the Board for information
- GO Regional Express Rail is now a funded 10 year, \$13.5 billion program that will dramatically increase service on all GO rail lines
- RER enabling works were recently approved by the Metrolinx Board:
 - GO East Rail Maintenance Facility (ERMF) in Whitby
 - Stouffville line double tracking and soundwalls between Agincourt and Milliken
 - Barrie line double tracking between Steeles Avenue and south of Rutherford Station
 - Network Electrification Environmental and Technical Advisor
- Rapid Transit updates for vivaNext Bus Rapid Transit, Crosstown, Finch West, Hurontario-Main and Hamilton Light Rail Transit Projects

Rapid Transit Projects

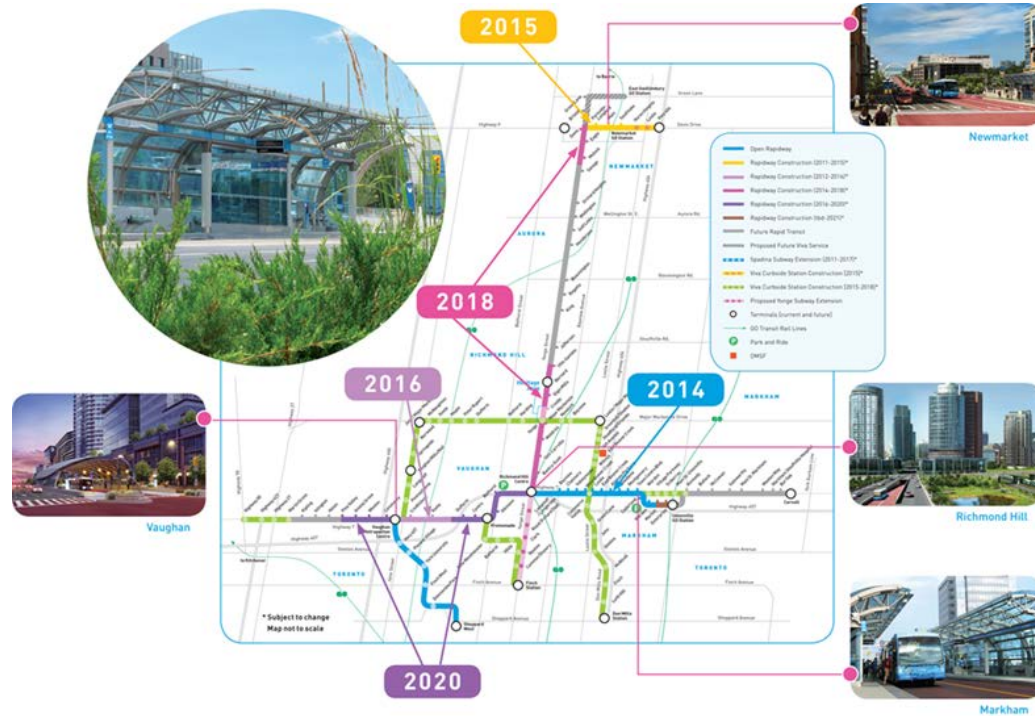
vivaNext Bus Rapid Transit

- The full H3 rapidway segment along Highway 7 between Bayview Ave. and Warden Ave. has been open since January 2015
- 6 km of the new 35 km rapidway program is in-service or 17% complete; bus travel time savings of up to 35% and a 10% increase in ridership have been noted
- Opening next: Davis Drive segment in Newmarket in December 2015
- Design-Build-Finance contract of the H2 segments in Vaughan and Richmond Hill to be awarded in the fall of 2015
- On-track to open a new segment nearly every year until total project completion in 2020



vivaNext Bus Rapid Transit

- Phased openings of vivaNext Segments



Eglinton Crosstown LRT

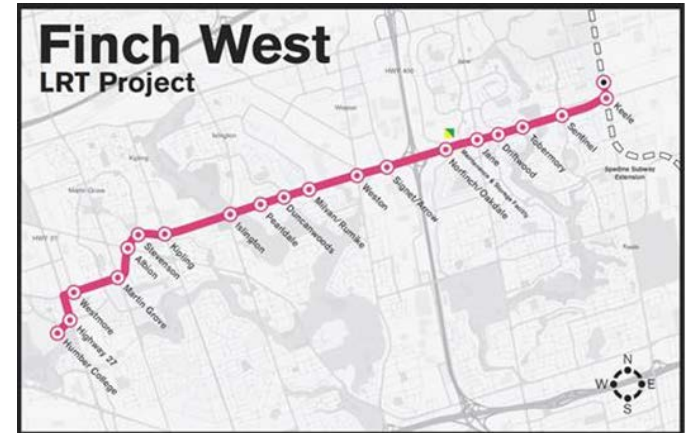
Construction progress:

- Crosslinx Transit Solutions (Crosslinx) was selected as preferred proponent to design, build, finance and maintain the Crosstown; financial close is targeted for the end of July 2015
- Construction on East & West Tunnels is progressing
- In the west, both tunnel boring machines (TBMs) reached the Allen Road extraction shaft (at the TTC's Eglinton West Station) and were extracted and relocated across the subway station box
- Two TBMs are undergoing retrofits and will be reassembled to resume tunnelling activities east of Allen Road towards Yonge Street (at the TTC's Eglinton Station) in the summer of 2015
- In the east, preparatory works are underway and tunnelling is expected to begin summer 2015



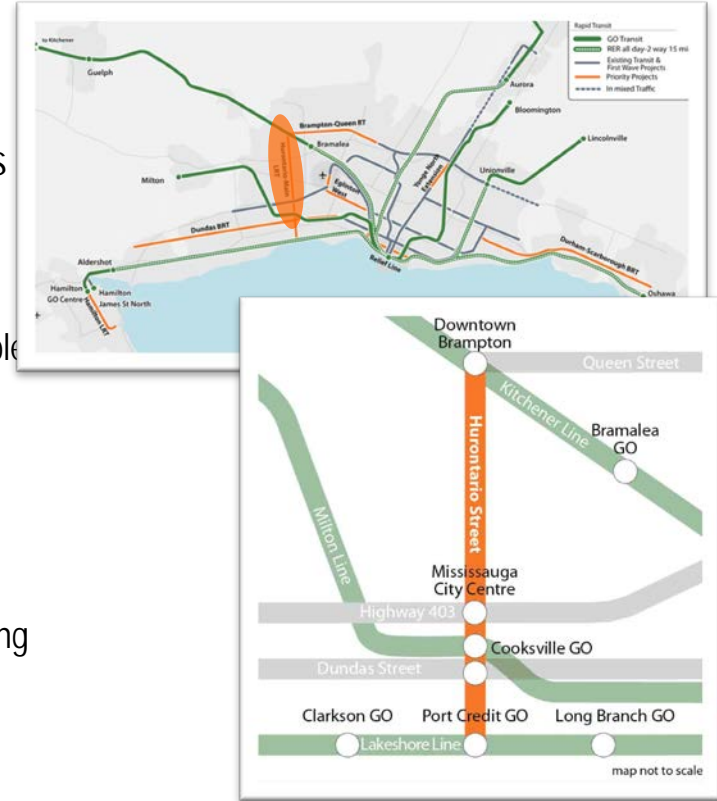
Finch West LRT

- 11 km of light rail transit across the centre of Finch Ave West between the new Finch West subway station and Humber College
 - 18 surface stops along Finch Avenue and a below-grade interchange station at the new Finch West Subway Station
 - Project also includes a maintenance and storage facility (MSF) serving the Finch West LRT
 - EA for MSF commenced May 2015 and is targeted for completion late 2015
 - Projected ridership is 2,250 passengers per hour in the peak direction by 2031
 - Projected cost is \$1.2 billion (2014\$)
 - Plan on issuing Request for Qualifications in summer of 2015 for design, build, finance, maintain (DBFM) contractors



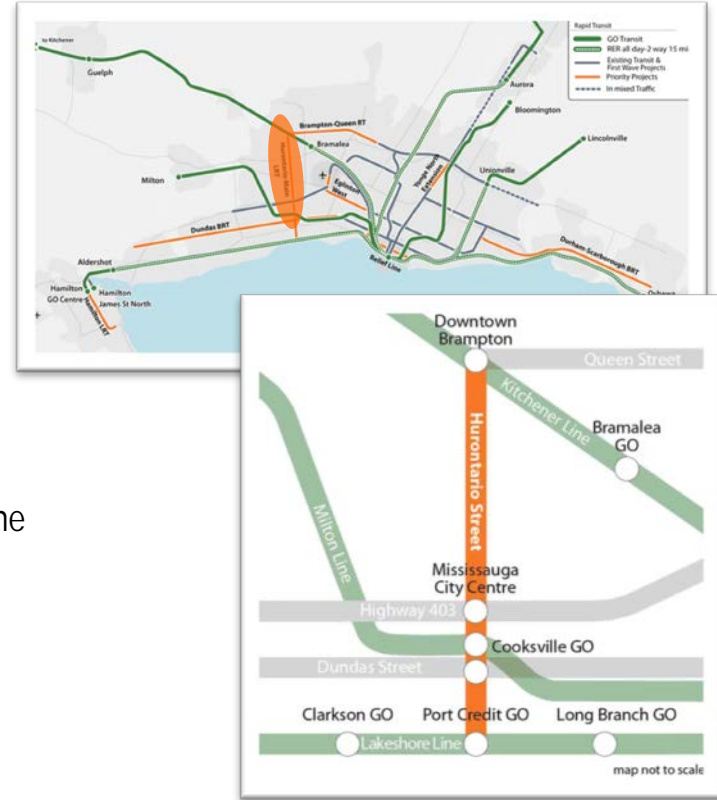
Hurontario-Main LRT

- 23 km of light rail transit along Hurontario and Main Streets from Port Credit to downtown Brampton
 - More than 33 million riders in 2031
 - Provides significantly faster, more frequent, and more reliable service with connections to multiple transit systems in the region
 - Projected cost is \$1.6 billion (2014\$)
 - EA complete
 - Seeking federal funding through P3Canada and New Building Canada Fund programs



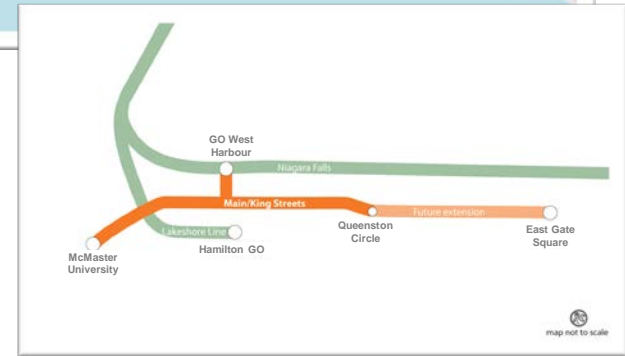
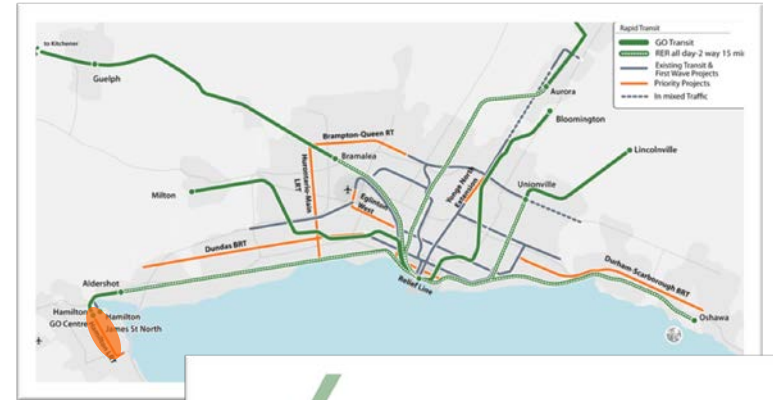
Hurontario-Main LRT

- Next steps include:
 - The procurement of advisory services, notably an owner's engineer/technical advisor
 - Acquisition of key parcels of property
 - Development of a master agreement with local/regional governments
 - Development of a risk-based master schedule throughout the RFQ/RFP phase
 - Development of an early works plan
- Approximately 3 years to start of construction



Hamilton LRT

- Phased implementation of the A and B-line LRTs has been announced:
 - B-Line: McMaster University to Queenston Circle
 - A-Line: Connection to West Harbour station
- Connects to the new GO West Harbour station and is about 300 metres from the GO Hamilton station on Jackson Street



Hamilton LRT

- Next steps include:
 - The procurement of advisory services, notably an owner's engineer/technical advisor
 - Acquisition of key parcels of property
 - Development of a master agreement with local/regional governments
 - Development of a risk-based master schedule throughout the RFQ/RFP phase
 - Development of an early works plan
 - Work with City of Hamilton to further develop a LRT alignment that builds a section of the B-line from McMaster University to Queenston Circle and part of the A-line to connect to the waterfront and the new West Harbour GO Station



GO Expansion and Regional Express Rail Projects

Hamilton West Harbour Station

- Construction is on schedule as planned with the station being operational for the Pan Am Games. Service is expected to be launched on July 9, 2015
- The station building, north platform, and portion of landscaped outdoor promenade will be open
- The station is anticipated to be fully completed for June 2016 with 300 parking spaces, the Bay Street pedestrian bridge, and a south platform



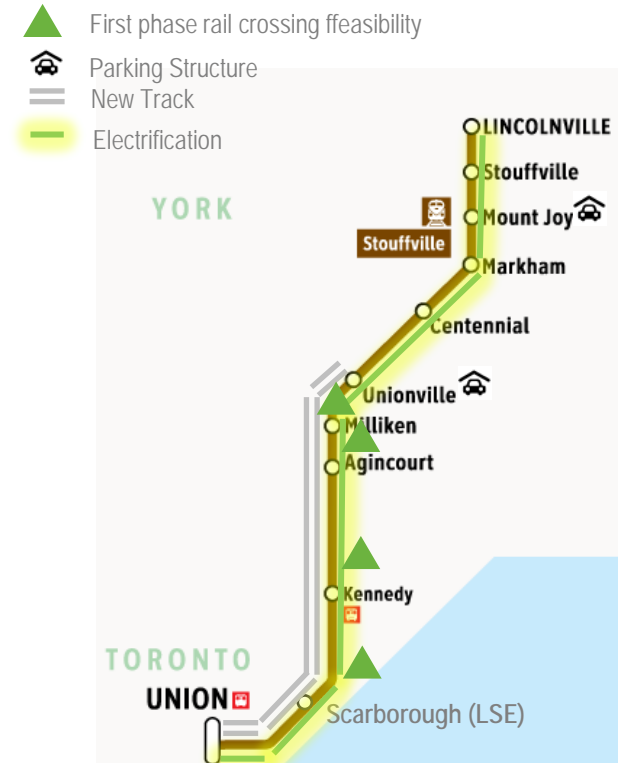
East Rail Maintenance Facility

- 70 acres of land located in Whitby, between South Blair and Thickson Road, south of Hwy 401 and north of the Lakeshore East GO rail corridor
- AFP contract awarded to Plenary Infrastructure ERMF (\$859.2M)
- Approximately 500,000 square-foot LEED® Gold certified facility located on 70 acres of land
- Tracks and storage for thirteen 12-car passenger trains, with built-in capacity for an additional nine in the future
- Includes measures to accommodate future electrification
- Preparatory construction work has been underway since September 2012
- Facility construction has commenced spring 2015 and substantial completion is planned for the end of 2017



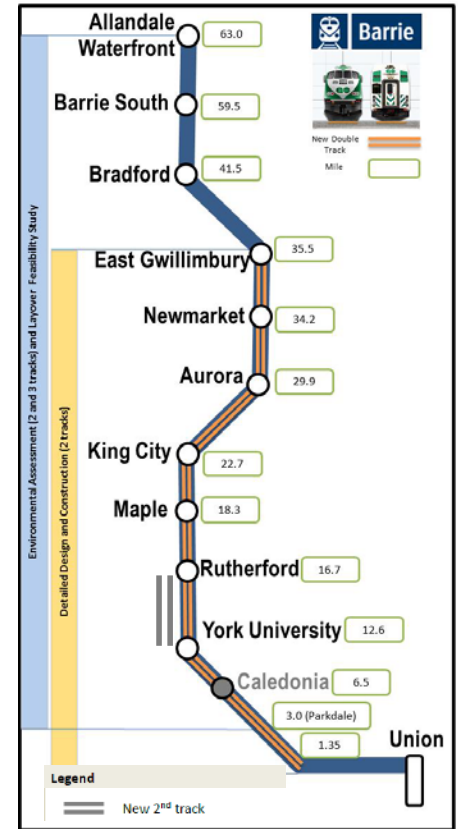
Stouffville Double Track

- Phase 1 - 5 km of double track construction, between Agincourt GO Station and Milliken GO Station, to start summer 2015
- Phase 2 double track construction to start summer 2016
- Grade separation feasibility to start summer 2015
 - Identify impacts, prioritize implementation based on municipal intended plans, benefits, and constructability.
 - Discussions with municipalities on service and infrastructure plans and opportunities to advance their required grade separations
- Agincourt, Milliken, and Unionville station design at 10% stage
- Kennedy station design/construction is underway with the Eglinton Crosstown project

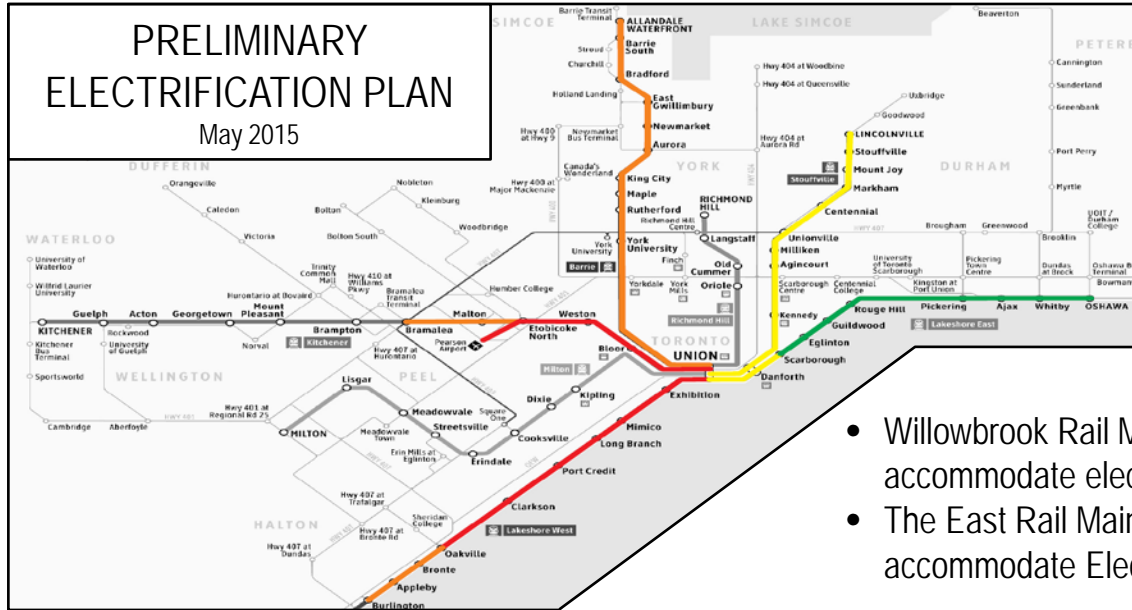


Barrie Double Track

- Construction for the Barrie double track expansion on Steeles Avenue and south of the Rutherford Station commenced in January 2015 with expected completion December 2016
- Feasibility study for a potential new layover facility in the Town of Bradford is underway
- EA and preliminary design is underway for two and three track segments between Parkdale and Allandale Waterfront GO Station, with related infrastructure requirements including modifications to existing stations and layover facility
- Anticipate EA completion in summer 2016



Network Electrification



- The Technical Advisor contract was awarded June 2015
- The System Wide EA will be completed late 2017
- Design, Procurement, and Construction will span between 2015 – 2024

- Willowbrook Rail Maintenance Facility will need to be modified to accommodate electric vehicles
- The East Rail Maintenance Facility will be designed to accommodate Electric vehicles

	Milton Corridor	Barrie	Kitchener	Lakeshore West	Stouffville	Lakeshore East	Richmond Hill	Totals
Miles of Electrified Track	0.0	60.0	19.0	31.5	22.0	30.1	0.0	162.6
Corridor Length (miles)	31.2	60.0	61.3	39.3	22.0	30.1	21.0	264.9
% of Corridor Electrified	0%	100%	31%	80%	100%	100%	0%	61%

Other Environmental Assessments (EAs)

- Lakeshore East Corridor
 - Additional track Guildwood to Pickering and three rail to road grade separations (in progress, anticipated for completion summer 2016)
 - Consultant selection underway for EA of additional track from Union Station to Scarborough
- Lakeshore West Corridor
 - Key rail to road grade separations on Lakeshore West Corridor (to be commenced)
 - Lakeshore West additional track Burlington to Aldershot (CN owned-to be commenced)
- Barrie Corridor
 - Caledonia Station (in progress, anticipated completion early 2016)
 - Davenport Community Overpass rail to rail grade separation (in progress, anticipated completion spring 2016)
 - Additional track from Parkdale to Allandale and layover facility north of Bradford (in progress, anticipated completion late 2016)
 - Key rail to road grade separations (to be commenced)
- Stouffville Corridor
 - Consultant selection underway for feasibility study and EAs for key rail/road grade separations
- Kitchener Corridor
 - Consultant selection underway for layover facility at Heritage Road
 - Kitchener Corridor additional track UP spur to Georgetown (mostly CN owned-to be commenced)

RER Stakeholder and Corridor Committees

Metrolinx has completed the first meetings of the Stakeholder Forum and each of the seven Corridor Committees

Stakeholder Forum – May 27th

- Key regional leaders in business, academic, labour and civil society provided advice to Metrolinx and the Minister of Transportation on regional RER implementation

Corridor Committee Meetings May/June

- Approximately 275 members spread across seven committees
- Members include local elected officials from all levels of government plus key leaders in business, academic, labour and civil society
- Member feedback and advice is focused on local transit issues and the implementation of RER on each of the corridors

Next round of meetings to occur in fall 2015

RER/SmartTrack Coordination

- A Program Committee continues to meet regularly to coordinate RER/SmartTrack planning
 - Membership includes Metrolinx, City of Toronto, TTC and Ministry of Transportation along with York Region and City of Mississauga
- Planning and analysis for RER/SmartTrack is proceeding through a coordinated and collaborative process
- Metrolinx co-hosted four city-wide joint public meetings with the City of Toronto and TTC between June 13 to June 22nd and supported four additional public meetings with a focus on specific transit planning studies
- New stations proposed by SmartTrack in existing GO corridors have been included in ongoing work to analyze new station opportunities network-wide
- The City of Toronto will report back to Toronto City Council on SmartTrack in Fall 2015



Awards

- In April 2015, the Weston Tunnel Grade Separation (part of the Georgetown South Program) won Top Project – Industrial from the Ontario General Contractors Association
- In May 2015, GO Transit's Ajax and Erindale parking structures both were awarded Illumination Awards from the Illuminating Engineering Society
 - These awards recognize commendable achievement in lighting design
 - In addition, the Ajax parking structure also won a Merit Award for Control Innovation, and the Erindale parking structure won a Merit Award for Energy and Environmental Design