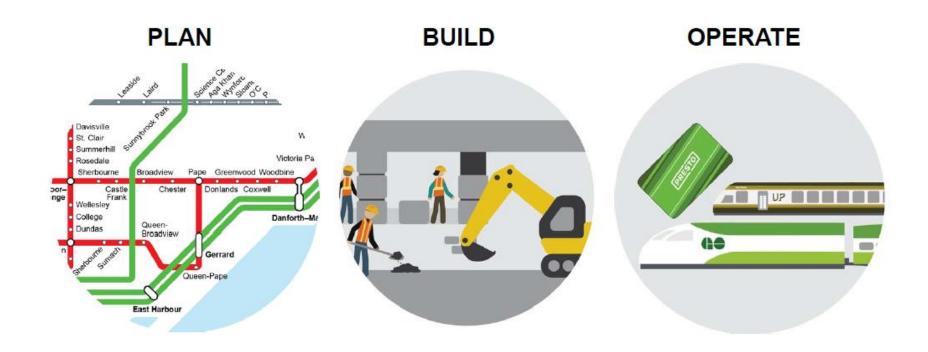


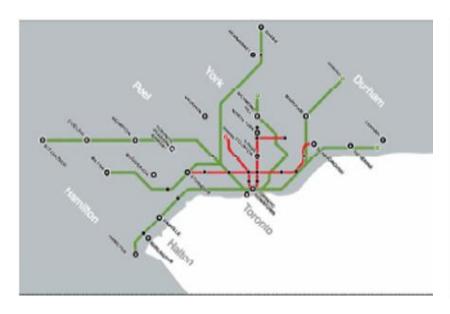
METROLINX



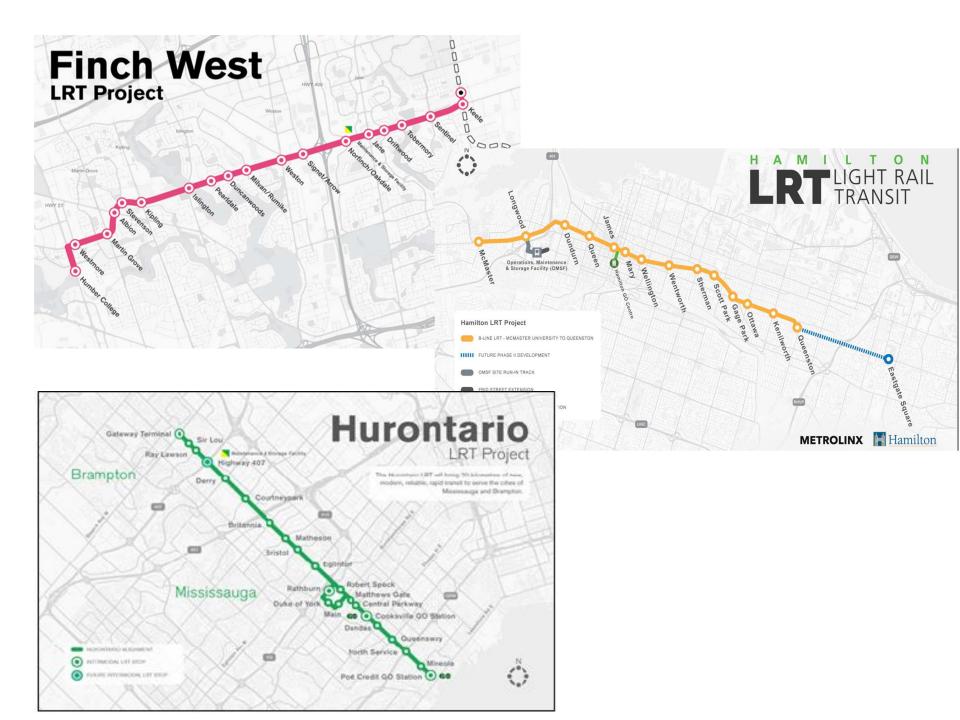
REGIONAL TRANSPORTATION PLAN

2012

25 YEAR PLAN







EGLINTON CROSSTOWN LRT

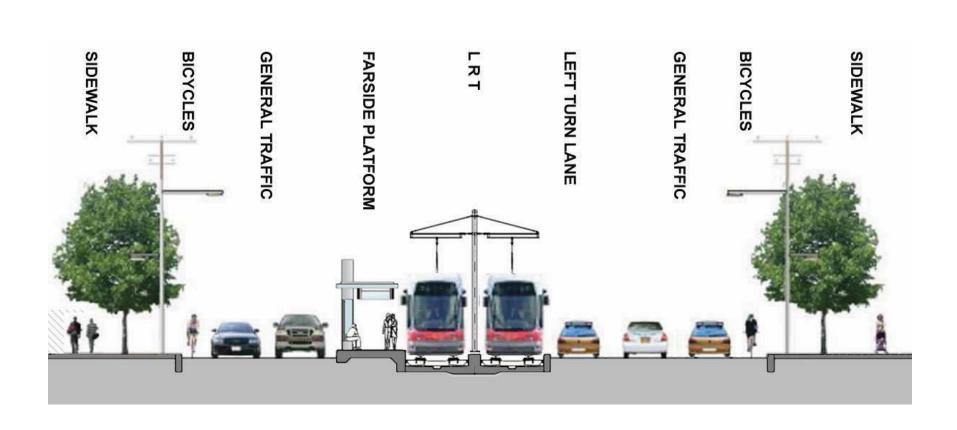
- 19 km long: 10 km underground and remainder running on surface in dedicated lanes
- \$5.3 billion, the largest transportation project currently underway in Canada
- Up to 60% faster than current east-west bus service.



- Hybrid procurement
 - Early works delivered conventionally
 - Majority of project delivered via AFP contract in association with Infrastructure Ontario (DBFM)
 - Operations to be provided by TTC under contract
- On time and on budget with planned opening in 2021
 - Tunnelling completed in 2016, work now underway on all subsurface stations

The Eglinton Line Eglinton Crosstown LRT Project 3 Aga Khan Park & Museum Science Centre Sunnybrook Park S Wynford Mount Pleasant Bloor-Danforth Line Scarborough Line Stouffville Line Yonge-University Line Yonge-University Line UNDERGROUND ALIGNMENT Barrie Line ABOVEGROUND ALIGNMENT Kitchener Line INTERMODAL LRT STOP UP Express + MAINTENANCE & STORAGE FACILITY

TYPICAL SURFACE STOP CROSS SECTION



AT GRADE ALIGNMENT

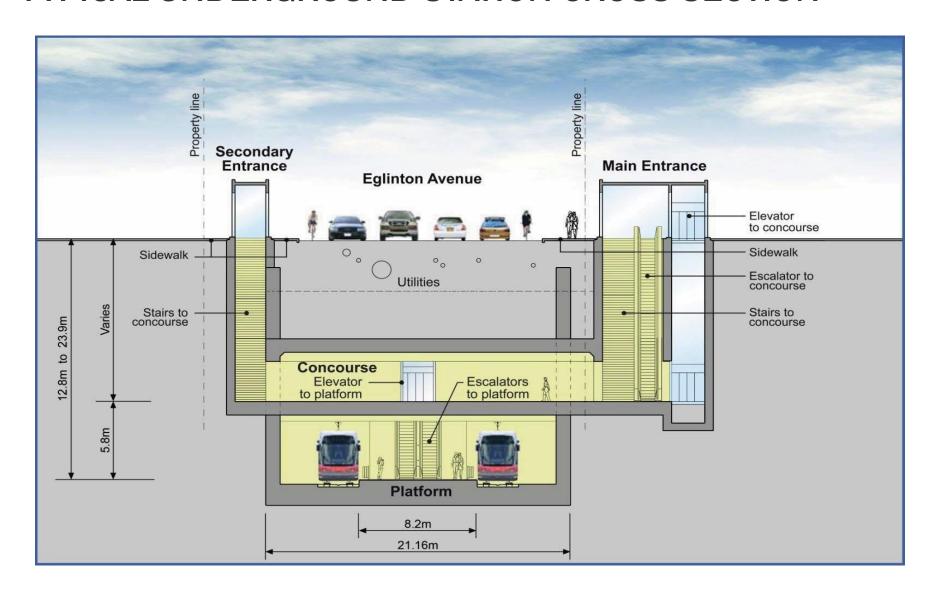
- LRT to be constructed and operate in a "transit way" in the middle of City street – maintaining existing traffic capacity
- 9 Stops
- Private property required for road widening (fee simple), utility relocations (permanent easements) and driveway restoration/grading (temporary easements).
- Master Agreement with City granted a construction license to Metrolinx and eventual transfer of permanent easement to Metrolinx for transit way in exchange for fee simple lands to City for widened right of way



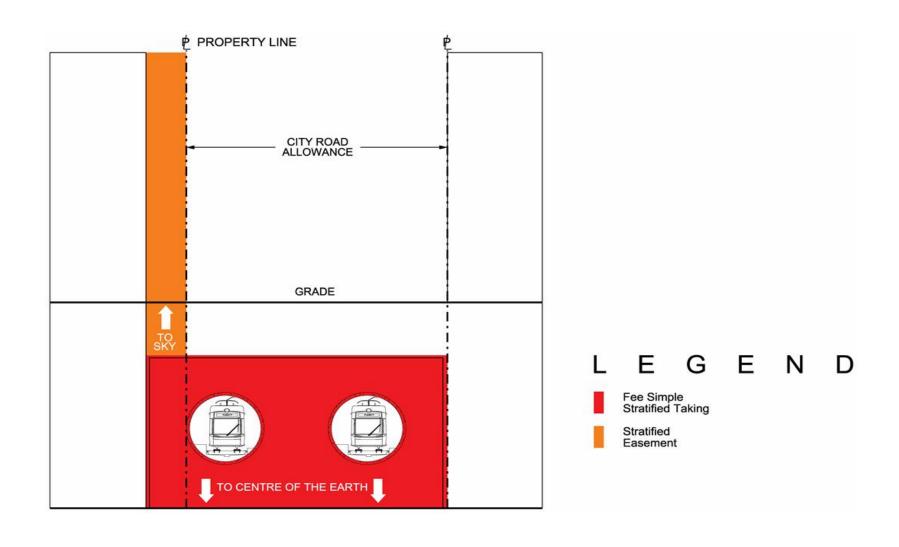
BELOW GRADE ALIGNMENT

- Narrow street width and development through mid-town
 Toronto did not allow for typical at-grade cross-section
- LRT will operate in tunnels below street 2 tunnel contracts completed as early works
- Subsurface requirements for 14 stations (within City street), full properties for station infrastructure (entrances, vent shafts, emergency exits etc.) similar to traditional subways
- To be constructed using both mining and cut and cover requires support of excavation – tie-backs, pipe roofs etc extending into adjacent private properties

TYPICAL UNDERGROUND STATION CROSS SECTION



PROPERTY REQUIREMENTS – TUNNELS





PROPERTY REQUIREMENTS

- Stations RFP identified 218 impacted properties to be delivered to contractor via phased delivery
 - 117 on execution of Project Agreement(July 2015)
 - 82 in 4th quarter 2015 and remaining 19 in 2016-2018
- Contractor identified additional 106 properties in bid for construction purposes (support of excavation, laydowns)
- In total, multiple interests at 324 properties delivered to contractor by Metrolinx
- Approximately 60% acquired by negotiation

THE CHALLENGES

- Delivery Model
 - > Timing of design development vs property delivery
 - ➤ Nature of property interests

- ➤ Nature of the Construction Project
 - ➤ Interface with neighbours
 - businesses
 - developers
 - special difficulties in relocation

PUBLIC PRIVATE PARTNERSHIPS – ALTERNATE FINANCE AND PROCUREMENT

- Engage creativity and innovation of private sector
- Motivate contractor to keep costs down not only for design / construction but also for operation and maintenance period
- Identify <u>what</u> must be built (specifications) not <u>how</u> to build it

vs traditional Design - Bid - Build contracts

 Design fixed in advance, property requirements finalized before bids are invited

EXAMPLES...

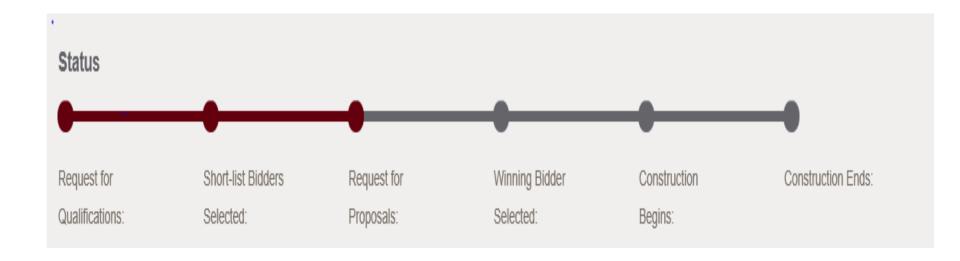
Budweiser Gardens



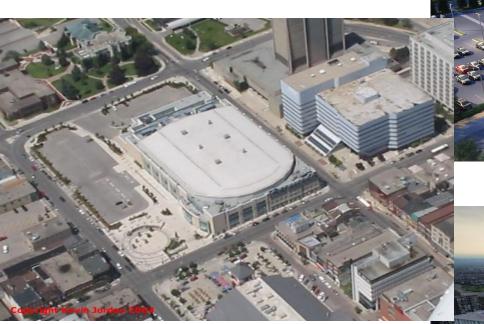
Sheridan College Hazel McCallion Campus (Phase 2)

Mississauga — Ontario

THE AFP MODEL IT SOUNDS SO SIMPLE....



AND LOOKS SO SIMPLE







BUT WHAT IF WE'RE TALKING TRANSIT?



DOES THIS LOOK SIMPLE?



Looks like its going to be a round hole square peg kinda day.



- PPP/ AFP model requires majority of property to be identified and delivered at an early stage of design:
 - 1. Reference Concept Design created for RFP property identified for delivery on/after financial close
 - 2. Proponents identify additional lands required for their individual design confirmed on financial close and delivered within 12-18 months
 - 3. Additional Lands identified by successful proponent during detailed design development another 12-18 months
- Can require multiple requests from property owners...

PROPERTY DEFINITION -

- Early acquisition + innovation requires flexibility
- Temporary Interests
 - commencement date
 - options to renew
 - tie-backs/ pipe roofs
- Permanent Interests
 - Fee simple vs easement to stratify or not to stratify?
 - Easement for support over tunnels

Project Impacts

- 4 mined stations
- 7 cut and cover
- 3 interchange stations
- Major construction 4–5 years













Business Loss Claims

- RFP provided incentives to bidders to reduce impacts – traffic lane and sidewalk closures discouraged
- Construction is ongoing
- Community Relations programs for signage, window cleaning, community events etc.
- Claims are evaluated against Expropriations Act and case law
- Interim settlements where appropriate

Development Interface

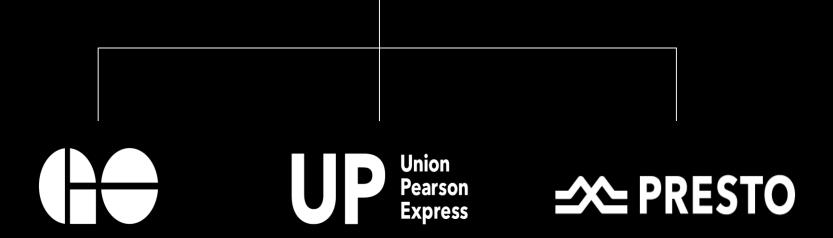
- Competing for space within right of way with developers
- Development review partner with City of Toronto to identify and comment on applications
- Site specific solutions:
 - Construction scheduling agreements
 - Interim lease of property pending redevelopment
 - Transit oriented development opportunities

Special Difficulties in Relocation

- Collaborative approach to sensitive uses full property
 - Charitable institution
 - Childcare centre

Lessons Learned

- Property team must work closely with Project Team to properly identify property requirements early
- Business and Land Inventories prepared in advance will assist in understanding/predicting impacts
- Incentive programs can be successful in expediting property delivery and reducing overall costs
- Incentives to promote good behaviour by contractor have proven difficult to monitor and enforce – more boots on ground



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