



CREATING CONNECTIONS IN THE CITY OF MARKHAM

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METROLINX

An agency of the Government of Ontario

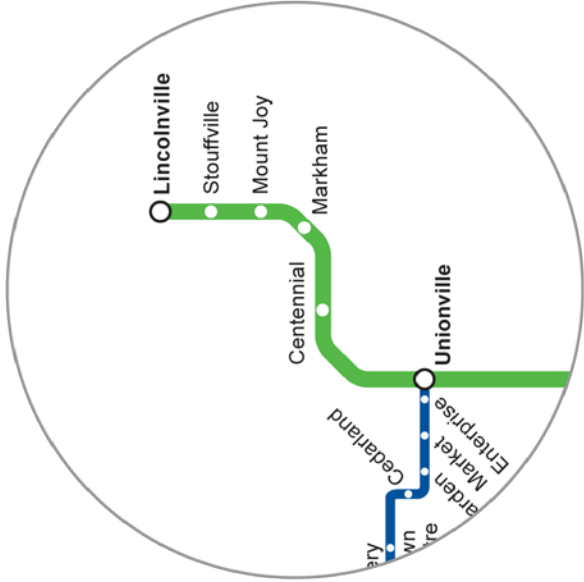
GRIDLOCK COSTS OUR ECONOMY



REGIONAL TRANSFORMATION



PLAN



BUILD



OPERATE



GO EXPANSION PROGRAM



DRAFT FOR DISCUSSION

SERVICE IMPROVEMENTS AND NEW STATIONS

INVESTMENTS IN THE CITY OF MARKHAM

Currently Markham residents have **ONLY** peak service. The GO expansion plan will bring significant levels of new service to Markham residents including:

- More GO Service during the day, on evenings and weekends
- New station building and connections to local transit at Unionville and Milliken GO Stations
- Improved level crossings including a grade separation at Steeles Avenue
- Electrified trains on the entire corridor

STOUFFVILLE: SERVICE IMPROVEMENTS

- Today there are 85 train trips operated per week.
- Two new trips during peak hours were added in January. We will continue to phase in additional service as we can.
- **A train every 20-minutes** from Lincolnville to Union Station in the morning and from Union Station to Lincolnville in the afternoon/evening.
- **All day, evening and weekend service** will become a new transit option for Markham residents – with 60-minute, two-way service between Mount Joy and Union Station.
- **Increased connections** to GO, regional and local bus services at GO Stations ensuring a more seamless trip for customers across services.

STOUFFVILLE CORRIDOR: NEW STATIONS

- Based on a station analysis that looked at over 50 potential new station locations, the Metrolinx Board of Directors approved moving forward with four new stations along the Stouffville line, that will be funded by City of Toronto:
 - Finch East
 - Lawrence East
 - Gerrard (*also served by Lakeshore East*)
 - Don Yard/Unilever (*also served by Lakeshore East*)
- Several new station sites in the City of Markham were included in the analysis but were ultimately not recommended as part of the GO RER 10-year program:
 - 14th Avenue: Major technical challenges due to existing rail grade separation
 - Denison: Proximity to existing Milliken station
 - Major Mackenzie: Proximity to Mount Joy station

UPDATE ON CITY OF MARKHAM RAIL INFRASTRUCTURE

INFRASTRUCTURE NEEDS FOR GO EXPANSION

- Metrolinx is undertaking one of the largest infrastructure projects in North America.
- Major financial investment has been committed to bring more transit options and new levels of service to York Region and City of Markham.
- There will be temporary community-level disruption to build a region-wide, integrated transit network.



New Track

150 kilometres of new dedicated GO track will allow for more uninterrupted service.



New Trains

New electric trains will travel faster for longer and reduce travel times.



New Bridges and Tunnels

Bridges and tunnels that eliminate intersections with rail and road traffic will provide more reliable GO train service.



New Renovations

New and improved stations will make your journey more comfortable, from start to finish.



Overhead Catenary



METROLINX

STOUFFVILLE CORRIDOR PROGRAM OVERVIEW

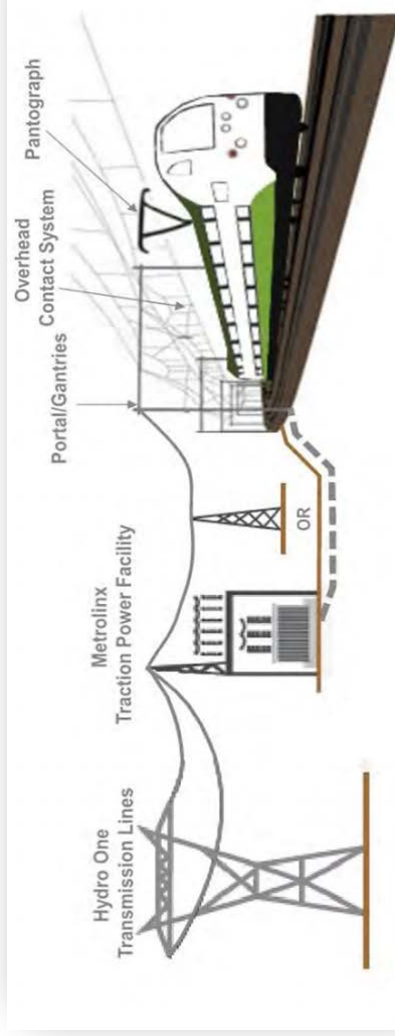
Infrastructure Build:

- Double track from Union to Unionville
- Signal improvements
- “Turn around” track at Unionville
- Bridge structure modifications
- Layover expansion and modifications
- Station modifications
- Improved rail crossings
- Grade separations
- Customer experience improvements



ELECTRIFICATION

- Electrification is planned for the entire length of the Stouffville line from Union to Lincolnville.
- In order to electrify, we need to build infrastructure including traction power substations, switching stations, paralleling stations, overhead contact systems and various safety modifications.
- This includes traction power facilities near Unionville (within 407 hydro corridor) and a paralleling station at Lincolnville (within layover facility).
- Design excellence is part of designing this infrastructure.
 - Portal/Gantries will be accommodated within the rail right-of-way.



ELECTRIFICATION

Traction Power Facility at Lincolnville.



Paralleling Station at Unionville.

STATION UPGRADES AND MODIFICATIONS

STOUFFVILLE LINE: STATION MODIFICATIONS



Unionville GO

Design: 2016 - 2017
15% Complete
Construction: 2017-2019

Milliken GO

Design: 2016 - 2017
15% Complete
Construction: 2017-2019

Agincourt GO

Design: 2016 - 2017
15% Complete
Construction: 2017 - 2019

* Dates Subject to Change

STOUFFVILLE: UNIONVILLE GO STATION



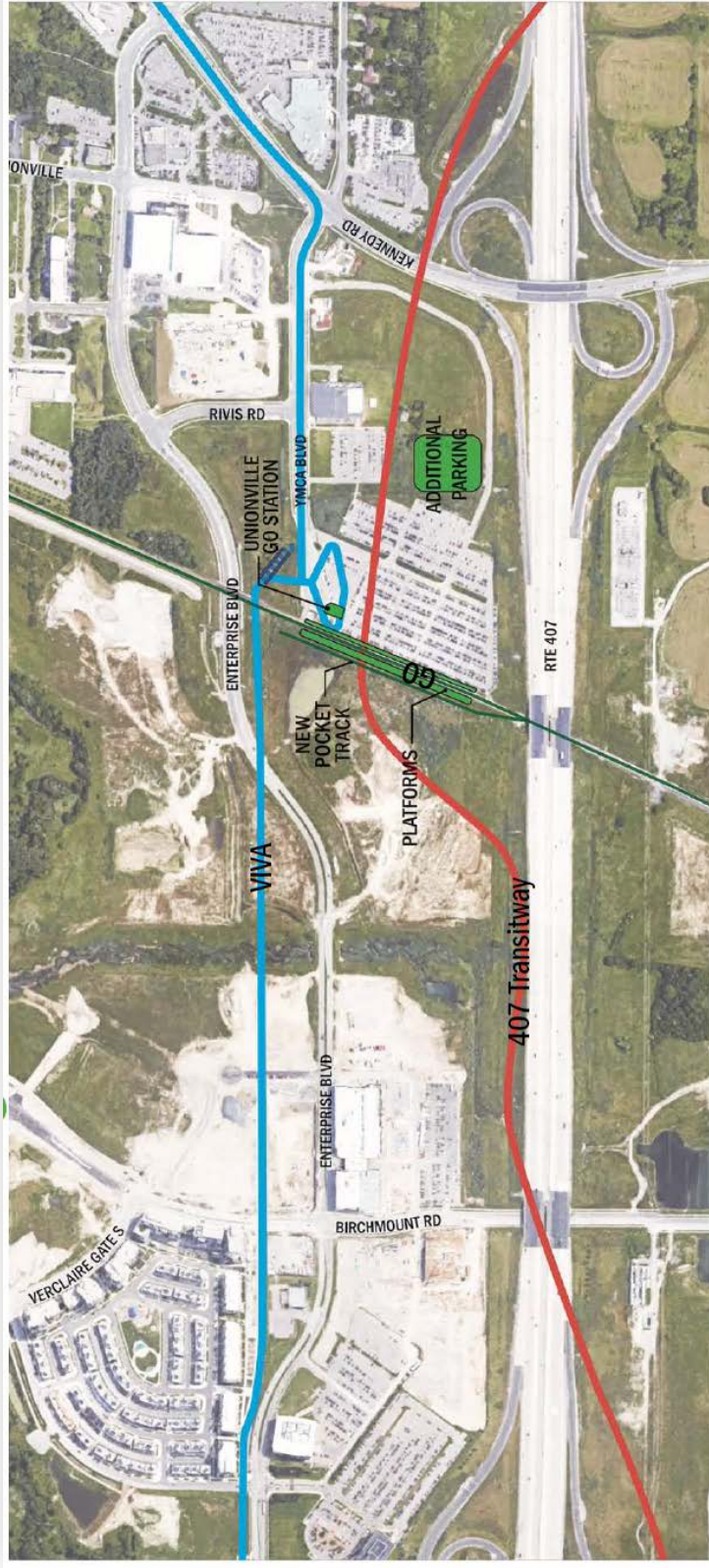
New Second Track and
Turnaround/Pocket Track

New Tunnels, Elevators
and Stairs

WEST (SOUTHBOUND PLATFORM)
EAST (NORTHBOUND)
New Median Platform
and East Platform with
Canopy

300 New Surface
Parking Spaces

MARKHAM CENTRE MOBILITY HUB STUDY



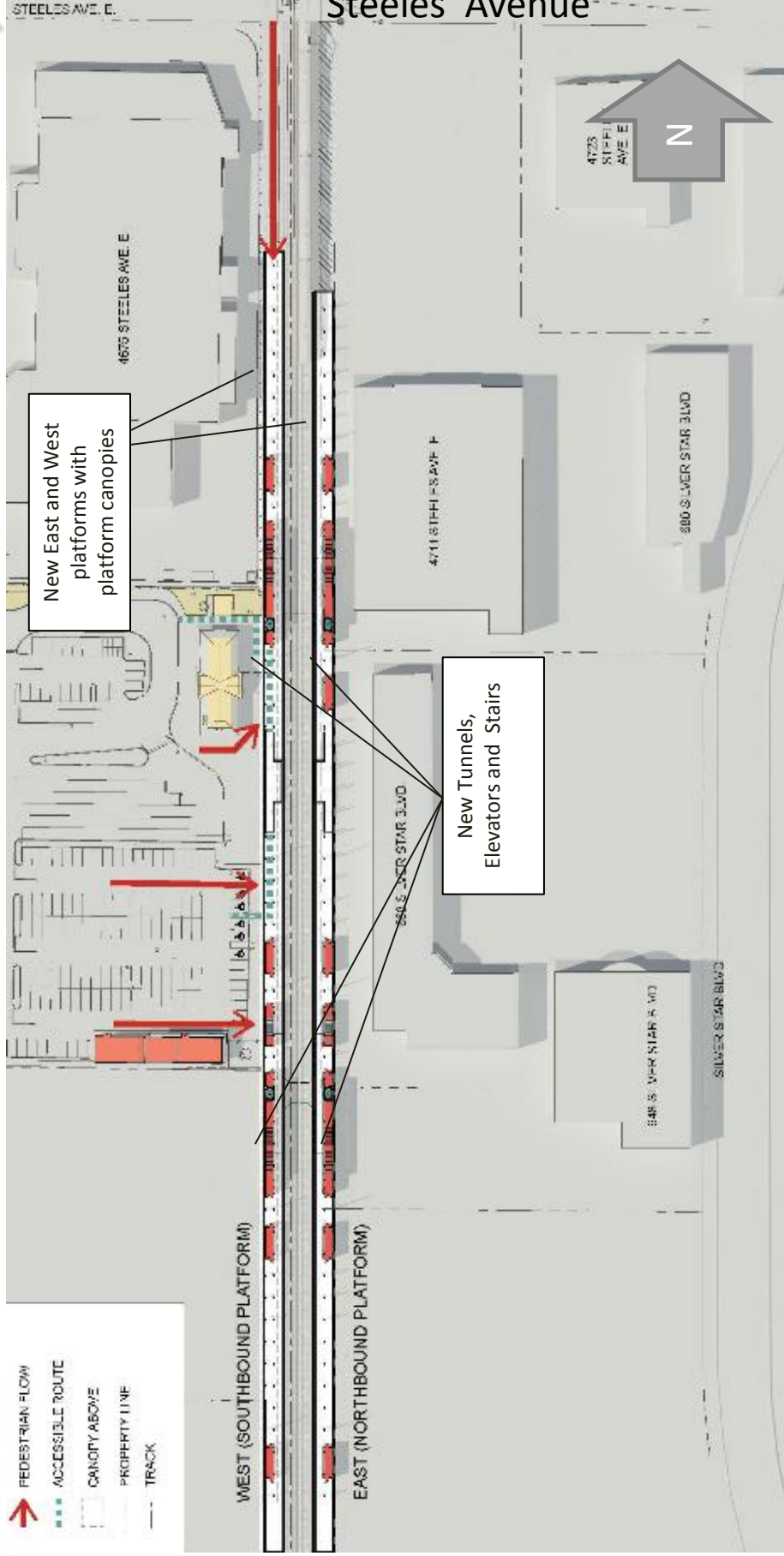
STOUFFVILLE: MILLIKEN GO STATION



TORONTO



STOUFFVILLE



Steeles Avenue

MILLIKEN AREA STATION PLAN

- Milliken Area Station Plan currently underway.
- Builds on first phase of station improvements to address additional station access needs related to RER Implementation.
- Key Issues to be addressed:
 - New off-street bus facility for TTC and YRT at Station
 - Bicycle facilities
 - Commuter parking expansion

LEVEL CROSSINGS AND GRADE SEPARATIONS

LEVEL CROSSINGS - ROAD/RAIL INTERSECTIONS

- With over 50 level crossings in York Region, they will continue to be a significant feature of the network.
- All level crossings on the GO network were assessed based on four criteria which included a number of components:

Usage and Existing Conditions (60%)

- Exposure Index (traffic and rail volumes)
- Geometry
- Accidents/Collisions
- Adjacent roadways and queuing

Operations (20%)

- GO Service improvements
- Special users (e.g. local transit, emergency services)
- Service reliability
- Station proximity

Social and Environmental (10%)

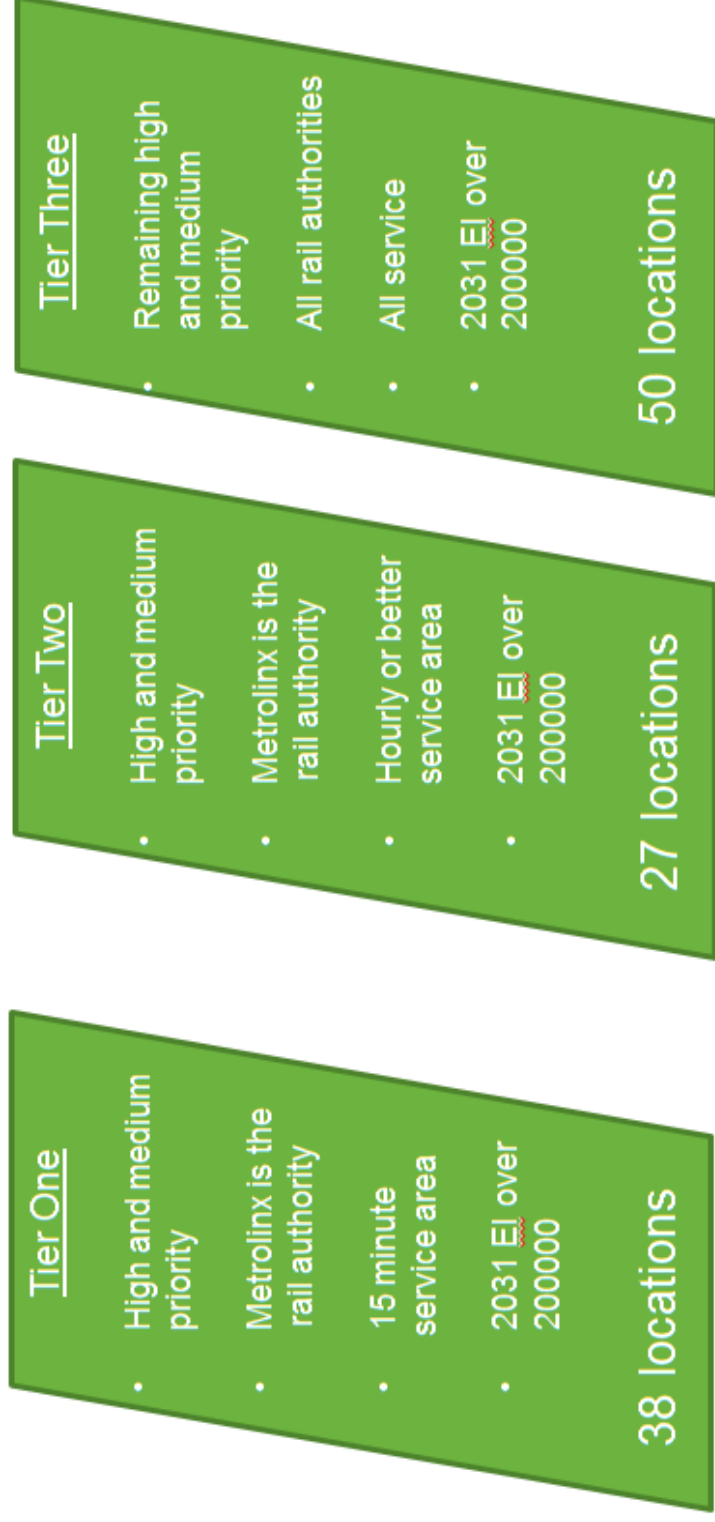
- Visual improvement
- Noise improvement
- Community connectivity

Cost (10%)

- Construction
- Property
- Maintenance

LEVEL CROSSINGS: SORTING REVIEW

Among high and medium priority locations, a tiered approach was adopted to inform prioritization and discussions with municipalities.



Area of focus

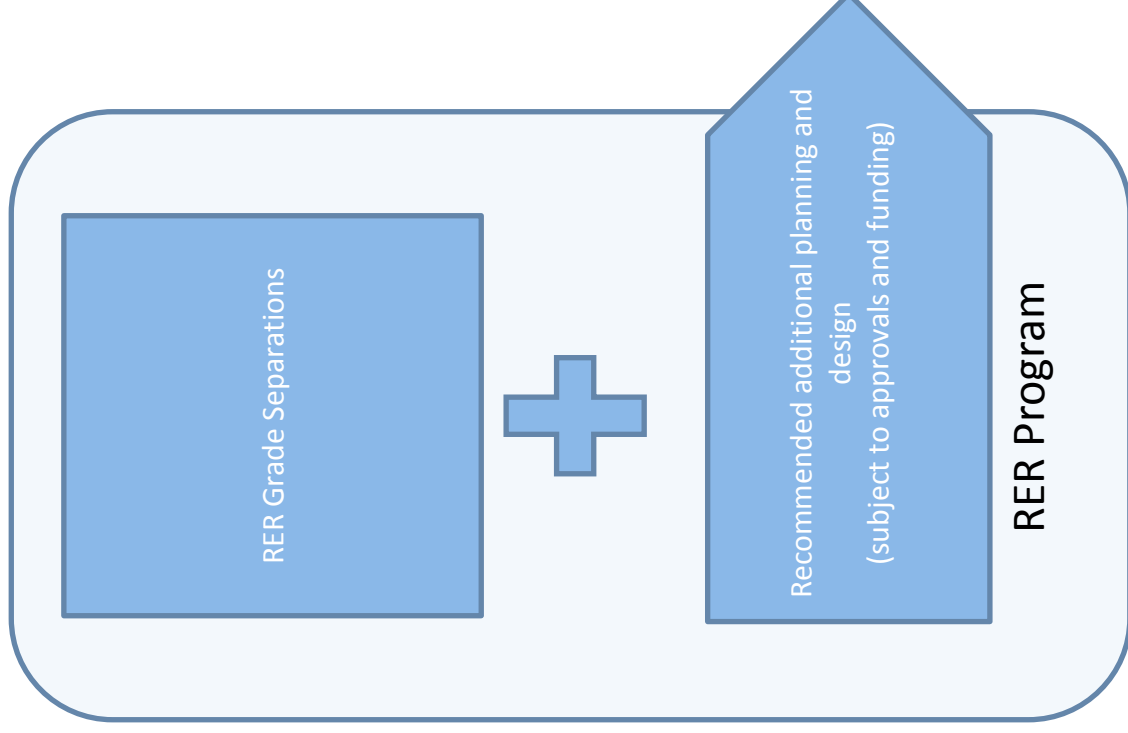
EI = EXPOSURE INDEX

LEVEL CROSSINGS: LONG TERM PLAN

Metrolinx will continue to work with municipal counterparts to plan for and advance grade separations where possible.

Metrolinx recommends a longer term plan be considered beyond the current program to move additional projects forward through planning and design, subject to approvals and funding.

This would allow for continued progress on a pipeline of locations not proceeding immediately as part of this RER program.



Municipal Partners

Federal Support



Future Projects

Beyond RER

LEVEL CROSSINGS: RESULTS

- Grade separations to support increased service in Markham:
- **Steeles Avenue East:** adjacent to station, EA underway by City of Toronto, Notice of Completion filed

Stouffville Line Tier One Crossings

Location	Score	Grade Separation	Comments
Finch Ave	74	Yes	Adjacent to a planned SmartTrack station, initial planning underway
Steeles Ave East *	67	Yes	EA underway by City of Toronto, adjacent to a station,
Danforth Road	66		Site is complex and in close proximity to Scarborough junction requiring further analysis:
Denison St *	66		identified for future consideration
Kennedy Road S. *	65		identified for future consideration
McNicoll Ave	64		identified for future consideration
Progress Ave	61		identified for future consideration
Huntingwood Drive	60		identified for future consideration
Havendale Road	55		identified for future consideration
Passmore Ave	53		identified for future consideration

Grade separations requiring further study

* - within/bordering City of Markham

STEELES AVENUE GRADE SEPARATION



* This drawing is for illustration purposes only and is subject to change during detail design.

STEELES AVENUE GRADE SEPARATION

EA Project Recommendations

Widen Steeles Ave to 6-lanes from
Redlea Ave to Midland Ave

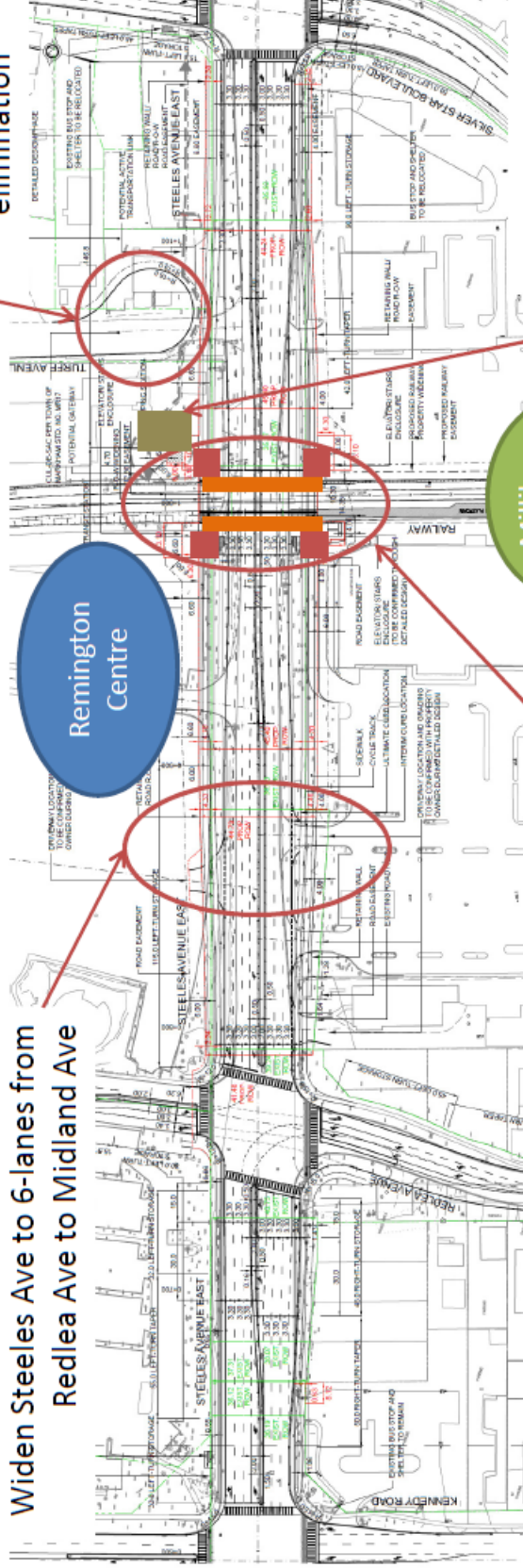
Turf Ave
elimination

Remington
Centre

Elevators (4) at each corner of rail
bridge and pedestrian walkway on
both sides of rail bridge

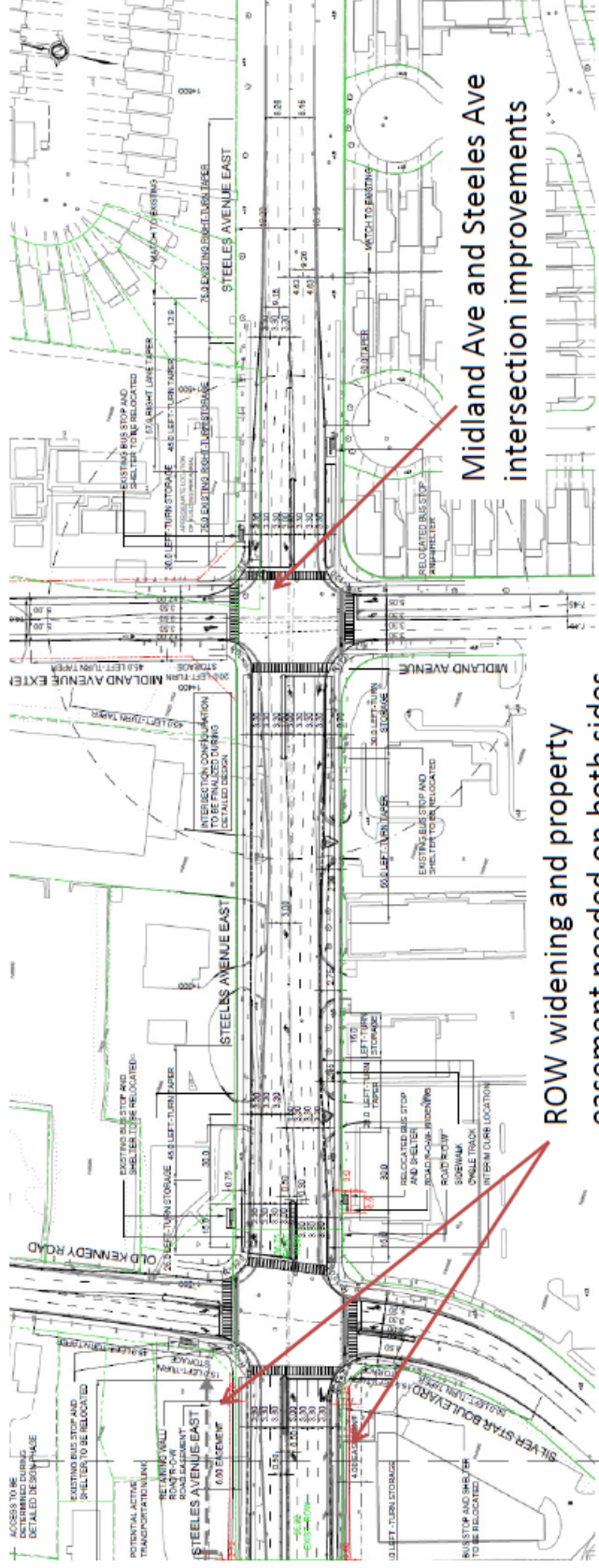
Proposed storm
water pumping
station

Milliken
GO
Station



STEELES AVENUE GRADE SEPARATION

EA Project Recommendations



ROW widening and property
easement needed on both sides

TRAIN WHISTLES: MARKHAM ANTI-WHISTLING

- We continue to work with Markham staff on train whistling.
- Metrolinx does not have legal standing under the regulation to apply for an exemption but works with municipalities that wish to make their own informed choices about the appropriate balance to strike between public safety risk and community disruption.
- As per the most recent Markham staff report (March 2017):
 - Metrolinx, the City and York Region have reached agreement on the scope of crossing upgrades to be constructed by Markham to enable anti-whistling; final review of the detailed design is ongoing
 - A Memorandum of Understanding (addressing issues such as liability) is in progress
 - Markham will simultaneously complete work to meet future Transport Canada safety standards; Metrolinx will fully compensate Markham for these related costs

NEXT STEPS: LEVEL CROSSINGS

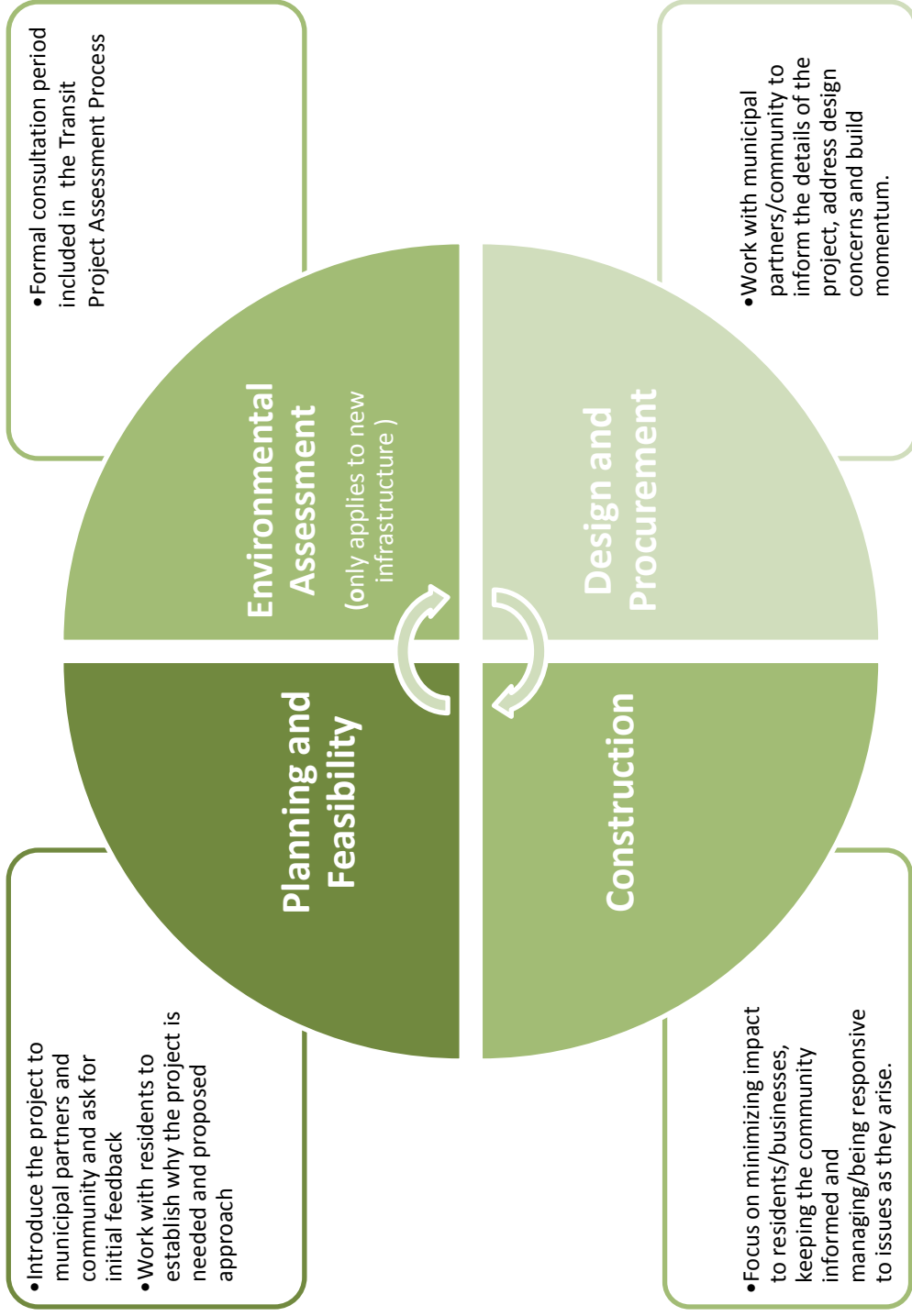
- Grade Separation Projects:
 - Finalize municipal agreements
 - Complete or initiate Environmental Assessment as required
- Study to make recommendations for remaining level crossings across GO-owned network
 - Municipal input will be part of this exercise
 - Safety assessment of Stouffville line crossings in Markham already completed due to collaboration with Markham-led work on Anti-Whistling Initiative
 - Recommended improvements to meet Transport Canada safety standards anticipated to be constructed in concert with City work
- Region-wide Community Advisory Committee
- Enhanced Safety and Education Awareness

ENGAGEMENT

OUR COMMITMENT TO COMMUNITIES

- Metrolinx recognizes that with new infrastructure and construction comes impacts to the community that must be worked through with residents, businesses, and their elected officials.
- A regional Municipal and Community regional tour is currently underway that creates an annual schedule for getting to every municipal council and for providing a comprehensive summary for each municipality that details what the program will look like locally.
- We are developing a community charter which will commit the organization to building the regional transportation system in a way that is respectful of the communities it touches.
- This is in addition to the standard community relations support that we have traditionally provided on the ground on projects like Georgetown South and the Eglinton Crosstown.

COMMUNITY ENGAGEMENT: PROJECT CYCLE



METROLINX COMMUNITY CHARTER

- In Phase 1 we sought your input on the six themes driving the Community Charter. Informed by your Phase 1 comments, we're back now for Phase 2 where we invite your feedback on the six Community Charter promises we've developed.
- Feedback for Phase 2 closed on April 21st, and will help to set regional promises and service standards.



HELP DEVELOP A COMMUNITY CHARTER

Have your say

At Metrolinx, we're committed to a future where you have the options you need to get where you need to go. Building transit takes time. It isn't always easy. That's why we're working hard to put communities at the centre of each project. We're developing a Community Charter that will apply to every area of our operations and we want your input. As we plan and build our regional transportation system, we want to be respectful of the communities we work in every day. The Charter will clearly outline our promises and commitments to working together, to listen, and to learn from each other.

LET'S GET IT RIGHT.

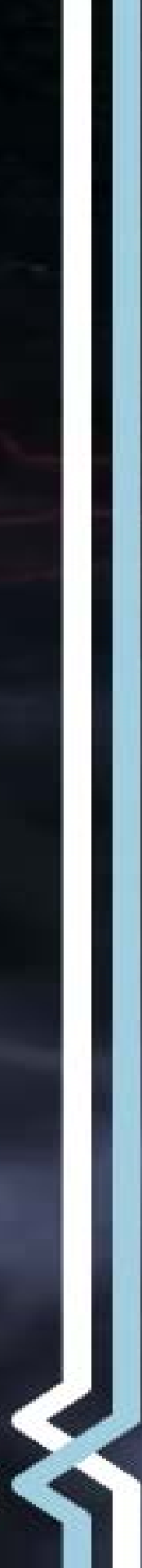
Tell us what you think about these six draft promises.

Metrolinx promises to:

- Ensure your safety
- Invest public funds responsibly
- Be considerate and treat you with respect
- Seek your input to help us make the best decisions
- Keep you informed
- Build and operate transit that connects our communities today and tomorrow

Join the conversation at [MetrolinxEngage.com](https://www.metrolinx.com/en/eng/CommunityCharter)



As our region grows our transit
system needs to grow too.

Let's get moving.