



Building Markham's Future Together
Journey to **Excellence**

Transit Update

Development Services Committee
June 23, 2015



SILVER RECIPIENT 2010
ORGANIZATIONAL QUALITY
& HEALTHY WORKPLACE



Building Markham's Future Together
Journey to Excellence

Presentation:

1. Overview of Metrolinx
2. *The Big Move*
3. Projects Update
4. Investment Strategy
5. Next Steps



SILVER RECIPIENT 2010
ORGANIZATIONAL QUALITY
& HEALTHY WORKPLACE

Metrolinx:

- In 2007 the Government of Ontario established Metrolinx to develop and implement an integrated multi-modal transportation plan for the Greater Toronto and Hamilton Area (GTHA)
- Metrolinx is also responsible for the development of an investment strategy and capital delivery plan
- Metrolinx Board consists of a maximum of 15 independent members, appointed by the Minister
- In 2008 Metrolinx released *The Big Move* which includes a long-term strategic plan for an integrated, multimodal Regional Transportation system
- In 2008, Metrolinx adopted the Regional Transportation Plan (RTP) titled *The Big Move*

The Big Move (2008):

- *The Big Move's* RTP is a transportation plan that:
 - ❑ Takes into account all modes of transportation
 - ❑ Establish a transit network for the GTHA
 - ❑ Makes use of intelligent transportation systems
 - ❑ Promotes the integration of local transit systems with the GO Transit system
 - ❑ Works toward easing congestion and commute times, and reducing transportation-related emissions of smog and greenhouse gases
 - ❑ Promotes transit-supportive development and the viability and optimization of transit infrastructure





The Big Move (2008):

- *The Big Move* Regional Transportation Plan (RTP) implementation includes:
 - 25 year infrastructure plan estimated at \$50 billion
 - Top Transit Priorities within the first 15 years at \$30 billion
 - Projects within 16-25 year plan at \$20 billion



The Big Move (2008) Projects in Markham:

□ Top Transit Priorities within the first 15 years:

- Viva Hwy 7 Bus Rapid Transit – Yonge Street to Kennedy Road
- Yonge Subway extension to Richmond Hill
- Improvements to existing GO Rail services including Richmond Hill line and Stouffville Line
- GO Service on the Havelock line
- Don Mills BRT/LRT- Bloor Street to Hwy 7



The Big Move (2008) - 15 Year Plan:



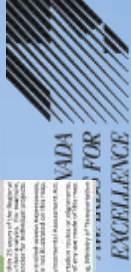


The Big Move (2008) - 25 Year Plan:

**THE
BIG
MOVE**



The International Association of Agricultural Economists (IAAE) is a non-profit organization that promotes the advancement of agricultural economics. It was founded in 1949 and has since then been a leading international organization in the field. The IAAE's primary concern is to advance the knowledge and understanding of agricultural economics through research, teaching, and the promotion of international cooperation. It achieves this through its various activities, including the organization of international conferences, the publication of journals, and the provision of research grants. The IAAE also works to promote the development of agricultural economics as a discipline, and to encourage the participation of developing countries in the international community of agricultural economists. The IAAE's efforts have been instrumental in the development of agricultural economics as a discipline, and in the promotion of international cooperation in the field.



SILVER RECIPIENT 2010
ORGANIZATIONAL QUALITY
& HEALTHY WORKPLACE

The Big Move (2008) Projects in Markham:

□ Projects within 16 to 25 year plan

- 407 Transitway from Hwy 427 to Markham Centre
- Steeles Avenue BRT/LRT from York University to Milliken GO station
- Steeles Avenue BRT/LRT from Milliken GO station to Downtown Oshawa
- McCowan Road BRT/LRT from Markham Centre to Scarborough Centre (Markham North/South Link)

□ Longer-Term Projects:

- New Rapid Transit service along Major Mackenzie Drive proposed by the Region of York and COM

The Big Move Update (2012):

- By 2012 Metrolinx had committed \$16 billion out of the original \$30 billion of the top transit priorities
- In November 2012 Metrolinx updated *The Big Move* to meet emerging transit needs and adjusted their capital delivery program
- Metrolinx announced the Next Wave of projects from *The Big Move* for the GTHA
- The Next Wave projects is the next set of projects that Metrolinx will implement
- Next Wave projects in Markham:
 - Yonge Subway Extension
 - GO Rail Expansion, two-way all-day
- Metrolinx outlined Next Wave projects totalling \$34 billion
- Implementation schedule (to 2031) not defined
- Projects are subject to funding, under Metrolinx's Funding Strategy /Trillium Trust



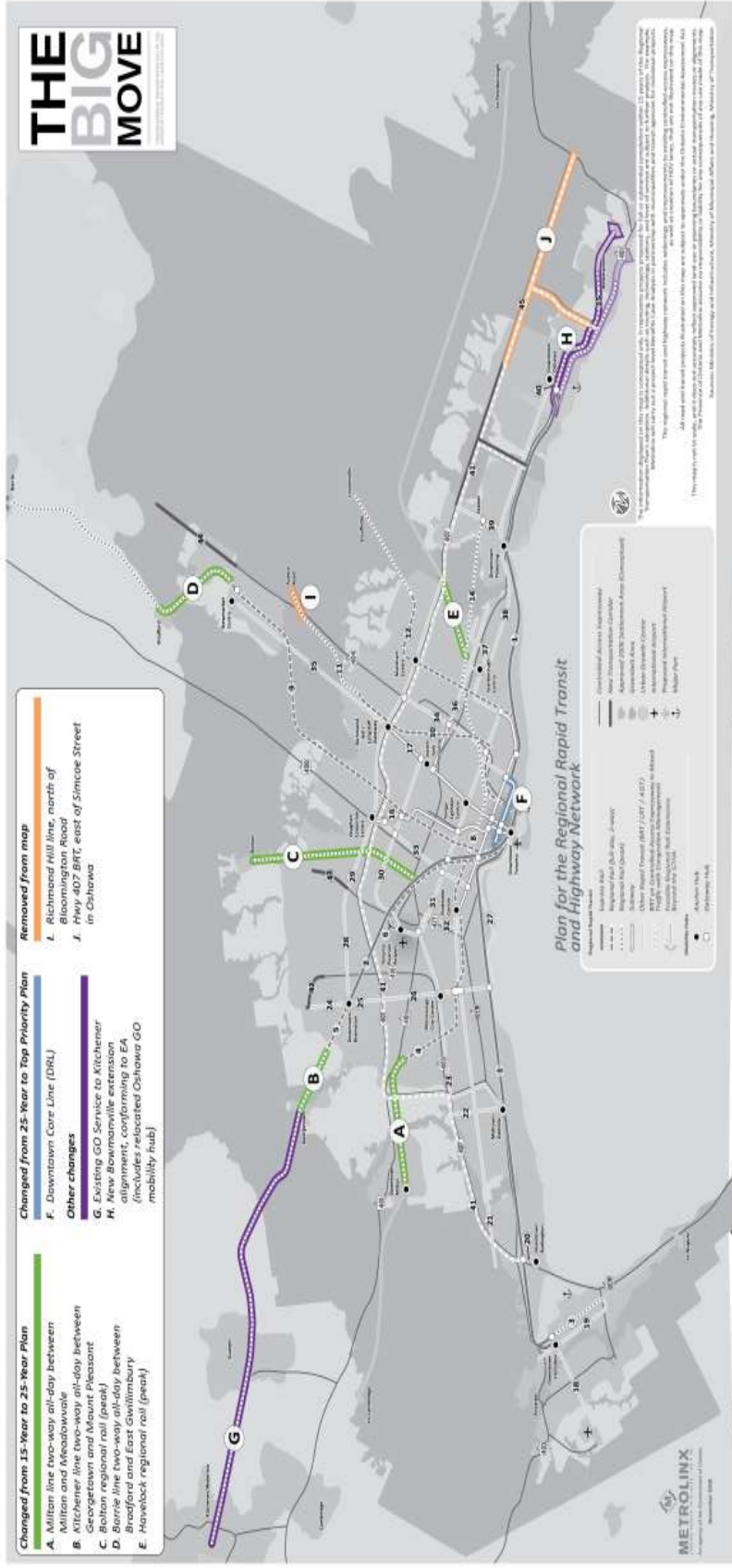
The Big Move Update (2012):

PLAN FOR THE REGIONAL RAPID TRANSIT NETWORK

- Changed from 15-Year to 25-Year Plan**
- A. Milton line two-way all-day between Milton and Meadowdale
 - B. Kitchener line two-way all-day between Georgetown and Mount Pleasant
 - C. Bolton regional rail (peak)
 - D. Barrie line two-way all-day between Bradford and East Gwillimbury
 - E. Hurontario regional rail (peak)
- Changed from 25-Year to Top Priority Plan**
- F. Downtown Core Line (DCL)
- Other changes**
- G. Existing GO Service to Kitchener
 - H. New Bramanville extension alignment, conforming to EA (includes relocated Oshawa GO mobility hub)

- Removed from map**
- I. Richmond Hill line, north of Bloomington Road
 - J. Hwy 407 BRT, east of Simcoe Street in Oshawa

THE BIG MOVE





Big Move vs Next Wave

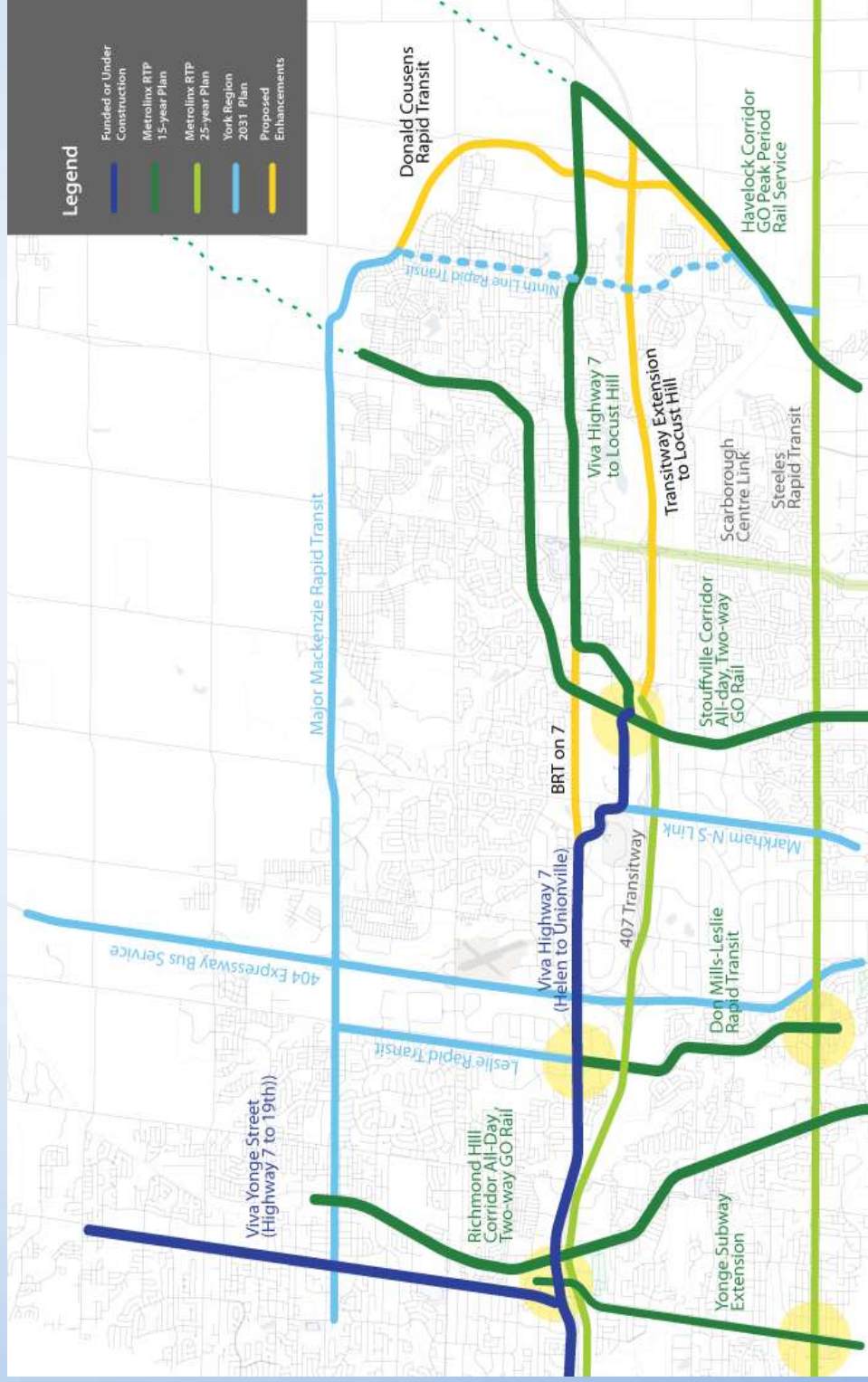
Projects	Big Move(2008)				Big Move Update (2012)	
	15 yrs	16 to 25 yrs	Beyond 25 Year	Next Wave	25 Year Plan	
Yonge Subway Extension to Hwy 7	●			●		
GO Rail Expansion Richmond Hill & Stouffville Lines (Two way-all day)	●			●		
407 Transitway		●			●	
Havelock GO Services (delayed)	●				●	
Steeles Ave BRT		●			●	

Big Move vs Next Wave

Projects	Big Move(2008)			Big Move Update (2012)	
	15 yrs	16 to 25 yrs	Beyond 25	Next Wave	25 Year Plan
Don Mills BRT/LRT (Not identified in the Big Move Update)					
McCowan BRT/LRT					
❖Major Mac/9 th Line BRT	Additional Project Required by ROY/COM				
❖Hwy 7 BRT-Warden to Kennedy	Additional Project Required by ROY/COM				



MTSP Recommended Transit Service



The Big Move Update (Regional Transportation Plan):

- Metrolinx is currently updating their Regional Transportation Plan
- York Region and the City of Markham are part of Technical Advisory Committee
- Metrolinx, Region and municipalities are reviewing transit needs to 2041
- The Regional Transportation Plan is anticipated to be completed in mid-2017 followed by an implementation plan
- Staff will report back to committee with updates and the recommendations of the Regional Transportation Plan

Yonge Subway:

- Yonge Subway extension to Richmond Hill Centre / Langstaff – Gateway remains a key priority project of Metrolinx
- Yonge Subway is in “Next Wave” of projects, but is subject to specific funding announcement
- Conceptual design has been completed (5%)
- Projects that may be needed before the Yonge Subway extension is possible:
 - Downtown Relief Line (\$7.4B)
 - Yonge - Bloor Station Capacity Improvements
 - Automatic Train Operation/Automatic Train Control
- York Region continues to work with Metrolinx and TTC to advance Yonge Subway (Benefit Cost Analysis, Richmond Hill train storage yard, land uplift capture study, funding options for Project Development & Environmental Studies)
- ± \$100m funding commitment needed to advance design
- Electrification and all-day service of Stouffville GO Line may address some of TTC concerns
- June 25, 2015 Metrolinx Board of Directors meeting may provide funding for the preliminary design

Highway #7 BRT:

- Construction of BRT is substantially complete on Highway 7 to Birchmount Road
- VIVA has Metrolinx funding to extend BRT on Simcoe Promenade from Birchmount Road to the Unionville GO Station
- VIVA review of alternative alignments due to conflict with YDSS at Simcoe Promenade
- VIVA and City of Markham staff to finalize the transit alignment and road network in the area and report back to committee in early 2016 so VIVA can proceed with design late 2016
- Construction of BRT through Markham Centre to Mobility Hub scheduled for 2018/19/20
- VIVA and City of Markham will also coordinate the VIVA design with Metrolinx RER – Unionville Station improvements

Stouffville Line:

- In 2014 GO Transit undertook a Class Environmental Assessment (EA) for this corridor from the Unionville GO Station in Markham to the Scarborough Junction in Toronto
- Scope of the proposed expansion:
 - All-day two-way service on weekdays, during the evenings and on weekends in core areas
 - Accommodation of increased train service levels (15 to 52 trains per day) to provide 15 minute headway from Union Station to Unionville Station
 - Additional track segments
 - Improvements to existing stations
 - Additional GO service to be provided North of Unionville Station (12 to 40 trains per day to Mount Joy)
 - Anti whistling is a key issue to address
 - Metrolinx proceeding with design and construction of double tracks:
 - Phase 1 from Toronto to Kennedy Road crossing (2015 – 2016)
 - Phase 2 from Kennedy Road to Unionville (2016 – 2017)

407 Transitway- Central Section:

- In 2010, the Ministry of Transportation (MTO) undertook a Transit Project Assessment Process (TPAP) for the Central Section of the 407 Transitway from east of Highway 400 in the City of Vaughan to Kennedy Road in the City of Markham
- 23 Kilometers, two-laned, dedicated runningway and stations along the Highway 407 corridor
- 407 Transitway will be implemented initially as Bus Rapid Transit (BRT) with the opportunity to convert to Light Rail Transit (LRT) in the future
- Outstanding issue related to 407 Transitway alignment at Langstaff Gateway and Markham Centre Hub
- VIVA/City review of VIVA alignment in Markham Centre and the Mobility Hub Study may resolve 407 Transitway alignment

407 Transitway- Phase 2:

- In 2015, the Ministry of Transportation (MTO) commenced a Transit Project Assessment Process (TPAP) for Phase 2 of the 407 Transitway from Kennedy Road in the City of Markham to Brock Road in the Pickering
- 18 Kilometers, two-laned, dedicated runningway and stations along the Highway 407 corridor
- 407 Transitway will be implemented initially as Bus Rapid Transit (BRT) with the opportunity to convert to Light Rail Transit (LRT) in the future
- MTO will present the preferred alignment and station locations to Council in Fall 2015
- Ongoing discussions regarding the preferred alignment and station locations
- MTO continue to view their transit corridor as a Regional Facility versus an inter province high speed rail transit route

John Street GO Station:

- In 2010, City of Markham requested that Metrolinx and Go Transit consider a GO Commuter Rail Station on the Richmond Hill Line at John Street in Thornhill.
- City representatives recently met with Metrolinx to discuss issues and long term potential
- Detailed report on this station submitted to DSC June 2, 2015
- Staff will update DSC upon completion of Metrolinx's Regional Express Rail Concept

Markham GO Station:

- In 2015 GO Transit commenced the Transit Project Assessment Process (TPAP) to facilitate the platform extension at Markham GO Station to accommodate 12-car trains which includes:
 - ❑ Realign Snider Drive westerly
 - ❑ Modifications of Bullock Drive to facilitate the realignment of Snider Drive
- City of Markham has been involved as stakeholder in the TPAP process
- First Public Information Centre held June 15, 2015
- Metrolinx/GO Transit to update Council September 2015
- Construction summer 2016 requiring a 4 month road closure of Bullock Drive

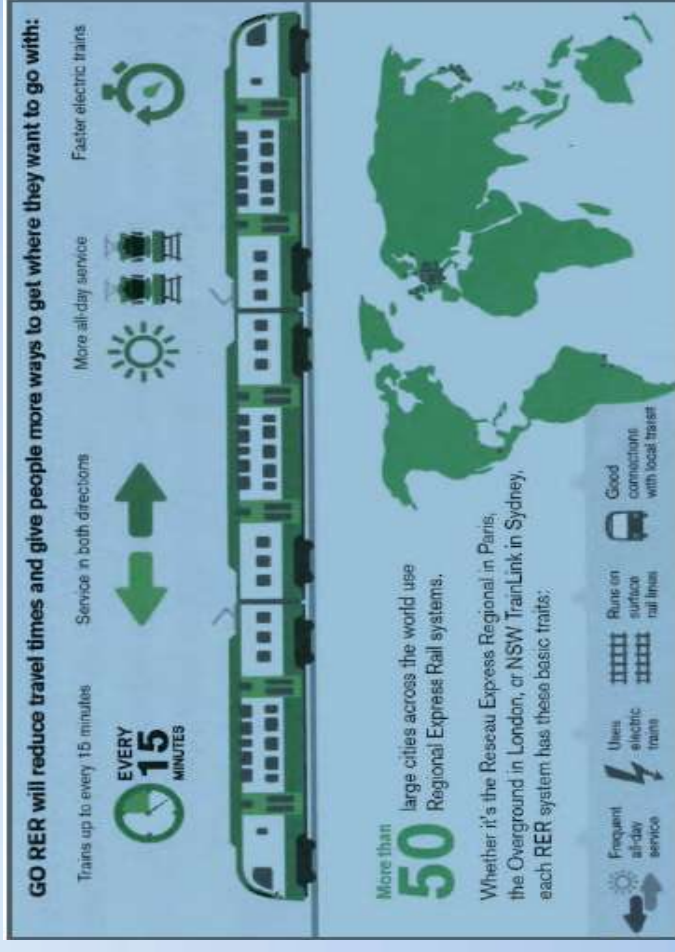
Electrification of GO Lines:

- Following initiatives underway regarding electrification of GO Lines:
 - Regional Express Rail (RER)
 - Smart Track
 - I-METRO-E
- Key elements of these initiatives are similar and have the following objectives:
 - Electrification of GO Lines
 - All-day two-way service on weekdays, during the evenings and on weekends in core areas
 - Additional stations
 - More frequent transit service
 - Intensification around new stations



Regional Express Rail (RER):

- RER is the Province's 10-year initiative that will give people throughout the GTHA new travel option with faster and more frequent GO rail service and electrification on core segments of the GO rail network.
- RER includes high speed trains, typically electric, serving primarily longer- distance regional trips.
- Key elements of this initiative include:
 - All-day two-way service
 - All day 15 minute headway between trains
 - Electrification of GO Lines





RER:

☐ Potential routes:

- Lakeshore East and Lakeshore West corridor, between Oshawa and Burlington
- Union Station to Unionville on the Stouffville corridor
- Union Station to Bramalea on the Kitchener corridor, including the Union Pearson Express
- Union Station to Aurora on the Barrie corridor

☐ Richmond Hill Line:

- More frequent peak rush-hour service from Monday to Friday from Richmond Hill Station to Union Station (every 15 min pm and am)
- Richmond Hill Line not being considered for RER due to issues of ownership (CN) and flooding.

Stouffville Corridor RER and Richmond Hill Corridor improvements:



Weekday rush hour

- 15-minute, two-way service between Unionville and Union Station
- 20-minute service from Unionville to Union Station in the morning and from Union Station to Unionville in the afternoon/evening



Midday, evening and weekend

- 15-minute, two-way service between Unionville and Union Station
- 60-minute, two-way service between Mount Joy and Union Station





The SmartTrack Line Proposal - City of Toronto Initiative:

- SmartTrack is a proposal from City of Toronto. There are no commitments yet to fund it
- The SmartTrack line will provide RER service from the Airport Corporate Centre in the west, southeast to Union Station and northeast to Markham in the east
- The SmartTrack line is a regional line, extending beyond the borders of Toronto. It would be delivered by Metrolinx who would be responsible for its operation.
- It would have 22 new station stops and five interchanges with the TTC rapid transit network
- It would offer all-day, two way, frequent express service across the City of Toronto
- It would be 53km in length
- It is mainly a retrofit of two existing GO lines (Stouffville GO line and Kitchener corridor)
Operated by Metrolinx
- Estimated project cost \$5.2 billion (unfunded)





Markham East Toronto Rapid Ontario-Electric (I-METRO-E) Concept:

- In 2012 Regional Councillor Jim Jones proposed I-METRO-E concept which includes:
 - Transforming the Stouffville GO-Line into a Rapid Transit Line from Mount Joy to Toronto's Union Station as part of *The Big Move* 15 year plan for Regional Rapid Transit
 - Electrification of the entire corridor
 - More frequent headways
 - More frequent transit stops along this corridor
 - Alternative technologies such as Maglev to be considered



Unionville Mobility Hub:

- In 2011 staff began work with Metrolinx on the Terms of Reference for a Markham Centre Mobility Hub study to review the road network and location of the proposed transit alignments through this portion of Markham Centre including:
 - Precinct Plan
 - Transit interface; VIVA, 407 Transitway and GO Transit
 - Public Consultation
- Study commenced in 2014
- Due to an alignment conflict with YDSS at Simcoe Promenade for the VIVA Rapidway, Regional and City staff to review alternate alignment
- Mobility Hub study has been put on hold
- VIVA and City of Markham staff to finalize the transit alignments and road network in the area and report back to committee in late 2015/early 2016
- City of Markham staff to restart the Mobility Hub study in 2016/2017 based on new transit/road alignments



Milliken GO Station:

- Opportunity to move the Milliken GO Station North to straddle Steeles Avenue is being reviewed
- City of Toronto is starting an amendment to the Steeles Avenue/GO grade separation Class EA
- Region and Markham are also reviewing conceptual redevelopment plans for the Market Village and Pacific Mall sites as relates to the GO Station and grade separation
- Staff will report back to Committee with updates



Parking:

- As part of Metrolinx's transit initiative municipalities have raised the issue of parking constraints and traffic congestion
- Agencies need to consider a GO parking strategy as part of each transit initiative, including the following:
 - Parking demand and supply
 - Provide alternatives to driving to GO Station, i.e., smart technology, shuttle service, etc.
 - Regional and local road capacity constraints
 - Parking structures
 - Parking fees

Investment Strategy:

- The Metrolinx investment strategy proposes a series of recommendations to integrate transportation, growth, land use planning in the GTHA, maximize the value of public infrastructure investment and dedicate new revenue sources for transit and transportation
- Funds generated from the investment strategy will be used to fund The Big Move's Next Wave of projects
- Investment Strategy approved by Metrolinx Board of Directors on May 2013
- In 2013 Premier established a Transit Panel chaired by Anne Golden
- The Transit Panel issued its final report including 20 recommendations on transportation funding sources for GTHA including endorsement of Metrolinx's Funding Strategy

Province has yet to select investment tools to fund

The Big Move's Next Wave options may include:

- One percentage increase to the harmonized sales tax
- 5 Cent per Litre increase for Regional fuel and gasoline tax
- Business parking levy
- 15% increase of development charges



* chart represents estimated annual revenue

The Trillium Trust and Moving Ontario Forward (April 16, 2015 Provincial Press Release):

- Trillium Trust is a tool that supports the government plan to unlock the value of certain public assets and use the net proceeds to help support investments in transit and transportation infrastructure projects through Moving Ontario Forward.
- Net proceeds from the sale of qualifying provincial assets would be credited to the Trillium Trust to fund infrastructure projects



The Trillium Trust:

- Hydro One IPO:

The government intends to introduce legislative amendments that would enable the gain from the Hydro One IPO and any subsequent share sales to go into the Trillium Trust.

- General Motors:

In February 2015, Ontario completed selling its remaining shares in General Motors. Net proceeds from that sale, including the \$200 million are now in Trillium Trust ready to be used for public infrastructure, such as transit and roads



Building Markham's Future Together
Journey to Excellence

Moving Ontario Forward:

- Moving Ontario Forward is part of Ontario's investment of more than \$130 billion over 10 years in public infrastructure including transit, transportation and other priority infrastructure
- \$16 billion is being allocated for transit projects in the GTHA
- \$15 billion is being allocated for infrastructure projects outside the GTHA



SILVER RECIPIENT 2010
ORGANIZATIONAL QUALITY
& HEALTHY WORKPLACE



GTHA Moving Ontario Forward Projects:

- \$16 billion is being allocated for transit projects in the GTHA including:
 - The creation of Regional Express Rail (RER) - a fully electrified service that runs at about 15-minute frequencies, along the following routes:
 - ❖ Lakeshore East and Lakeshore West corridor, between Oshawa and Burlington
 - ❖ Union Station to Unionville on the Stouffville corridor
 - ❖ Union Station to Bramalea on the Kitchener corridor, including the Union Pearson Express
 - ❖ Union Station to Aurora on the Barrie corridor

GTHA Moving Ontario Forward Projects:

- Currently awaiting Provincial commitment for planning and design work for Next Wave projects from the Metrolinx Big Move Plan, including:
 - ❖ Yonge North Subway Extension
 - ❖ Toronto Relief Line
 - ❖ Brampton Queen Street Rapid Transit
 - ❖ Durham- Scarborough Bus Rapid Transit
 - ❖ Dundas Street Bus Rapid Transit, linking Toronto, Mississauga, Oakville and Burlington
- York Region in April 2015 established a Transportation Advisory Task Force
- Markham is currently providing financial assistance (\$35,000) to Strategic Regional Research Alliance (SRRRA)



Building Markham's Future Together
Journey to Excellence

Next Steps:

- Staff continue to work with the Region and Metrolinx to advance a transit system to accommodate growth to 2031
- Staff continue to update Council on specific transit projects
- City participation on Task Forces and Working Groups

37



SILVER RECIPIENT 2010
ORGANIZATIONAL QUALITY
A HEALTHY WORKPLACE