



Report to: Development Services Committee

Date Report Authored: April 1, 2014

SUBJECT:	Stouffville Corridor Rail Service Expansion Environmental Assessment (EA) Project Report
PREPARED BY:	Alan Brown, Director of Engineering, Ext.7507 Sepideh Majdi, P.Eng. Special Projects Engineer, Ext. 2414

RECOMMENDATION:

- 1) That the April 1, 2014 report entitled "Stouffville Corridor Rail Service Expansion Environmental Assessment(EA) Project Report", be received;
- 2) And that GO Transit's Environmental Project Report for the enhanced GO Service on the Stouffville line be endorsed;
- 3) And that Metrolinx be requested to commit to funding service improvements on the Stouffville line in 2014/2015;
- 4) And that GO Transit be requested to establish a joint working group with Metrolinx, City of Markham, Region of York, City of Toronto and other stakeholders to undertake the following;
 - Establish the ultimate transit service improvements of the entire corridor ;
 - Confirm the implementation plan for ultimate service improvement requirements;
 - Review electrification of the corridor including the potential for additional stations;
 - Review anti-whistling requirements for the Hwy 7 to Major Mackenzie Drive section;
- 5) And that Staff be authorized and directed to do all things necessary to give effect to this resolution;
- 6) And that Robert Prichard, Chair of Metrolinx, Greg Percy, President, GO Transit, Jim Bradley, Minister of the Environment, Bill Fisch, Regional Chair, and John Livey, Deputy City Manager Toronto, be advised accordingly.

PURPOSE:

To provide Council with comments and staff recommendations with respect to the GO Transit Stouffville Corridor Rail Service Expansion Environmental Assessment Project Report.

BACKGROUND:

- 1) GO Transit's EA Study:
On April 2013, GO Transit started a "Group B" Class Environmental Assessment

Process (EA study) and Preliminary Design for the Stouffville railway corridor from just south of Kennedy GO Station in Toronto (Scarborough junction) to the Unionville GO Station in Markham. The study will identify the appropriate infrastructure improvements of the corridor needed to enhance the quality of service offered to customers and provide new transit options in the eastern GTHA.

Recommendations of the EA Study were outlined in the GO Transit presentation to DSC on January 21, 2014 and are summarized as follows;

- Increase in train service during the day from 15 to 52 trains
- Double tracking of rail line from Scarborough Junction to Unionville GO Station to allow two- way service
- Road/ rail grade separation and signal system improvement
- Improvement to existing stations
- Integration with Local Transit Service

Proposed improvement details are also outlined in Attachment “A”.

2) Budget and Implementation:

Implementation of this project is contingent on dedicated funding and an implementation strategy. Although Metrolinx included this project in the Next Wave (November 2012) list of projects, there currently isn't a firm funding or implementation commitment.

Given Markham will be experiencing significant growth to 2031, it is essential that the Stouffville GO Line improvements be implemented in conjunction with or in advance of development over this timeframe, as part of phase one of the Next Wave Metrolinx Plan.

3) Public/Council Communication

The project has been carried out as a GO Transit “Group B” Class EA and the first Public Information Centre (PIC) was held in late June 2013 to present the proposed rail expansion project. The second PIC was held in late January 2014 to review the study results and preliminary preferred alternatives. GO Transit is planning to file its EA study with the Ministry of the Environment this Spring, then forward this project to Metrolinx for funding approval.

On May 1, 2012 and September 17, 2013, Markham Council (see Attachment “B” and Attachment “C”) requested GO Transit to;

- establish the ultimate transit service improvements of the entire corridor ;
- confirm the implementation plan for ultimate service improvements requirements;
- review electrification of the corridor including additional stations;
- review anti-whistling requirements for the Hwy 7 to Major Mackenzie Drive section;

On January 21, 2014, Trevor Anderson, Manager, Environmental Assessment, GO Transit delivered a PowerPoint presentation entitled "Stouffville Corridor Rail Service Expansion" to Development Services Committee. The presentation included a problem statement, study purpose, corridor overview, scope of proposed expansion, corridor opportunities, EA process, public and municipal consultation feedback, ridership forecasts, improvements to the existing stations, service improvements, local transit integration and next steps.

In addition, Transport Action Ontario (TAO) a non-government organization identified several comments and recommendations that were submitted to GO Transit for its response, including:

- Request to extend scope of track twinning to Major Mackenzie
- Review electrification of line
- Review additional stations
- Review parking and station access
- Review rail grade separation
- Noise from train whistle should be considered

TAO comments are in Attachment "D".

4) Metrolinx's Big Move and Next Wave documents

Over the next 20 years, Markham's population and employment is expected to grow significantly. Given the limitations on expanding road capacity in these areas, combined with Markham's goals for improving transit modal splits, it is imperative that a hierarchy of transit options be provided. This includes the 407 Transitway (which would serve longer distance trips across the Region and to/from others areas of the GTA), Yonge subway, all day GO rail service, and VIVA rapid transit.

The Metrolinx Regional Transportation Plan (The Big Move 2008) and Next Wave(November 2012) documents indicate the service expansion for this corridor is from Union Station to Mount Joy station whereas the GO Transit EA study area is from Kennedy to Unionville station.

The Region's Transportation Master Plan and the draft Markham Transportation Strategic Plan recommended that additional service on the Stouffville GO Line would be required to accommodate the 2031 growth.

5) Recommendations:

GO Transit has not fully addressed to date the earlier comments from Markham and TAO, and it is essential to continue our efforts to improve this service at the earliest timeframe. We recommend that Council endorse the GO Transit EA study so that the project can advance to the next stage for funding approval. We also recommend Metrolinx/GO Transit establish a working group with City of

Toronto, Region of York, City of Markham and other stakeholders to undertake the following;

- Establish the ultimate transit service improvements of the entire corridor ;
- Confirm the implementation plan for ultimate service improvements requirements;
- Review electrification of the corridor including the potential for additional stations;
- Review anti-whistling requirements for the Hwy 7 to Major Mackenzie Drive section;

ALIGNMENT WITH STRATEGIC PRIORITIES:


The report aligns with Growth Management; Transportation/Transit and Environment initiatives. The provision of the Stouffville GO EA is critical in achieving these strategic objectives.

BUSINESS UNITS CONSULTED AND AFFECTED:

The Planning Department has reviewed this report and their comments have been incorporated.

RECOMMENDED

BY:


Alan Brown, C.E.T.
Director, Engineering


Jim Baird, M.C.I.P, R.P.P
Commissioner, Development

ATTACHMENTS:

- Attachment A: -GO Transit's EA proposed improvements
Attachment B: - May 1, 2012 Council Resolution
Attachment C: - September 17, 2013 Council Resolution
Attachment D: - Transport Action Ontario comments

Attachment A

Train Volumes

Existing	AM Peak		Midday		PM Peak		Evening		Total Trains
Starting GO Station	SB	NB	SB	NB	SB	NB	SB	NB	
Lincolnville	6					6			
Mount Joy									
Unionville			1	2					
Union									
Subtotal	6	0	1	2	0	6	0	0	15
Future	AM Peak		Midday		PM Peak		Evening		Total Trains
Starting GO Station	SB	NB	SB	NB	SB	NB	SB	NB	
Lincolnville	10					10			
Mount Joy			6	6			4	4	
Unionville	3	3			3	3			
Union									
Subtotal	13	3	6	6	3	13	4	4	52

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Note: Not all GO Stations shown. Future train volume projections are subject to change.

Additional Track Segments

Proposed service levels require the following improvements:

- Additional mainline results in double track corridor between the Scarborough Junction and Unionville GO Station.
- Improvements in grading, drainage and culverts including extensions to track bridges over existing watercourses.
- Modifications to existing road/rail grade separations to accommodate proposed double track corridor.
- Modifications to existing signal system to control train movements on double track corridor.

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Improvement to Existing Stations

Station Improvements were evaluated based on existing station infrastructure, future requirements, integration of pedestrian, cyclist and other transit initiatives.

- **Unionville GO Station**



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Local Transit Integration

Stouffville Corridor Rail Service Expansion will involve integration with the following local transit projects in the future:

- Eglinton Crosstown LRT (Kennedy GO Station)
- Scarborough RT (Kennedy GO Station)
- Bloor-Danforth Subway Line Extension (Kennedy GO Station)
- Sheppard East LRT (Agincourt GO Station)
- VIVA BRT (Unionville GO Station)
- Kennedy Mobility Hub (Kennedy GO Station)
- Markham Centre Mobility Hub (Unionville GO Station)

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Attachment B



THE CORPORATION OF THE CITY OF
MARKHAM

***EXTRACT CONTAINING ITEM #0005 OF THE DEVELOPMENT SERVICES COMMITTEE OF
(May 01, 2012)***

5. MARKHAM EAST TORONTO RAIL ONTARIO-EXPRESS ALL DAY TRAIN SERVICE (5.14)

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Presentation

On April 3, 2012 Council referred consideration of this motion to the meeting this date.

Regional Councillor Jim Jones gave a presentation on the "I-METRO-E" proposal, and referred to the information book distributed previously. An update was provided on discussions with City of Toronto Council members and staff.

The proposal involves transforming the existing GO line from Union Station to Stouffville, into an electric light rail METRO line, and increasing the stops from nine to twenty-five. This will improve the frequency, connectivity and speed, encourage ridership in excess of 100,000 people per day, and provide a potential alternative downtown relief line. The City of Toronto has referred the proposal to their Growth and Development Committee, and York Region staff have indicated support. Metrolinx is preparing to begin an Environmental Assessment for this line based on heavy rail; therefore it is important for this proposal to be put forward so that it can be included in the EA process.

Alan Brown, Director of Engineering, and Jim Baird, Commissioner of Development Services indicated there is merit to this proposal and the benefits of a light rail system, which will support the intensification strategy. Staff supports the recommendations to work with Toronto/Metrolinx to review this concept.

The Committee discussed key lines, grade separations, trip times, the strengths and economies of electrical technology, and funding options such as Public-Private Partnership, TIF, HST, and Gasoline Tax, between the province, region, and municipalities. Extension of the project to provide relief to other areas of Toronto and York Region was also discussed.

Regional Councillor Jim Jones requested consideration of the proposed motion to allow the process to continue, and an update report will be presented in a few months. It was clarified that the working group in Clause 3 refers to a technical/staff group.

Kevin Egan, Scarborough resident, spoke in support of the proposal and provided comments concerning the route, increasing the capacity of the line, and technical issues regarding the electrified system.

Moved by: Councillor Alan Ho

Seconded by: Councillor Logan Kanapathi

That the presentation by Regional Councillor Jim Jones, and the "I-METRO-E" document regarding the proposed Markham East Toronto Rail Ontario-Express All Day Train Service be received; and,

That the deputation by Kevin Egan, with comments regarding the proposed Markham East Toronto Rail Ontario-Express All Day Train Service be received; and,

Whereas the Metrolinx Regional Transportation Plan 2009 ("The Big Move 2020") identifies full day, 2-way service on the Stouffville line from Mount Joy to Toronto's Union Station as part of the 15 year plan for Regional Rapid Transit; and,

Whereas GO Transit will be undertaking an Environmental Assessment (EA) study on the Stouffville line for future infrastructure improvements in Markham and Toronto to provide for the planned full day, 2-way service, to be operational between Markham Center and Toronto's Union Station by 2014; and,

Whereas Metrolinx in 2013 is reviewing and updating its Regional Big Move 2020 Transportation Plan. The Stouffville Go Line should be considered for electrification in its entirety; and,

Whereas the Stouffville Rail Corridor Environmental Assessment process allows opportunities to consider alternative technologies. These alternative technologies include MagLev which is currently used in major centers and is extremely quiet, affordable, efficient and fast; and,

Whereas smaller, more cost effective diesel-electric multiple unit (DEMU), trains that are used throughout Europe, in use today in Ottawa on their O-Train line, and is currently being implemented between Toronto Pearson Airport and Union Station; and,

Whereas consideration should be given to go directly to Electric Train Technology for the Stouffville GO Line; and,

Whereas the electric technology will enable more frequent, lower cost service, with a greater number of new stations stops along the route and improve travel time to our transit riders; and,

Whereas the electric technology trains could carry a similar or larger number of transit rides than subway service; and,

Whereas the ~~Markham~~ East Toronto Rail Ontario-Express (I-METRO-E) concept would enable more frequent headways, and more frequent transit stops along this approved north-south rapid transit corridor between Stouffville and Union Station; and,

Whereas this north-south corridor will also interconnect with a number of existing and planned east-west rapid transit corridors, including VIVA bus rapid transit, 407 Rail Transitway, Steeles BRT/LRT, Finch BRT/LRT, Sheppard, Eglinton-Crosstown, and Bloor-Danforth Subway, and Lakeshore East GO; and,

Whereas the I-METRO-E would stimulate transit dependant development (TDD) and redevelopment along I-METRO-E transit corridor; and,

Whereas climate change, global warming, end of oil and gridlock are issues facing all major cities, it is important that all station communities are TDD designed systems to be net zero in energy, waste and emissions and produce the best public realm and quality of life for our citizens; and,

Whereas I-METRO-E would reduce automobile dependence, energy consumption and would promote environmental, social and economic sustainability initiatives; and,

Whereas Metrolinx has allocated their budget for transit projects for the next five years and revenues from development charges, TIFs, Section 37, HST, taxes, Gas Taxes increased user fees, improve operating performance are viable and can be leveraged within a Public Private Partnership (P3) model;

Now therefore be it resolved:

- 1) That a steering committee co-chaired by Markham Regional Councillor Jim Jones and a member of Toronto Council selected by City of Toronto Council be created. The committee will determine its membership which will include members of Markham, Toronto Council and other municipalities and levels of Government. This committee will focus on station and rail strategy, TDD, community planning, Government Relationships and Public Private Partnerships; and,
- 2) That the Steering Committee seek advice from the participating government bodies, agencies and other sources as determined by the committee with respect to terms of reference and funding requirements for comprehensive studies and reports that would be required to pursue the I-METRO-E concept; and,
- 3) That a working group reporting to the steering committee be formed of representatives from Metrolinx, the City of Toronto, the Region of York, and the Town of Markham to review the need and justification of the I-METRO-E concept, and the associated transportation, land use planning and economic development benefits; and,

4) That Metrolinx and other government agencies and stakeholders at the Federal, Provincial, Regional and Municipal level be requested to consider the merit and implications of the I-METRO-E concept and Maglev/Electric/DEMU technology on the Stouffville rail line in the context of the current review and update of the Metrolinx Regional Transportation Plan and Metrolinx Environment Assessment Study for the GO's Stouffville Line; and further,

5) That copies of this resolution be forwarded to the Premier of Ontario, the Federal Ministers of Finance, Transportation, Infrastructure and the Provincial Ministers of Finance, Transportation and Infrastructure Ontario, East Toronto and Markham area MPP's, the City of Toronto, the Mayor and Council members of the City of Toronto, the Toronto Transit Commission, Metrolinx, York Region and York Rapid Transit Corporation.

CARRIED

ADJOURNMENT

The Development Services Committee meeting adjourned at 11:55 AM.

Alternate formats for this document are available upon request.

Attachment C



RESOLUTION OF COUNCIL MEETING NO. 18 DATED SEPTEMBER 17, 2013

REPORT NO. 35 – DEVELOPMENT SERVICES COMMITTEE

(1) STOUFFVILLE CORRIDOR RAIL SERVICE EXPANSION CLASS ENVIRONMENTAL ASSESSMENT (5.0)

- 1) That the presentation from John Long - LEA Group on behalf the Major Mackenzie & 48 Land Owners Group be received; and,
- 2) That GO Transit be requested to amend their EA scope of work to include service improvements to Major MacKenzie and review alternative technology on the GO Line; and,
- 3) That the Mayor's Office be requested to arrange a senior meeting with Metrolinx, GO Transit, Ministry of the Environment and MPP's as soon as possible, to discuss GO Transits scope of work for their EA Study on the Stouffville Line; and,
- 4) That GO Transit be requested to establish a technical steering committee consisting of senior staff from GO Transit, Toronto, York Region and Markham; and further,
- 5) That Robert Prichard, Chair of Metrolinx, Gary McNeil, President, GO Transit, Jim Bradley, Minister of Environment and Bill Fisch, Regional Chair be advised accordingly.

A handwritten signature in black ink, appearing to read 'Kimberley Kitteringham', written over a horizontal line.

Kimberley Kitteringham
City Clerk

Copy to: Minister Jim Bradley, Minister of Environment
Jim Baird, Commissioner of Development Services
Alan Brown, Director of Engineering
Robert Prichard, Chair, Metrolinx
Gary McNeil, President, GO
Bill Fisch, Regional Chair
Laurie Rose, Chief of Staff

September 18, 2013

The Honourable Jim Bradley
Minister of Environment
11th Floor, Ferguson Block
77 Wellesley Street W.
Toronto, ON M7A 2T5

**RE: STOUFFVILLE CORRIDOR
RAIL SERVICE EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT (5.0)**

Dear Mr. Bradley:

This will confirm that at a meeting held on September 17, 2013, Council of the City of Markham adopted the following resolution:

- "1) That the presentation from John Long - LEA Group on behalf the Major Mackenzie & 48 Land Owners Group be received; and,
- 2) That GO Transit be requested to amend their EA scope of work to include service improvements to Major MacKenzie and review alternative technology on the GO Line; and,
- 3) That the Mayor's Office be requested to arrange a senior meeting with Metrolinx, GO Transit, Ministry of the Environment and MPP's as soon as possible, to discuss GO Transits scope of work for their EA Study on the Stouffville Line; and,
- 4) That GO Transit be requested to establish a technical steering committee consisting of senior staff from GO Transit, Toronto, York Region and Markham; and further,

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- 5) That Robert Prichard, Chair of Metrolinx, Gary McNeil, President, GO Transit, Jim Bradley, Minister of Environment and Bill Fisch, Regional Chair be advised accordingly.

If you have any questions, please contact Alan Brown, Director of Engineering, at 905-477-7000 ext. 7507.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'Kimberley Kitteringham', written over a horizontal line.

Kimberley Kitteringham
City Clerk

Copy to: Robert Prichard, Chair Metrolinx
Gary McNeil, President, GO
Bill Fisch, Regional Chair

Attachment D



TRANSPORT ACTION ONTARIO

(formerly Transport 2000 Ontario)

Advocating for Sustainable Public and Freight Transportation

Box 6418, Station "A" Toronto, ON M5W 1X3

www.transport-action-ontario.com

January 30, 2014

Comments for Public Information Centre #2 for GO Stouffville Corridor Rail Service Expansion, as they relate to City of Markham
(as modified per discussion at Markham DSC, January 21 and PIC#2 January 28, 2014)

c:\TAO-GOStouffvillePIC#2-rev 2

General – We are very supportive of GO's proposal to expand and improve rail service on this corridor. In general, improvements to GO Rail offer badly-needed, region wide rapid transit that is cost-effective and rapidly implementable and has little interference to road capacity for autos. However, the scope of this EA appears to be narrow. We believe there are a number of additional issues that need analysis in the EA study.

Issue	Comments
Extend scope of track twinning to Major Mackenzie Drive	<ul style="list-style-type: none">-60% of passenger volume originates north of Unionville-Single track north of Unionville Station prevents two way service from Unionville to Mt Joy during peak periods – just when you need it-Utilize passing tracks north of Unionville, in newer areas with good setbacks. Identify locations for these-Identify best location for Major Mac station, considering future parks and development in area
Electrification should be considered as it has many benefits	<ul style="list-style-type: none">-Lakeshore corridor express rail/electrification (prerequisite for Stouffville) included in Metrolinx Next Wave projects and currently under study-Stouffville corridor (including electrification and additional stations) is under active consideration by Metrolinx in their Yonge Relief Network Study-Constructed infrastructure (e.g. clearances) needs to be compatible with future electrification-In conjunction with low noise bogies and bogie skirts, electrification could eliminate/reduce height of costly noise walls-Reduced localized air pollution and fumes near the corridor-Significant long term operating cost savings versus diesel, e.g. energy recovery, shorter trains during non-peak periods (if EMU)

Additional stations should be considered to allow Markham riders to connect with TTC	<ul style="list-style-type: none"> - For example, Transport Action Ontario's report "Regional Rapid Rail: A Vision for the Future" studied conversion of GO Rail to a "surface subway", as per European cities. This report is under active consideration by Toronto in their "Feeling Congested" study, as input to their Official Plan. - That report contemplated additional stations at Finch and Ellesmere
Improve connection to TTC Route S3 Steeles E bus at Milliken Station	<ul style="list-style-type: none"> - Steeles E bus can be used by many Markham residents - Current route does not make a convenient connection at Milliken Station
Connection needed at Scarborough GO station	<ul style="list-style-type: none"> - To allow riders to transfer to/from Lakeshore East points (eg Oshawa) - Complex – a rail-rail grade separation (fly under) is needed at Scarborough Junction for north-bound Stouffville trains. Therefore there will be an elevation difference between the track and station
Parking and station access must be considered	<ul style="list-style-type: none"> - Potentially a significant constraint as train service ramps up - Most Markham stations are currently near parking capacity, and local roads exiting the stations are at capacity during evening peak period - "GO Transit Rail Parking and Station Access Plan" (June, 2013) provides draft plans. For the four Markham stations, short term plans were shared parking with Markville Shopping Centre for Centennial, improved intersection improvements near Mt Joy, and improved transit/shuttle buses for all stations. In the medium term, the plan identified parking structures at Mt Joy and Unionville. - Strongly urge that the EA review and potentially improve/add specificity on these plans. For example, at Unionville Station, the mobility hub studies now underway will hopefully identify additional local roads to be constructed for station access. - Local residents are open to assisting GO in testing new ideas, such as shuttles and new transit routes, car-pool zone, fare and parking pricing to change travel behaviour, cycling/walking incentives
Road-Rail grade separations should be studied for all arterial roads	<ul style="list-style-type: none"> - Rule of thumb is that if vehicles/day x trains/day > 200,000, study grade separation - 52 trains per day in 2020/2025 south of Unionville Station, 40 north of Unionville - 4-lane arterials such as Steeles, Kennedy (N. of Steeles), Denison, Highway 7, Kennedy (N. of Hwy 7), McCowan, Markham Road carry in excess of 20,000 vehicles/day - Cross product 40 x 20,000 is about 800,000 movements - Will also help with vexing problem of train whistles disrupting quiet enjoyment by residents - Construction at Steeles could be synergistic/cost shared with plans for Remington Centre (Kennedy/Steeles), which currently include an underground ramp below Steeles and improved pedestrian connections to Milliken Station
Noise from Train Whistle must be considered	<ul style="list-style-type: none"> - With 40 trains a day north of Unionville Station, this will become a major issue of public concern - Although road-rail grade separations will eliminate the issue for those crossings, there may be some road crossings where this is not possible - GO is already involved in Anti-Whistling Working Group lead by the City - EA must identify the problem and potential solutions