As part of the City’s Rapid Transit initiative, the Rapid Transit Team has brought forward numerous reports for Council consideration, endorsement and information, as staff work towards securing Provincial funding for Rapid Transit in Hamilton. This Information Report outlines the process of the Metrolinx Benefits Case Analysis and options being considered for rapid transit implementation for the City of Hamilton’s proposed B-Line Corridor.

Information:

Background

In June 2007, the Province of Ontario released their MoveOntario 2020 plan, which was a multi-year rapid transit action plan for the Greater Toronto Hamilton Area (GTHA). The plan, which was developed in response to concerns over transportation issues, focused on tackling gridlock throughout the GTHA and includes rapid transit projects in Hamilton, as defined by the Regional Transportation Plan (RTP) (November 2008), developed by Metrolinx. Metrolinx, the governing agency for the implementation of the RTP, has set the wheels in motion to build and fund a rapid transit system across the GTHA. Ultimately, the improved GTHA rapid transit network will move people and goods quickly and efficiently and will ensure the GTHA continued prosperity, as a result of minimizing both the environmental and social impacts of increased congestion.

The Province’s MoveOntario 2020 vision and associated funding commitments has both allowed and required that Hamilton accelerate rapid transit planning in our community. As a result of the initial phases of the City’s Rapid Transit Feasibility Study and results of the public consultation program, Council endorsed a recommendation to focus on
Light Rail Transit (LRT) as the preferred mode of rapid transit for Hamilton, as part of Staff Report PW08043d (October 2008). Subsequent to this endorsement, Hamilton’s existing B-Line corridor was identified as a top 15 priority project for implementation within the first 15 years of the Regional Transportation Plan by Metrolinx. The limits of the B-Line corridor, as per the RTP, extend from Eastgate Square to McMaster University.

In order to provide an evidence-based platform for prioritization of the Top 15 projects, Metrolinx will undertake a Benefits Case Analysis (BCA), for each of the projects which are not already completed or substantially underway, or already funded through previous agreements.

For Hamilton, the B-Line BCA was initiated April 2, 2009. Metrolinx has acquired the services of Steer Davies Gleave (SDG) to undertake the Benefits Case Analysis and has committed to working closely with Hamilton’s Rapid Transit Team. Steer Davies Gleave is a leading edge international company that has been supporting the delivery of urban transit projects across the UK, Europe and the Americas for over 20 years. SDG brings to the table a vast array of experienced transport professionals with worldly experience in developing and delivering urban transit projects in complex urban environments. Their techniques for evaluation take into account modal competition, regulatory frameworks and political and public sensitivities. The systems recommended for implementation provide true economic, environmental and social benefits to the community.

As part of the BCA process, SDG will also review and incorporate all background studies previously completed by the City of Hamilton’s Rapid Transit Team as part of the Rapid Transit Feasibility Studies (RTFS), Phases 1, 2 & 3. Although the RTFS focuses primarily on LRT, Metrolinx has always indicated to staff that both BRT and LRT would be reviewed for implementation as part of the BCA.

**Metrolinx Benefits Case Analysis - Hamilton B-Line**

The purpose of the Benefits Case Analysis is to undertake a comparative analysis of feasible options for a specific rapid transit project and present the results in such a way that it will assist decision makers to select a preferred option for implementation, based on a triple bottom line approach. The Hamilton BCA will review both Light Rail Transit (LRT) and Bus Rapid Transit (BRT) as options for implementation, as well as look at various routing alternatives. Hamilton’s B-Line corridor, as defined by the Regional Transportation Plan (Metrolinx, 2008) extends from Eastgate Square in the east to McMaster University in the west. Although the City of Hamilton supports the provision of rapid transit to University Plaza, potential funding is only available, as part of the Regional Transportation Plan and MoveOntario 2020, for rapid transit from Eastgate Square to McMaster University. This does not preclude future extensions of the line further west or east in the future or the implementation of the entire rapid transit system envisioned for Hamilton (“BLAST” map attached as Appendix A) both through short term BRT-lite service or long term LRT or BRT services.

Based on the findings of the RTFS, it was confirmed that the most desirable cross-section for the east and west sections, Eastgate Square to the Delta (Main/King intersection) and Paradise Road (west of Highway 403) to University Plaza respectively,
was for rapid transit to operate in a median transitway (middle of the road). By operating rapid transit in exclusive lanes in the middle of the road, the most efficient rapid transit system, with the least amount of impact to the adjacent properties and traffic is achieved. The scenario being reviewed as part of the Benefits Case Analysis, for both the east and west sections of the B-line corridor, is rapid transit within a median transitway. A representative cross-section is included as Appendix B.

As identified in Information CPI09.05 (February, 2009), the options being reviewed by the Rapid Transit Team as part of the Rapid Transit Feasibility Study, Phase 3 focused on LRT and the area between the Delta (Main/King Split at Gage Park) and Paradise Road (west of Hwy 403). Representative cross-sections are included in Appendix C and include:

- Rapid transit in exclusive curb lanes on one-way streets (one-way transit and one-way traffic on both Main and King)
- Rapid transit in an exclusive median transitway (two-way) within one corridor and two-way traffic on both Main Street and King Street
- Rapid transit in an exclusive curb side transitway (two-way) within one corridor and one-way traffic maintained on both Main Street and King Street (Contra-flow transit operation)

The intent of the Benefits Case Analysis is to review existing conditions and determine what type of rapid transit system can best be supported within the existing constraints. Based on the existing conditions of the Main/King corridor and its existing one-way operation, the Metrolinx Benefits Case Analysis does not consider the conversion of the existing one-way street system as part of this exercise, but rather focuses on reviewing the feasibility of implementing rapid transit in an exclusive curb side transitway (two-way) within one corridor and maintaining one-way traffic on both Main Street and King Street (Contra-flow transit operation).

This however, does not exclude the possibility of implementing a rapid transit system in Hamilton that would result in the conversion of the Main/King one-way street network. This concept is supported within the RTFS and by staff as part of the Corporate Working Team. As this is a concept that will need to be discussed further with Council and the public, the concept of one-way conversion will be brought forward to the public as part of on-going rapid transit public consultation. By bringing this concept forward to the public, the Rapid Transit Team will be able to gauge the public’s appetite for such a change in traffic operation and provide this information to Council for their information and consideration. Additional transportation modelling will be undertaken in order to determine which scenario produces the least amount of traffic impact.

Throughout Spring/Summer 2009, the Rapid Transit Team will also be undertaking a comprehensive public consultation component as part of the last phase of the Rapid Transit Feasibility Study.

Public Consultation Plan

Similar to the aggressive public consultation that was undertaken by the Rapid Transit Team in Spring/Summer 2008, staff will be utilizing a variety of media to reach out to
residents, business owners and stakeholders in regards to the solicitation of input in the rapid transit process.

**Community Update Meetings**

In order to capture the entire B-Line corridor, three different venues have been selected for Rapid Transit Community Update Meetings. The Community Update Meetings will be drop-in format, with brief presentations by staff. Staff will also be in attendance to answer questions and discuss display boards throughout the afternoon and evening.

The Community Update Meetings are scheduled at the locations and dates noted below and on the Notice attached as Appendix D. This notice will appear in the Hamilton Spectator, View Magazine, Hamilton Magazine and all six Hamilton Community Newspapers on May 22nd and May 29th, 2009.

**West B-Line Location**
- **Date:** Monday, June 1, 2009
- **Time:** 3 pm to 8 pm (brief presentation at 4 pm and 6pm)
- **Location:** St. Paul Anglican Church
  1140 King Street West

**East B-Line Location**
- **Date:** Wednesday, June 3, 2009
- **Time:** 3 pm to 8 pm (brief presentation at 4 pm and 6pm)
- **Location:** Church of the Nativity
  1831 King Street East

**Central B-Line Location**
- **Date:** Tuesday, June 9, 2009
- **Time:** 3 pm to 8 pm (brief presentation at 4 pm and 6pm)
- **Location:** Sheraton Hotel
  116 King Street West

**Surveys**

In order to reach as many citizens as possible, while ensuring that the input process is simple and efficient, the Rapid Transit Team will activate an online on June 1, 2009. For those who do not have access to the Internet, paper copies of the surveys will be made available at Hamilton Public Library branches, Municipal Service Centres, Councillors’ Offices, Mayor’s Office, Clerks Office and HSR ticket office/GO Station, in addition to being made available at the Community Update Meetings and other public events throughout the summer. Beginning in May 2009, through the use of radio and print advertisements, the Rapid Transit Team will notify the public of the opportunities to provide input into the rapid transit decision-making process by completing the surveys, in addition to attending the Community Update Meetings. A copy of the B-Line Corridor Options survey that will be available for public input is attached to this update as Appendix E.

**Other**

Although specific events have not yet been scheduled, the Rapid Transit Team is committed to meeting with the community and continuing communications with stakeholders. The Rapid Transit Team will provide all Councillors with communication
for their newsletters and will be sending out a Rapid Transit newsletter to its mailing list to advise of the online survey.

Opportunities for messaging through the media and upcoming community events will be utilized and staff will work with Councillors to use their existing communication channels to help spread the word about the rapid transit initiative and the public consultation component. Interviews will also be arranged to engage local media outlets throughout this process.

Critical to ensuring a successful response to these surveys is getting the message out to the public that the Rapid Transit Study Team and City Council want to know their opinion on the preferred routing option for rapid transit implementation along the B-Line corridor.

Throughout the process to date, staff has indicated to the public that comments on Rapid Transit are always welcome either through the project website www.hamilton.ca/rapid-transit, direct project e-mail rapidtransit@hamilton.ca or in person.

Next Steps

Through a multiple accounts evaluation process, the Metrolinx Benefits Case Analysis for Hamilton’s BCA will undertake a comprehensive review of all viable routing alternatives, based on the existing conditions along the B-Line Main/King corridor, for both LRT and BRT rapid transit implementation. The results of the BCA will be brought forward to the Metrolinx Board for approval in Summer 2009, by Metrolinx staff. Once the Metrolinx Board has approved the recommendations as outlined in the BCA, Hamilton’s Rapid Transit Team will bring forward a comprehensive and detailed report for Council’s consideration. It is anticipated that this report will outline the results of the BCA, implications to Hamilton’s road network, public consultation results. This report will be brought forward for Council consideration late Summer 2009/early Fall 2009.

Gerry Davis, CMA
Acting General Manager
Public Works Department
APPENDIX A
Hamilton’s Proposed Rapid Transit System (“B-L-A-S-T”)
APPENDIX B
Representative Cross-sections east/west sections - Median Transitway

Eastgate Square to the Delta (Main/King intersection) and Paradise Road (west of Highway 403) to University Plaza
APPENDIX C

Representative Cross-sections Centre Section - Delta (Main/King intersection to Paradise Road South (west of Highway 403)

One-way Transit & Traffic

Two-way Transit & Traffic

Two-way Transit & One-way Traffic (Contra-flow)
COMMUNITY UPDATE MEETINGS

The City of Hamilton will provide an update on the status of ongoing rapid transit plans.

The sessions will be drop-in format with brief presentations at 4pm and 6pm each night. Staff will also be in attendance to answer questions. The same information will be presented at all three meetings.

Beginning June 1, 2009 please visit our website to fill out an opinion survey on proposed rapid transit options or pick-up a survey at your local library.

www.hamilton.ca/rapid-transit

meeting times

West B-Line Location
Date: Monday, June 1, 2009
Time: 3 pm to 8 pm
Location: St. Paul Anglican Church
         140 King Street West

East B-Line Location
Date: Wednesday, June 3, 2009
Time: 3 pm to 8 pm
Location: Church of the Nativity
         1831 King Street East

Central B-Line Location
Date: Tuesday, June 9, 2009
Time: 3 pm to 8 pm
Location: Sheraton Hotel
          Heritage Room
          116 King Street West

* brief presentations at 4pm and 6pm each night.
Providing Rapid Transit in Hamilton has been about more than just the provision of an improved transit system. It is an opportunity to potentially transform our community. City Council has endorsed a Rapid Transit vision statement, which will guide all rapid transit planning as we begin to implement Hamilton’s "BLAST" system (see map below).

**Rapid Transit is more than just moving people from place to place.** It is about providing a catalyst for the development of high quality, safe, sustainable and affordable transportation options for our citizens, connecting key destination points, stimulating economic development and revitalizing Hamilton. Rapid transit planning strives to improve the quality of life for our community and the surrounding environment, as we move Hamilton forward.

The alternatives presently being reviewed for the City of Hamilton’s B-Line corridor include both Bus Rapid Transit (BRT) and Light Rail Transit (LRT), with consideration being given to the following:

- maintaining one-way traffic and one-way transit operation;
- two-way traffic and two-way transit operation; and
- two-way transit operation on one-way streets (contra-flow).

Although it is important to keep in mind that the Province, through Metrolinx, is driving the implementation of rapid transit in Hamilton, the City will have an opportunity to provide input. Your comments continue to be an integral part of this planning process.

Please take a moment to complete this survey. All comments received by **July 31, 2009** will be included in a staff report to Council in September 2009.

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Rapid Transit Team Contact Info
Lisa Zinkewich – Senior Project Manager
Rapid Transit
e-mail: rapidtransit@hamilton.ca
www.hamilton.ca/rapid-transit

Public Works Department
320-77 James Street North
Hamilton, ON L8R 2K3
Tel: (905) 546-2424 ext 1473
Fax: (905) 546-4435

Comments on Rapid Transit are always welcome either through the project website www.hamilton.ca/rapid-transit, direct project e-mail rapidtransit@hamilton.ca or in person.

Thank you for your input.
Last Name: ________________________________
First Name: ________________________________
Address: ______________________________________________________ Unit/Apt: ________
City: _____________________________
Postal Code: ___________________________
Province: ____________________________
Ward: ____________________________
Phone #: __________ Ext. ____________
Email address: ________________________________

Affiliation
General Interest
I own a residential property
I am a tenant of residential property
I own a commercial property
I am a tenant in a commercial property
I work/study near a corridor
Other

Is your location on a RT corridor? yes □ no □ don’t know □
If yes, which corridor (see map on previous page) B □ L □ A □ S □ T □

Do you represent either a technical agency or a stakeholder group? yes □ no □
Technical Agency - A technical agency is an agency that would be involved from a planning/design perspective i.e. Bell, Horizon, Provincial Ministry etc.
Stakeholder Group - A stakeholder group would be a Neighbourhood Association, Community Group etc.

Organization: ________________________________
Title: ________________________________
Is you mailing information different than above? yes □ no □
Address: ______________________________________________________ Unit/Apt: ________
City: _____________________________
Postal Code: ___________________________
Province: ____________________________
1. Do you support the implementation of rapid transit in Hamilton? yes □ no □
If you do not support rapid transit in Hamilton, why not? ____________________________________________

2. The B-Line rapid transit options being reviewed by Metrolinx include both Light Rail Transit (LRT) and Bus Rapid Transit (BRT). Both technologies have been proven to bring redevelopment and positive economic impacts to cities that invest in transit. Technologies such as monorail, subway etc are not being considered by Metrolinx as a result of their capital cost and high ridership requirements for efficient operation.

- **BUS RAPID TRANSIT (BRT)**
A rubber-tired rapid transit service that combines stations, vehicles, running ways and a flexible operating plan into a high quality, customer focused service that is frequent, reliable, comfortable and cost efficient.

- **LIGHT RAIL TRANSIT (LRT)**
LRT is a lightweight metropolitan electric railway system characterized by its ability to operate single cars or short trains along exclusive right-of-way at street level. These vehicles are usually powered by overhead electrical wires, and offer a frequent, reliable, comfortable and high quality service that is environmentally sustainable.

3. For planning purposes, the City of Hamilton B-Line Corridor has been divided into three sections, east, west & centre.

**East/West Sections**
East limits extend from Eastgate Square to Delta (Main/King intersection). West limits extend from Paradise Road South (west of Highway 403) to McMaster University*. Presently, both of these sections operate under two-way traffic.

The Rapid Transit Feasibility Studies, Phases 1, 2 & 3 and Metrolinx Benefits Case Analysis have confirmed that a full rapid transit system, in either the east or west sections of the study area, could operate in a median transitway (middle of road).
Although the City of Hamilton supports the extension of the B-Line to University Plaza, funding is only available from the Province for rapid transit from Eastgate Square to McMaster University. This does not preclude future extensions of this corridor.

If the recommended scenario is a median transit (median of road) way for both the east and west sections I would support this option for

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<th>yes</th>
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<tbody>
<tr>
<td>Bus Rapid Transit</td>
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<tr>
<td>Light Rail Transit</td>
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**Centre Section**

Centre limits extend from the Delta (Main/King intersection) to Paradise Road (west of Highway 403), through the Downtown core. Presently, this section operates under one-way traffic.

The Rapid Transit Feasibility Studies, Phases 1, 2 & 3 and Benefits Case Analysis have identified two viable options for rapid transit through this section.

**Alternative 1 (centre): Rapid Transit Contra-flow (two-way rapid transit/one-way traffic)**

In order to maintain the one-way traffic operation of both Main Street and King Street and ensure access to the rapid transit system is as convenient as possible (in one corridor), rapid transit could operate in both directions on King Street, in the south side curb lanes, with the remaining lanes continuing to operate one-way traffic westbound. Main Street would remain one-way traffic eastbound. This scenario would address the day to day operational issues of LRT and would be more convenient for passengers by utilizing one corridor for rapid transit.

Some considerations related to this scenario include:
- Limited vehicular crossing of rapid transit lane
- Local side street closures on the side of the rapid transit curb lane (cul-de-sac)
- Left vehicular turning movements would take place at signalized intersections only
- As a result of removing two westbound traffic lanes, traffic congestion would be expected on certain sections of King Street.

**Alternative: CONTRA-FLOW LRT OPERATION**

If the recommended scenario is contra-flow (two-way rapid transit/one-way traffic) for the centre section I would support this option for

(a) Bus Rapid Transit

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<th>yes</th>
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<td>Bus Rapid Transit</td>
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(b) Light Rail Transit

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<th>no</th>
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<tbody>
<tr>
<td>Light Rail Transit</td>
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**Alternative 2 (centre): Two-way (two-way traffic/two-way transit operation)**

In order to maintain as much roadway capacity as possible and provide rapid transit along one corridor through the centre section, rapid transit could operate on King Street in a median transitway. Both Main Street and King Street would be converted to two-way for traffic operation.

Some considerations related to this scenario include:
- Local side streets would operate as right turn in/right turn out only access
- Left vehicular turning movements & U-turns would take place at signalized intersections only
- Limited vehicular crossing of rapid transit lanes
If the recommended scenario is two-way (two-way traffic/two-way transit operation) for the centre section I would support this option for

(c) Bus Rapid Transit  yes ☐ no ☐
(d) Light Rail Transit yes ☐ no ☐

My preferred order of preference for the above two centre section alternatives is:
(please number/rank (a) through (d) by numbers 1 – 4, 1 being most preferred, 4 being least preferred).

(a) ______ BRT contra-flow  (c) ______ Two-way BRT
(b) ______ LRT contra-flow  (d) ______ Two-way LRT

Although not being reviewed for implementation, my preferred scenario is to maintain one-way operation for both vehicles and transit through the centre section (as it operates today).

Bus Rapid Transit  strongly agree ☐ agree ☐ neutral ☐ do not agree ☐
Light Rail Transit  strongly agree ☐ agree ☐ neutral ☐ do not agree ☐

4. Hamilton City Council has requested that any funding received for rapid transit implementation cover 100% of the associated capital costs. Metrolinx has since indicated that although the Province would cover the “Lion’s Share” of capital costs, it is anticipated that municipalities would be required to contribute to some of the capital costs of implementation.

Would you support the implementation of rapid transit in Hamilton if the City was responsible for funding:

<table>
<thead>
<tr>
<th>Hamilton Cost Sources</th>
<th>Other Funding Sources</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
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<tbody>
<tr>
<td>5%</td>
<td>95%</td>
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<td>10%</td>
<td>90%</td>
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<td>More than 50%</td>
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5. It is anticipated that in order to implement rapid transit in Hamilton there may be impacts on how the corridor looks and operates today from a land-use, pedestrian, transit and traffic perspective. While there may be significant changes, rapid transit will bring tremendous benefits to the city, such as economic development, sustainability and reduced traffic congestion. Given the potential for these changes, although every effort will be made to minimize the impacts, rapid transit will benefit the City of Hamilton and every effort should be made to move this process forward.

strongly agree ☐ agree ☐ neutral ☐ do not agree ☐ don’t know ☐

6. If you are already on our Rapid Transit Mailing List, do you find the project updates and project newsletters informative?

yes ☐ no ☐ not on mailing list ☐

7. Have you visited the Rapid Transit Initiative Web Site?   yes ☐ no ☐

If yes, did you find it useful?  yes ☐ somewhat ☐ no ☐

Other Comments

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

www.hamilton.ca/rapid-transit