

**CITY OF HAMILTON**

**PUBLIC WORKS DEPARTMENT**  
**Environment & Sustainable Infrastructure Division**

<b>TO:</b> Chair and Members Public Works Committee	<b>WARD(S) AFFECTED:</b> CITY WIDE
<b>COMMITTEE DATE:</b> February 1, 2010	
<b>SUBJECT/REPORT NO:</b> Rapid Transit Studies - B-line Underground Life Cycle Assessment (PW10014) - (City Wide)	
<b>SUBMITTED BY:</b> Gerry Davis, CMA General Manager Public Works Department	<b>PREPARED BY:</b> Carla Ippolito (905) 546-2424, Extension 2448 Jill Stephen (905) 546-2424, Extension 4621 Jim Harnum (905) 546-2424, Extension 4483
<b>SIGNATURE:</b>	

**RECOMMENDATION:**

That \$350,000, for use as outlined in Report PW10014, be transferred from the Rapid Transit Reserve (108047) to the Rapid Transit Studies Project (5300855100).

**EXECUTIVE SUMMARY**

On April 1, 2009, the Province of Ontario announced \$3million in funding for Rapid Transit Studies in the City of Hamilton. The \$3million Contribution Agreement between the City of Hamilton and Metrolinx has been signed by all parties and dated December 18, 2009. The proposed workplan outlined Preliminary Design and Engineering, Subsurface Infrastructure Investigation and Ridership Review for the B-line and Corridor and route selection analysis for the A-line.

In conjunction with the workplan outlined above, City staff have determined that additional work is required relating to the Life Cycle of the municipal sewers and watermains along the B-line Corridor. Whether we decide to go BRT or LRT, we need to determine and understand the expected life span of the underground infrastructure as well, to ensure strategic decisions are made relating to repair/replace/relocation of the service at the time of construction of rapid transit. The cost estimate of the Life Cycle

**SUBJECT: Rapid Transit Studies- B-Line Underground Life Cycle Assessment  
(PW10014) - (City Wide) - Page 2 of 5**

---

analysis is approximately \$350,000. The benefits of doing this work far outweigh the consequences, since future disruption to any rapid transit system would far exceed the cost of the initial assessment.

This report seeks the authority to allow the transfer of funds in the total amount of \$350,000 from the Rapid Transit Reserve 108047 to the Rapid Transit Studies Capital Projectid 5300855100.

**Alternatives for Consideration - See Page 4**

**FINANCIAL / STAFFING / LEGAL IMPLICATIONS**

**Financial:**

In 2008, the City received \$29.8 million from Metrolinx "Quick Wins" to be used for municipal capital expenditures for Transit Vehicles and Infrastructure to support A-Line and B-Line improvements. These monies were placed in the Rapid Transit Reserve 108047. The projects identified as part of the \$29.8 million continue to be a works in progress.

Interest earned for 2008 was approximately \$700,000 and is also included in the Rapid Transit Reserve 108047. It is recommended that the interest portion of the original "Quick Wins" monies be used to fund the Life Cycle Assessment. The Life Cycle Assessment is in line with supporting B-line improvements and will cost approximately \$350,000. However, in order to move forward with this study, funds must be transferred from the Rapid Transit Reserve 108047 to the Rapid Transit Studies Capital Project ID 5300855100 in the amount of \$350,000.

**Staffing:**

There are no staffing implications associated with this Report.

**Legal:**

Should it be determined that the City of Hamilton does not use the funds for which they are intended, as outlined in Reports PW08043 and FCS08021, the Province has the right to recover funds. Reports detailing expenditures shall be submitted to the Province and the Province may request an independent audit of the projects.

**HISTORICAL BACKGROUND**

On April 1, 2009, the Province of Ontario (through Minister Ted McMeekin and MPP Sophia Aggelonitis), announced \$3million in funding for Rapid Transit studies in the City of Hamilton. Hamilton was the only municipality or transit agency to receive funding for studies in that announcement. In August 2009, City staff prepared a proposed workplan outlining how the funds were to be used in order to set the basis for the required funding agreement between the City and the Province, through Metrolinx. This was presented and approved at Council on October 14, 2009 via report #PW09088 Contribution Agreement between Metrolinx and the City of Hamilton for Rapid Transit Studies. The Contribution Agreement has been prepared and signed by the General Manager of

**SUBJECT: Rapid Transit Studies- B-Line Underground Life Cycle Assessment  
(PW10014) - (City Wide) - Page 3 of 5**

---

Public Works, City Treasurer and the President and CEO for Metrolinx dated December 18, 2009.

Since then, further discussions with Metrolinx and City Staff have determined that a Life Cycle assessment on the underground infrastructure should be done. This is valuable information to have in order for us to make informed and strategic decisions on whether we need to repair/replace/relocate any underground infrastructure. Any necessary underground work along the B-line corridor should coincide with the BRT or LRT construction phase. The consequences of not doing this work will lead to untimely rapid transit system disruption and costs that would far exceed the initial assessment.

### **POLICY IMPLICATIONS**

The City of Hamilton has numerous policies and plans in place to support sustainable transportation in Hamilton. Provincial Policies include Regional Transportation Plan for the GTHA - "The Big Move", MoveOntario 2020, Places to Grow. Hamilton policies include Corporate Strategic Plan, Transportation Master Plan, GRIDS, Vision 2020, etc. A full list of supporting policies can be found as part of Report PW09088 Appendix A.

The Rapid Transit vision statement, approved by Council on January 28, 2009 developed a guiding principle behind the planning for and delivering of a rapid transit system for the City of Hamilton. The study associated with this report will carry forward that vision statement as it relates to the provision of high quality, safe, environmentally sustainable and affordable transportation options.

This study is also in line with our Public Works Business Plan, Innovate Now, and our vision to be recognized as the centre of environmental and innovative excellence in Canada. By reducing pollution and being more energy efficient, Rapid Transit will provide services to our communities that focus on a healthy environment. This study will provide our Rapid Transit team with the knowledge to make creative and innovative decisions as well as ensure strategic processes are undertaken. We are utilizing available funding sources in a mindful and strategic manner to ensure a positive investment.

### **RELEVANT CONSULTATION**

The following groups have been consulted in regards to this report:  
Corporate Finance and Metrolinx.

### **ANALYSIS / RATIONALE FOR RECOMMENDATION**

Along any Rapid Transit corridor, whether BRT or LRT, it only makes sense to ensure where possible, all underground infrastructure has a consistent life span with the above ground layout. This ensures strategic planning as well as demonstrates our commitment to the Province and the MoveOntario 2020 vision and the Regional Transportation Plan.

**ALTERNATIVES FOR CONSIDERATION:**

**Alternative 1 - Do not proceed with the B-Line Life Cycle Assessment of the Underground Infrastructure**

Pros: The \$350,000 from the reserve could be used for other Rapid Transit Line Improvements. There are no staffing or legal implications.

Cons: Interruption of the Rapid Transit System will occur as well as repair/replace/relocation costs that would far exceed the \$350,000 requested. In addition, it will illustrate to the Province and the residents of the City of Hamilton that we are not planning our work strategically and allowing for unnecessary system interruptions and costs.

This alternative is not recommended.

**Alternative 2 - Do not proceed with Life Cycle Assessment and Relocate all the Municipal Services outside the LRT/BRT Trackbed/Travelway and from the Impact Zones on each side.**

Pros: The Rapid Transit trackbed/travelway and the impact zones on each side would be clear of all municipal water and sewer services. This would potentially eliminate all future disturbances to the Rapid Transit trackbed/travelway required due to future subsurface municipal sewer and watermain repair and relocation. This alternative will result in new municipal sewer and watermains being constructed within the remaining area of the right of way/widened right of way and theoretically eliminate the need to repair or replace these services for the foreseeable future. From an infrastructure condition perspective this is the preferred approach if monies and right of way are available and if the relocation of the sewers can be engineered to maintain acceptable flow, grades and separation from other services and utilities.

Cons: The construction of new municipal sewers and watermains outside of the Rapid Transit trackbed/travelway and the impact zones on each side will require a high investment cost by the City in the short term. Further, it is unclear at this time whether the sewer and watermain relocation is possible both from an engineering and road right of way availability perspective. Currently, this work is not included in the Capital Budget. Other cities have constructed Rapid Transit systems without relocating all the municipal services.

This alternative is not recommended.

**CORPORATE STRATEGIC PLAN**

Focus Areas: 1. Skilled, Innovative and Respectful Organization, 2. Financial Sustainability, 3. Intergovernmental Relationships, 4. Growing Our Economy, 5. Social Development, 6. Environmental Stewardship, 7. Healthy Community

The significance of providing Rapid Transit is identified under Focus Areas 4 (Growing our Economy) and 7 (Healthy Community).

**SUBJECT: Rapid Transit Studies- B-Line Underground Life Cycle Assessment  
(PW10014) - (City Wide) - Page 5 of 5**

---

Rapid Transit addresses the importance of Key Activities 4.4.5 - improve access to employment areas by public transit and Key Activity 4.6.5 - improve access to residential areas by public transit.

Providing Rapid Transit is also identified in the Desired End Result 7.4 - increase alternative transportation usage in areas such as transit ridership, walking, cycling.

In addition, the Rapid Transit Initiative aligns with the Corporate Vision “to be the best city in Canada to raise a child, promote innovation, engage citizens and provide diverse economic opportunities”, Our Mission (by engaging our citizens and by providing high quality services in an environmentally sustainable way), and the Strategic Themes of job creation and image.

**APPENDICES / SCHEDULES**

None