Request for City Council Committee Action
From the Department of Public Works

Date: October 9, 2012

To: Honorable Sandra Colvin Roy, Chair Transportation & Public Works Committee

Subject: **Hiawatha Avenue Signal System Improvement Project**

Recommendation:

Receive and File Hiawatha Signal System Improvement Project presentation.

Previous Directives:

- January 31, 2012 – Authorize City officers to enter into appropriate agreements with funding partners
- January 17, 2012 – Amend Resolution 2011R-663 increasing TR 023 Trunk Highway 55 Signals $108,000
- December, 2009 - Approve Project TR 023 (Trunk Highway 55 Signal Improvements) in capital program with $150,000 in 2011 and $100,000 in 2012
- March 12, 2009 – Eliminate appropriation of $250,000 for Hiawatha Signal Improvements
- December 12, 2008 – Appropriate $250,000 for Hiawatha LRT Signal Improvements

Prepared by: Allan Klugman, P.E., Sr. Prof. Engineer, Traffic & Parking Services, 673-2743

Approved by:

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Steven A. Kotke, P.E., City Engineer, Director of Public Works

Presenter: Allan Klugman, P.E., Sr. Prof. Engineer, Traffic & Parking Services

Reviews Not Applicable

Financial Impact

None

Community Impact

Neighborhood Notification: Not Applicable
City Goals: An appropriately designed and well maintained City infrastructure will promote safe and efficient movement of our Police, Fire and Emergency units as well as the safe and efficient movement of our residents and traveling public.

Preserve and enhance our natural and historic environment and promote a clean, sustainable Minneapolis by preserving the ability to provide coordinated traffic flow thus continuing to reduce CO and hydrocarbon production.
Comprehensive Plan: Not applicable
Zoning Code: Not Applicable

Background/Supporting Information
The Hiawatha corridor LRT operates at grade and is “side running” adjacent to Hiawatha Avenue (State Trunk Highway 55). This side running design presents unique challenges to the traffic signal operation that control the traffic on Hiawatha and on the intersecting roadways. These challenges have had a substantial negative impact to the drivers and pedestrians that use these traffic signals.

A number of improvements have been made to the signal operation since the LRT began operations in 2004. These changes have had substantial positive impacts, but they have been incremental. The current signal operations, in spite of the improvements that have been made, still result in extreme frustration for drivers and pedestrians in the corridor, especially to the traffic on the east-west streets.

Recognizing the need for improvement to traffic operations in the corridor, the city hired engineering consultants with expertise in the operation of traffic signals adjacent to gated railroad crossings. City staff worked with Metro Transit, Mn/DOT, Hennepin County and the FHWA to develop recommendations to improve operations in the corridor. The conclusion of these analyses is that there are opportunities to improve the safety and efficiency of vehicle and pedestrian traffic.

The four key recommended improvements include:

1. Revising the sequencing and phasing of the signals.
2. Optimizing traffic signal detection.
3. Installing new traffic signal controllers and cabinets.
4. Refining the timing data sent from the LRT system to the traffic signal systems.

The total cost to implement all recommended improvements is estimated to be $1.1 million shared amongst the project partners. Public Works staff has tested and selected the equipment needed to accomplish the recommended improvements. Field installation of the equipment is scheduled to proceed in October and November of 2012, together with operational efforts to maximize the traffic safety and flow improvements derived from the project.