Hiawatha Avenue Signal System Improvement Project

January 31, 2012

West River Pkwy S
Edmund Blvd S
Lake St Bridge
Intercity Bridge
Minnehaha Av S
Snelling Av S
Hiawatha Av S
Minnehaha Park Drive S
Hiawatha Av S Frontage Road
Minnehaha Pkwy E
East Lake Nokomis Pkwy S
Longfellow Av S
Nokomis Av S
Standish Av S
Dorman Av S
Lake St E
Glabe Lane E
Dowling St E
Coffey Lane E
Folwell Drive E
Burton Lane S
Morrill Lane S
Cottman Lane S
Nakomis Blvd E
Godfrey Pkwy E
Crosby Place E
Keewaydin Place E
Lake Nokomis
Feet
0
470
940
1,880
2,820
3,760

Hiawatha Corridor Characteristics

26th to 50th Streets (3.4 Miles)

7 Signals

5 Stations

Traffic Volumes: Hiawatha: 18,000 – 40,000

Cross Streets: 5,000 – 17,000

LRT: 30,000 riders/weekday

LRT Characteristics

LRT

- 45 MPH
- Warning lights & gates
- Preempts signals
- Scheduled headways = 8 min. per direction
- Random arrivals

Cross street delay in corridor

- Pedestrians & bicyclists
- Vehicles

Project Development

<u>Analysis Phase Study Partners</u>

- Minneapolis
- Metro Transit
- Mn/DOT
- Hennepin County
- FHWA
- Expert Rail and Traffic Signal Consultants

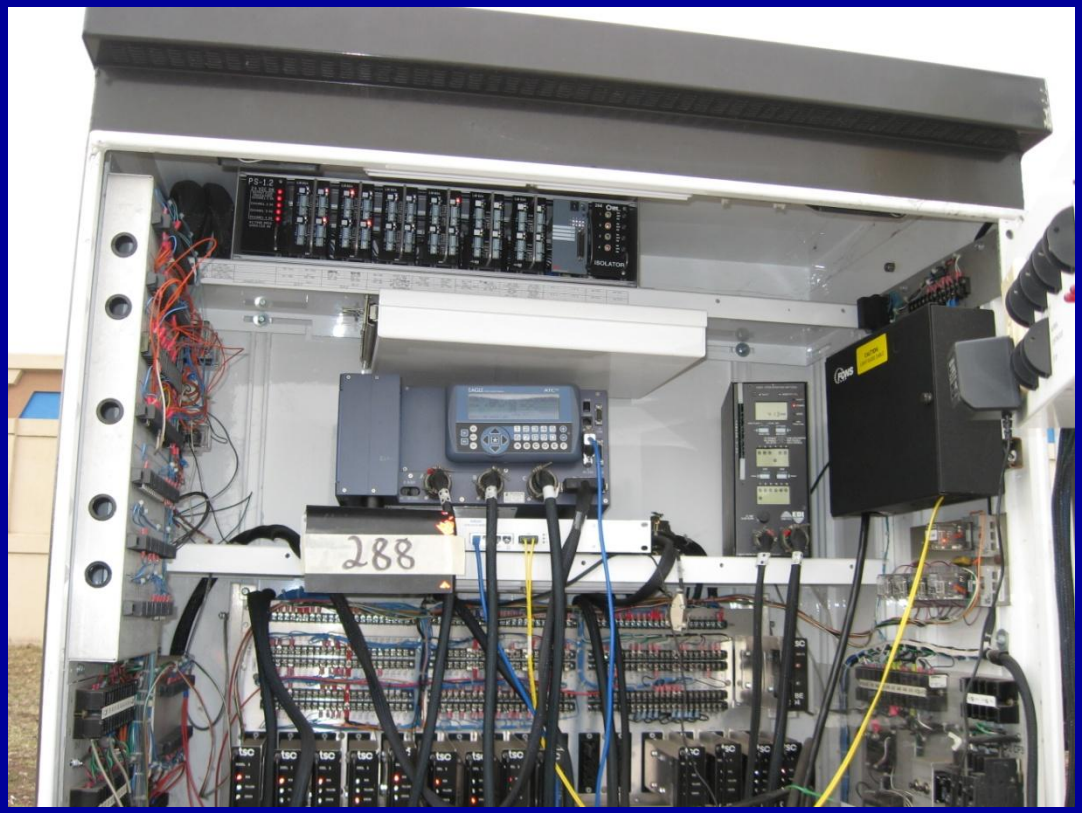
Project Development, cont'd

<u>Analysis Findings</u>

- Potential for improvement
- Focus on elements that can be accomplished in a short time frame
- Goal: reduce person and vehicle delays

Keys to Improvement

1. Revise Signal Sequencing
2. New Signal Controllers
3. Optimize Signal Detection
4. Refine Rail Timing Inputs



Project Budget by Activity

1. Revise Signal Sequencing	$50,000
2. New Signal Controllers	$550,000
3. Optimize Signal Detection	$350,000
4. Refine Rail Timing Inputs	$150,000
Total	$1,100,000

Project Budget by Funding Partner

1. Minneapolis	$358,000
2. Metro Transit	$397,000
3. Mn/DOT	$275,000
4. Hennepin County	$ 70,000
Total	$1,100,000

Next Steps

Adjust signal sequencing	2011 – ongoing
Controller determination	February, 2012
Install new controllers	Spring, 2012
Examine signal timing	Ongoing
Refine rail timing inputs	Summer, 2012
Install new detectors	Summer, 2012
Operate & optimize system	Summer/Fall