

 <p style="text-align: center;">Council Communication Office of the City Manager</p>	Date:	May 5, 2014
	Agenda Item No.	7
	Roll Call No.	<u>14-0677</u>
	Communication No.	<u>14-202</u>
	Submitted by:	Jeb E. Brewer, P.E., City Engineer

AGENDA HEADING:

Approving and authorizing the execution of Iowa Department of Transportation (IDOT) Agreement for the Citywide Traffic Signal Battery Backup Project.

SYNOPSIS:

Recommend approval of IDOT Agreement No. 2015-TS-023 for \$210,000 in Traffic Safety Improvement Program funds for the Citywide Traffic Signal Battery Backup Project.

FISCAL IMPACT:

Amount: \$270,000

Funding Source: Various funding sources as follows:

- \$210,000 – IDOT Traffic Safety Improvement Funds
- \$60,000 – 2014-2015 Capital Improvement Program (CIP), Page Street-40, Traffic Signals, Channelization, and School Crossings, TR091, G.O. Bonds

ADDITIONAL INFORMATION:

The objective of installing traffic signal battery backup units is to increase public safety and reduce traffic congestion by allowing traffic signals to function even during power outages. The project involves the purchase and installation of battery backup units at 30 existing traffic signal controllers. The battery backup unit is located in a separate cabinet that is mounted on the existing traffic signal controller cabinet. The battery backup units would be connected to the City’s network in order to monitor their status. The units will also have the capability to send out email notifications when the unit is on battery power and also when it returns to a/c line power. The City is responsible for installation of the equipment needed at the battery backup locations. The total project cost is \$270,000. The grant agreement provides up to \$210,000 in Traffic Safety Funds, which is the cost of the equipment and materials. The cost of installation, including staff time, materials, incidentals, grant administration, etc., is estimated to be \$60,000 and is included in the CIP. The locations proposed for the installation of battery backup units are listed below:

SE 14th Corridor (U.S. 69): at Maury, Hartford, Bell, Park, Watrous, McKinley, Walmart/Home Depot, Diehl, Cummins, Army Post, and Indianola at Park (11 locations)

Merle Hay Corridor (IA 28): at Hickman, Urbandale, Douglas, Merle Hay Mall, Madison, Aurora, and Meredith (7 locations)

E. University Corridor (IA 163): at I-235 SB off ramp, E. 21st, Hubbell, E. 26th, E. 30th, E. 33rd, and Williams (7 locations)

ML King/Douglas Corridor: at Hickman, Urbandale, Euclid, and Lower Beaver (4 locations)

All of the proposed locations for battery backup power are along major multi-lane arterials within the City, with 27 of them being on State Highways. Maintaining these traffic signals in full operation during a power outage is very important from both a traffic safety and a City worker safety viewpoint. Currently, when there is a power outage, the affected traffic signals go “dark”, which requires all drivers to treat the signals as a 4-way stop condition. However, many motorists treat them as if they had a green signal, especially if they travel on the major street.

Historically, power outages are a result of severe weather, which could be a thunderstorm system in the summer months or a blizzard event in the winter. These conditions are not desirable to have non-operating traffic signals present, nor to have City workers in the roadway attempting to place 4-way stop signs.

PREVIOUS COUNCIL ACTION(S):

Date: July 29, 2013

Roll Call Number: [13-1183](#)

Action: [Approving](#) FY2015 Traffic Safety Fund Applications to the Iowa Department of Transportation. ([Council Communication No. 13-402](#)) Moved by Hensley to adopt. Motion Carried 7-0.

1. East 46th Street and Hubbell Avenue Intersection Widening and Signalization
2. Pedestrian Crossing Signal Upgrades – 15 intersections
3. Traffic Signal Battery Backup Units – 30 intersections

BOARD/COMMISSION ACTION(S): NONE

ANTICIPATED ACTIONS AND FUTURE COMMITMENTS:

Normal actions for award of the construction contract for the work.

For more information on this and other agenda items, please call the City Clerk’s Office at 515-283-4209 or visit the Clerk’s Office on the first floor of City Hall, 400 Robert D. Ray Drive. Council agendas are available to the public at the City Clerk’s Office on Thursday afternoon preceding Monday’s Council meeting. Citizens can also request to receive meeting notices and agendas by email by calling the Clerk’s Office or sending their request via email to cityclerk@dmgov.org.