COUNCIL COMMUNICATION				
CITY OF DES MOINES OFFICE OF THE CITY MANAGER	Number:	23-075	Meeting:	February 20, 2023
	Agenda Item:	43	Roll Call:	23-247
	Submitted by:	Anna W. Whipple, CIO, Information Technology Director		

## **AGENDA HEADING:**

Approval of purchase of Cisco IE4000 network hardware for Intelligent Transportation Systems from Heartland Business Systems, (Peter Helander, CEO, 108 3rd Street, Suite 300, Des Moines, Iowa 50309) per the State of Iowa Contract No. 21294 and NASPO ValuePoint No. AR3227, which is competitively bid.

### **SYNOPSIS:**

Recommend approval of the purchase of Cisco IE 4000 network hardware from Heartland Business Systems, per the State of Iowa Contract No. 21294, NASPO ValuePoint AR3227, which is competitively bid. This purchase will allow the Information Technology (IT) Department to purchase the network equipment and management software to support Phase 3 of the Intelligent Transportation Systems (ITS) Master Plan. The implementation of ITS requires deploying IP networking capabilities to City traffic signal cabinets.

#### **FISCAL IMPACT:**

Amount: \$396,113.60

Funding Source: FY2020-2021/FY2025-2026, TR097, C038EG99, Traffic System Operation

Improvements, G.O. Bonds, Page Street – 164.

#### ADDITIONAL INFORMATION:

- The results and recommendations of the ITS Master Plan were presented to City Council at a
  work session on October 22, 2018. On November 19, 2018, the City Council adopted the ITS
  Master Plan as a framework for the City of Des Moines future traffic management and
  communication system infrastructure.
- The ITS Master Plan addresses major components: signal system hardware and software, work order system, fiber communications infrastructure, video observation cameras, and dynamic message signs.
- The current ITS infrastructure for the City of Des Moines primarily consists of antiquated technologies, including traffic signal controllers using 1970s technology, video observation cameras that are often not operable, and a central management software that is outdated and will soon be unable to run on City computer systems due to operating system upgrades.

- The ITS Master Plan is broken into eight (8) phases that are prioritized on vehicle volumes, roadway capacity, annual crashes, truck/transit route needs, existing operational issues, and conditions of existing communications.
- Phase 3 includes upgrading 76 traffic signal locations along:
  - o Merle Hay Road from Hickman Road to I-35/80
  - o 2nd Avenue from Euclid Avenue to I-35/80
  - o E. 14th Street from E. Euclid Avenue to I-35/80
  - o 63rd Street from I-235 to Hickman Road
  - o Martin Luther King Jr. Parkway from High Street to Euclid Avenue
  - o Douglas Avenue from 62nd Street to Martin Luther King Jr. Parkway
  - o Euclid Avenue from Martin Luther King Jr. Parkway to Cornell Street
  - o Hickman Road from Westover Boulevard to Merle Hay Road
  - o University Avenue from 63rd Street to E. 9th Street
- The upgrades at each intersection in Phase 2 include:
  - o Fiber optic cable
  - o IP Network switch
  - o Traffic signal cabinet, controller, and ITS device as applicable

## PREVIOUS COUNCIL ACTION(S):

<u>Date</u>: April 18, 2022

Roll Call Number: 22-0624

Action: Purchase of Cisco IE-4000 Network Hardware from Heartland Business Systems (Peter Helander, CEO) per State of Iowa (DAS) contract for use by the Information Technology Department, \$208,807.80. (Council Communication No. 22-186) Moved by Gatto to adopt. Second by Boesen. Motion Carried 7-0.

# **BOARD/COMMISSION ACTION(S): NONE**

## ANTICIPATED ACTIONS AND FUTURE COMMITMENTS: NONE

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