


## COUNCIL COMMUNICATION

	Number:	<b>25-225</b>	Meeting:	<b>June 9, 2025</b>
	Agenda Item:	<b>10</b>	Roll Call:	<input type="text"/>
	Submitted by:	<b>Steven L. Naber, P.E., City Engineer</b>		

### AGENDA HEADING:

Approving and authorizing the execution of the Iowa Department of Transportation (IDOT) Agreement for the Intelligent Transportation Systems (ITS) Upgrade Phase 6 project.

### SYNOPSIS:

Recommend approval of IDOT Agreement No. 1-25-STPU-016 between the City of Des Moines and the IDOT for the ITS Upgrade Phase 6.

### FISCAL IMPACT:

Amount: \$4,000,000 Estimated Total Project Costs

Funding Source: Fiscal Year (FY) 2025-2026 Capital Improvement Program (CIP), Page 173, Traffic Systems Operation Improvements, TR097, Being: \$1,500,000 Surface Transportation Block Grant (STBG) Program, and the remaining \$500,000 in General Obligation Bonds

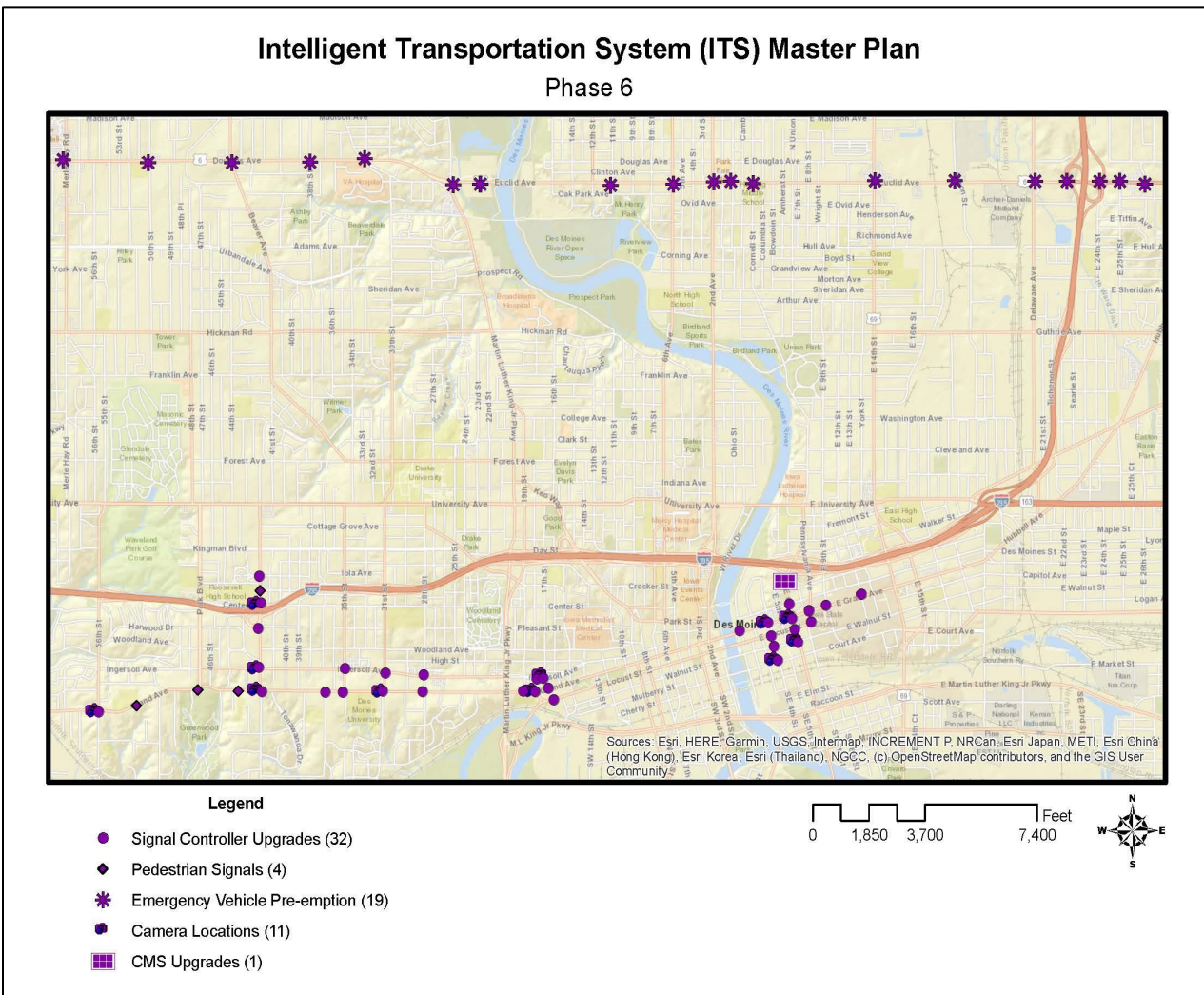
FY2025-2026 CIP, Page 172, Traffic Signal Replacement, TR091, Being: \$2,000,000 in General Obligation Bonds

### ADDITIONAL INFORMATION:

- The results and recommendations of the ITS Master Plan were presented to Council at a work session on October 22, 2018. The ITS Master Plan was adopted as a framework for the City of Des Moines future traffic management and communication system infrastructure at the November 19, 2018, Council meeting.
- 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 1970's technology and video observation cameras that are often not operable.

- The ITS Master Plan is broken into eight (8) phases with an estimated total cost of \$12.5 million. These eight (8) phases are prioritized on vehicle volumes, roadway capacity, annual crashes, truck/transit route needs, existing operational issues, and conditions of existing communications.
- Phases 1-3 have been substantially completed. Phase 4 construction started in spring 2024 and is scheduled to be completed in spring 2025. Phase 5 was awarded in spring 2025 and is scheduled to be completed in summer 2026.
- Phase 6 is a continuation of the ITS Master Plan implementation and focuses on upgrades of 32 signalized locations and four (4) pedestrian signals, generally in the East Village as well as along Grand Avenue and Ingersoll Avenue, as shown in the map below. These improvements will include communications infrastructure upgrades, communication network upgrades, and traffic signal cabinet/controller/ITS device upgrades.
- This project will also include the replacement of intersection signal systems. The traffic signal replacements are needed based on the age of the equipment. The following intersection traffic signals will be replaced:
  - Robert D. Ray Drive & E Grand Avenue
  - E 4th Street & E Grand Avenue
  - E 6th Street & E Grand Avenue
  - Pennsylvania Avenue & E Grand Avenue
  - E 6th Street & E Locust Street
  - E 6th Street & E Walnut Street
- Three (3) intersection traffic signals will also be removed as part of this project. The three (3) traffic signals will be removed because they do not meet traffic signal warrants. Instead of replacing the traffic signal equipment, these intersections will be replaced with all-way stop traffic control. The intersection of E 7th Street and E Locust Street will be converted to stop controlled on E Locust with a pedestrian crossing of E 7th Street. These changes will provide consistent traffic control based on other adjacent intersections in the East Village. The following intersections will be converted from signalized intersection control to all-way stops:
  - E 4th Street & E Locust Street (all-way stop controlled)
  - E 4th Street & E Walnut Street (all-way stop controlled)
  - E 7th Street & E Locust Street (stop controlled on E Locust only with pedestrian crossing on E 7th Street)
- Phase 6 will also include the installation of Emergency Vehicle Preemption (EVP) equipment at 19 intersections on Douglas Avenue/Euclid Avenue from Merle Hay Road to E 28th Street. EVP is a system that prioritizes emergency vehicles at intersections, allowing them to pass through with a green light while conflicting traffic is held at red. This system improves response times, enhances safety, and can lead to cost savings. These locations were selected in coordination with the Des Moines Fire Department as a test corridor to evaluate the effectiveness of this new system.

- Phase 6 will include one (1) new permanent dynamic message sign on E 6th Street, south of Interstate 235. Phase 5 of the ITS Master Plan included the replacement of all the existing dynamic message parking signs. The new dynamic message signs will be used to inform drivers on parking availability, construction activities, and street use events that may impact travel.
- On December 6, 2021, by Roll Call No. 21-1792, City Council approved the FY2026 Federal STBG Application to the Des Moines Metropolitan Planning Organization (DMMPO) for the ITS Upgrade for \$1,000,000. The City was awarded \$1,500,000 in STBG funds.
- The estimated project cost is \$4,000,000, with STBG Funds in the amount of \$1,500,000. The remaining \$2,500,000 will be General Obligation Bonds. The project is anticipated to begin construction in FY2027.



## PREVIOUS COUNCIL ACTION(S):

Date: February 19, 2024

Roll Call Number: [24-0235](#)

Action: [Approving](#) exception to Request for Proposal process for good cause and approving Professional Services Agreement with HR Green, Inc. for ITS Master Plan Integration – Phase 5, not to exceed \$206,500. ([Council Communication No. 24-076](#)) Moved by Gatto to adopt. Second by Voss. Motion Carried 6-0.

Date: December 6, 2021

Roll Call Number: [21-1792](#)

Action: [Authorizing](#) submittal of Federal STBG and Transportation Alternative Program (TAP), also known as STBG Set-Aside Program, FY2026 applications to the MPO. ([Council Communication No. 21-511](#)) Moved by Gatto to adopt. Motion Carried 7-0.

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

#### **ANTICIPATED ACTIONS AND FUTURE COMMITMENTS:**

Anticipated future actions related to this project include, ordering construction, receive and file bids, designate lowest bidder, and approve contract and bond; also partial payments to the contractor and final acceptance of work.

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