


# COUNCIL COMMUNICATION

 CITY OF DES MOINES OFFICE OF THE CITY MANAGER	Number:	25-146	Meeting:	April 21, 2025
	Agenda Item:	9	Roll Call:	25-0559
	Submitted by:	Steven L. Naber, P.E., City Engineer		

## AGENDA HEADING:

Approving and authorizing the execution of Iowa Department of Transportation (IDOT) Agreement for the Flashing Yellow Left Turn Signal Head and Retroreflective Backplate Replacement project.

## SYNOPSIS:

Recommend approval of IDOT Agreement No. 2026-TS-026 between the City of Des Moines and IDOT to utilize Traffic Safety Improvement Program (TSIP) Funds for the Flashing Yellow Left Turn Signal Head and Retroreflective Backplate Replacement project.

## FISCAL IMPACT:

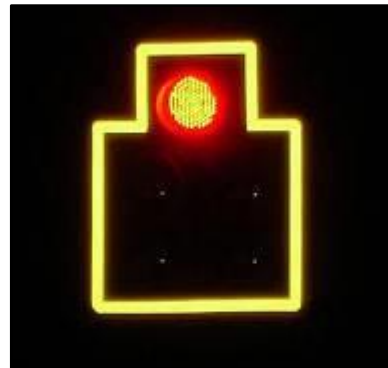
Amount: \$220,000 Estimated Cost

Funding Source: Fiscal Year (FY) 2025-2026 Capital Improvement Program (CIP), Page 170, Traffic Signal Replacement, TR091, Being: \$147,300 in TSIP Funding and \$72,700 in G.O. Bonds and Road Use Tax Funds

## ADDITIONAL INFORMATION:

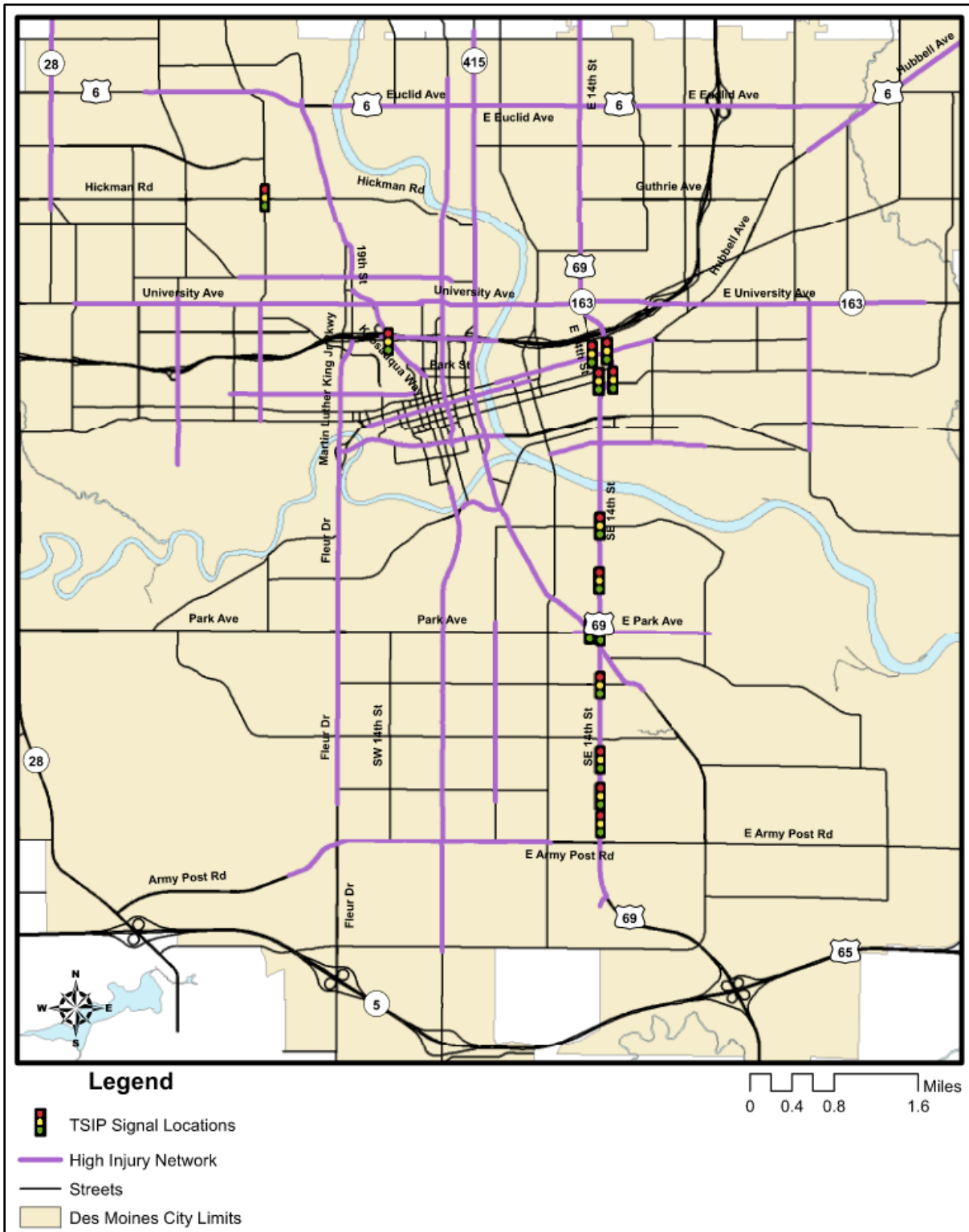
- IDOT implemented an annual program beginning in 1988 to provide for statewide traffic safety improvements. These improvements may include roadway construction projects to correct high-crash locations, upgrading of obsolete traffic control devices to comply with the requirements of the Manual on Uniform Traffic Control Devices (MUTCD), or traffic studies to determine how to correct a safety problem. Since the program began, Des Moines has been successful in securing funding, including several major intersection improvements, traffic signal upgrades, and other safety projects.
- The Vision Zero Transportation Safety Action Plan was adopted by the City Council at the June 26, 2023 Council meeting. The Plan advances the goals and objectives contained in PlanDSM and MoveDSM and sets forth a plan of measures and strategies to eliminate traffic deaths and serious injuries by 2040 on streets within the City of Des Moines.
- As a part of the development of the Vision Zero Transportation Safety Action Plan, detailed analyses were conducted on traffic crashes reported in the years from 2017 to 2021 to identify street corridors on the High Injury Network (HIN) that have high levels of fatal and severe injury crashes.

- Staff reviewed traffic signal locations and corridors and subsequently recommended 28 intersections along five (5) corridors be submitted for TSIP funds based on the high number of left-turn crashes and potential for serious injury crashes. This agreement includes 14 of the original 28 intersections in the proposed TSIP application.
- The proposed project will procure and install four (4)-section flashing yellow arrow (FYA) left-turn traffic signal heads and retroreflective backplates for one (1) main corridor (E 14th Street/SE 14th Street [US 69]) and two (2) other isolated intersections (30th Street & Hickman Road and Keosauqua Way & I-235 south ramp) for a total of 14 intersections. The intersections identified for improved traffic signal heads are shown in the project map below.
- Focusing improvements on city corridors that are also federal and/or state routes provides consistency in traffic signal operations along the corridors and aids in driver expectancy, which is an important factor in overall traffic safety. The safety improvements focus on three (3) main areas:
  - Upgrading existing left turn traffic signal heads to comply with the Federal Highway Administration’s (FHWA) MUTCD current standard for a four-section head with a left-turn FYA centered over exclusive left-turn lanes.
  - Updating the left-turn traffic signal phasing to either change from “permissive” to “protected/permissive” or from “protected/permissive” to “protected only” during peak travel times.
  - Installing retroreflective backplates, which is a FHWA Proven Safety Countermeasure to reduce crashes. Examples of retroreflective backplates are illustrated in the photos below.



These improvements are supported by the City’s Transportation Master Plan called MoveDSM, and the Vision Zero Transportation Safety Action Plan.

- On August 5, 2024, by Roll Call No. 24-1047, City Council approved FY 2026 TSIP Application to IDOT for the Citywide installation of FYA traffic signal heads along five (5) corridors for \$294,500.
- IDOT has awarded \$147,300 in TSIP funding for the Flashing Yellow Left Turn Signal Head and Retroreflective Backplate Replacement project. An agreement with IDOT is required for administration and receipt of the TSIP funding.
- The estimated total project cost is \$220,000, with TSIP Funds in the amount of \$147,300. The TSIP Funds cover the materials and equipment costs, with equipment installation starting in FY 2026.



**PREVIOUS COUNCIL ACTION(S):**

Date: August 5, 2024

Roll Call Number: [24-1047](#)

Action: [Approving](#) the FY 2026 TSIP Application to IDOT for the Citywide installation of FYA traffic signal heads along five (5) corridors. ([Council Communication No. 24-312](#)) Moved by Coleman to adopt. Second by Simonson. Motion Carried 6-0. Absent: Gatto.

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

**ANTICIPATED ACTIONS AND FUTURE COMMITMENTS:**

City staff anticipate actions related to purchasing materials and equipment.

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