



Recommendation to Terminate Dynamic Transportation Message Signs Pilot Project on 7th Avenue and 7th Street (Ordinance S-44685)

Request to authorize the City Manager, or his designee, to terminate the Dynamic Transportation Message Signs (DTMS) Pilot Project on 7th Avenue and 7th Street. This action may require the City to reimburse \$708,000 to the Federal Highway Administration (FHWA).

Summary

The DTMS pilot project was initiated in 2011 as an Advanced Traveler Information System initiative to provide drivers with real-time displays of travel times on 7th Avenue and 7th Street. A grant was submitted that same year for FHWA Federal Aid funding and the City was awarded funding in 2016. The intent was to provide information that would allow both inbound and outbound motorists to make route choices at key decision locations. The project consisted of several major components including: travel time dynamic message signs; Autonomous Re-Identification Devices (ARID), which are small antennas used to collect travel times along the corridors; and the software necessary to combine City of Phoenix ARID data with Arizona Department of Transportation travel times.

Locations to provide information about northbound travel times were identified for 7th Avenue and 7th Street south of I-10 and south of Northern Avenue, and for southbound travel times on 7th Street and Cave Creek Road north of Bell Road and north of Glendale Avenue. The proposed signs at these locations were intended to provide three choices to drivers: continue traveling on the same street, or choose a different route to the east or west based on the displayed travel times. **Attachment A** includes the originally proposed DTMS locations along with the three alternate route options to be displayed, and **Attachment B** includes a graphic showing the DTMS structures with dimensions.

Since the project's original inception in 2011, there are now a multitude of readily available travel time and path choice data sources from third-party vendors.

Public Concerns

Residents have questioned whether the DTMS project will encourage additional traffic

on 7th Avenue and 7th Street, as well as the streets east and west, or generate cut-through traffic in neighborhoods. The intent was for the signs to only be visible to drivers on the specific roadway at six locations and to provide travel times for two major arterial streets or freeways. The location of the signs was intended to be seen by drivers at locations prior to arriving at major cross streets so drivers would have time to make a decision to safely move to an alternate route using the major east-west streets. There is no information provided to validate whether the signs would encourage cut-through traffic in neighborhoods, however, neighborhoods have expressed concerns that this would occur.

Additionally, there were significant public concerns about the size and aesthetics of the poles and signs, particularly in residential areas.

Recommendation

Staff recommends terminating the pilot project for the DTMS on 7th Avenue and 7th Street based on the availability of travel time information from other sources, as well as concerns expressed by residents.

The unused equipment includes signs, poles, trombone mast arms, dynamic display modules and related electronics, which may be either re-purposed for other traffic uses or sold. Items that can potentially be re-purposed include electronic control cabinets and equipment, six standard stock power pedestals, and the ARID devices, which serve as a valuable tool for traffic engineers in evaluating traffic signal timing at signalized intersections and along major arterials. It is recommended that these devices be kept in place and used for other traffic engineering purposes.

Financial Impact

A total of \$942,811 in FHWA Federal Aid funding was awarded for the DTMS project, which required a minimum local funding match of \$56,989. Project expenses are \$1,158,000, of which \$708,000 has been charged to the federal grant. If the City Council concurs with staff's recommendation to terminate this pilot, staff will work with the FHWA to properly terminate the Federal Aid portion of the project, including potential reimbursement of the \$708,000 in federal funds. Funding is available in the Street Transportation Department's Capital Improvement Program (CIP) budget.

Concurrence/Previous Council Action

- The DTMS project was originally approved by the Transportation and Infrastructure Subcommittee by a vote of 3-0 on Dec. 13, 2016.
- The contract awarding the DTMS pilot project to AJP Electric, Inc. was approved by City Council on Dec. 14, 2016 (Ordinance S-43107).

- The Transportation and Infrastructure Subcommittee recommended termination of the pilot project on April 18, 2018 by a vote of 4-0.

Responsible Department

This item is submitted by Deputy City Manager Mario Paniagua and the Street Transportation Department.