

Agenda Report

February 8, 2021

TO: Honorable Mayor and City Council
FROM: Department of Transportation
SUBJECT: CONTRACT AWARD TO TRANSCORE, LLC FOR \$368,000 TO PROVIDE ADAPTIVE TRAFFIC CONTROL SERVICES AS PART OF THE ADAPTIVE TRAFFIC CONTROL NETWORK PHASE II METRO GRANT FUNDED PROJECT

RECOMMENDATION:

It is recommended that the City Council:

1. Find that the following proposed actions are exempt from review pursuant to the California Environmental Quality Act ("CEQA"), pursuant to State CEQA Guidelines Section 15061 (b) (3) Review for Exemption; and
2. Authorize the City Manager to enter into a contract, without competitive bidding pursuant to City Charter Section 1002(F), contracts for professional or unique services, with Transcore, LLC for the expansion of the Sydney Coordinated Adaptive Traffic System (SCATS), as described in the scope of work for the Adaptive Traffic Control Network-Phase II Metro funded project (FA No. 920000000F7318) , for an amount not to exceed \$368,000 which includes a base contract amount of \$335,000 and contingency amount of \$33,000 for the provision of necessary change orders, if any; and
3. It is further recommended that the City Council grant the proposed contract an exemption from the Competitive Selection process pursuant to Pasadena Municipal Code Section 4.08.049B, contracts for which the City's best interests are served.

BACKGROUND:

Adaptive traffic control operations are best suited to stabilize high and random traffic flows while maintaining a desired traffic progression over a grid pattern. Thus, the corridors for this project were selected as they carry high traffic volumes, intersections between major-to-major corridor, multiple movements (all around left turn movements) and traffic volume volatility. The following are the corridors and the corresponding corridor segments, as approved to be funded under this grant:

- Foothill Boulevard, from Sierra Madre Boulevard to Michillinda Avenue
- Lake Avenue, from Orange Grove Boulevard to San Pascual Street
- Del Mar Boulevard, from St John Avenue to Lake Avenue
- California Boulevard, from St John Avenue to Lake Avenue

The first implementation of an adaptive traffic control system in Pasadena occurred in 2013 with the Pasadena ITS Phase II project. The scope of work included piloting adaptive traffic control operation at 12 intersections along Fair Oaks Avenue. The Sydney Coordinated Adaptive Traffic Control System (SCATS) was selected via a competitive selection, based on functional requirements.

With the SCATS adaptive traffic control system in place, the concept of adaptive traffic control operations recorded reduction in motorists travel time and traffic delay along the 12 signalized intersections on Fair Oaks Ave. These results prompted the Department of Transportation to continue planning the expansion of the adaptive traffic control system into the Metro Gold Line network, which included all at-grade signalized crossings and their corresponding adjacent signalized intersections. In 2016, these planning efforts came to fruition when Metro awarded the City funding for the Metro Gold Line At-Grade Crossing Mobility Enhancement Project, which expanded the overall number to 26 signalized intersections running under the SCATS adaptive traffic control system. The implementation of that project was completed in 2019.

In 2017, the Department of Transportation (DOT) applied for additional grant funding to further expand the system at key corridors City-wide. The Adaptive Traffic Control Network-Phase II Project was awarded funds in the fall of 2017 and on December 4th, 2017 the City Council authorized the City Manager to execute a funding agreement with Metro in receipt of these grant funds. The infrastructure design work started in March of 2018 and was performed in-house. This work took over 24 months to complete, inclusive of plan checking and securing final approvals. With design having been completed, we are now ready to proceed with implementation. As approved, the Adaptive Traffic Control Network-Phase II project would enable the expansion of adaptive traffic control operations to an additional 31 signalized intersections city-wide. Today's request to authorize the award of contract to Transcore, LLC will allow for the expansion of the SCATS system as funded through the 2017 grant.

VENDOR SELECTION

Transcore, LLC is the sole distributor of the SCATS system in the United States. 2013 marked the first adaptive traffic control implementation when SCATS was selected via competitive selection, based on functional requirements as required by the Department of Finance procurement process. These functional requirements included the ability to manage random traffic flows entering and traveling thru several intersections along a corridor. Fair Oaks Avenue was chosen as pilot and the corridors above mentioned, chosen for this project. In 2016 the Metro Gold Line At-Grade Crossing Mobility Enhancement SCATS expansion added 14 intersections to the SCATS network. The upgrades were made to the at-grade intersections servicing the Gold Line and all adjacent intersections along the Metro railway. This 2016 expansion, brought the total SCATS operated intersections to 26. Given the aforementioned, attempting to

implement an adaptive traffic control system from another vendor would not produce efficient overall vehicular mobility between existing SCATS corridors and proposed corridors under this project. In addition, DOT has also considered the following:

- Different adaptive traffic control systems will invariably not communicate, thus negating any arterial network coordination enhancements any of the systems can provide for the corridor(s) segment.
- The few proven adaptive traffic control systems deployed and in operation have contrasting methodologies and may lead to conflicting operating scenarios, reducing the effectiveness of system coordination.
- A different adaptive traffic control system would not be able to leverage from existing infrastructure investment to the network architecture, as well as adding capital cost for maintenance of two systems.

For these reasons, it is recommended that the City Council grant the proposed contract an exemption from the competitive selection process pursuant to Pasadena Municipal Code Section 4.08.049B, contracts for which the City's best interests are served.

This contract in the amount of \$368,000 includes all the cost for full implementation of the project, attendance of key project meetings, submittal of all project deliverables, project reports, and a contract contingency of \$33,000 or approximately 10%.

COUNCIL POLICY CONSIDERATION:

This project is consistent with the following General Plan Mobility Element policies:

- Policy 1.10 - Continuously evaluate the operation of the City's transportation system to manage the speed of travel at or below the speed limit, manage queues at intersections and develop improvements; to increase safety of all transportation services;
- Policy 1.12 - Apply traffic management measures to manage vehicular speeds as a function of designated street type to ensure safe and orderly movement of all modes of travel.

ENVIRONMENTAL ANALYSIS:

The City's Environmental Administrator has determined the project is categorically exempt under the CEQA Guidelines in Section 15061 (b) (3), Review for Exemption.

FISCAL IMPACT:

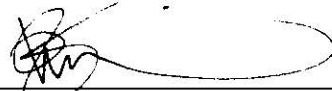
The cost of this action will be \$368,000. Funding for this action will utilize existing budget available in the Adaptive Traffic Control Network-Phase II Project (75095).

The following table presents a contract budget summary.

Contract Budget Summary	
Base Contract and Options Amount	\$ 335,000
Contingency (Approximately 10%)	\$33,000
TOTAL CONTRACT AMOUNT	\$ 368,000

The contract administration and staff cost to implement this project is approximately \$15,000 with budget available in the Adaptive Traffic Control Network-Phase II Project (75095).

Respectfully submitted,



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Department of Transportation

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