

Agenda Report

March 14, 2016

TO: Honorable Mayor and City Council

FROM: Department of Transportation

SUBJECT: AUTHORIZE THE INTERIM CITY MANAGER TO EXECUTE A CONTRACT WITH McCAIN TRAFFIC CONTROL PRODUCTS FOR \$410,410 FOR THE UPGRADE OF THE TRAFFIC MANAGEMENT CENTER TRAFFIC CONTROL SYSTEM SOFTWARE

RECOMMENDATION:

It is recommended that the City Council:

1. Find that actions proposed herein are exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15061 (b)(3) (General Rule);
2. Authorize the Interim City Manager to execute a contract with McCain Traffic Control Products for \$410,410 for the upgrade of the Traffic Management Center Traffic Control System Software as part of the Pasadena ITS Phase II Project (75910) under City Agreement 19,810-4. Competitive Bidding is not required pursuant to City Charter Section 1002 (F), contracts for professional or unique services; and
3. 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:

In 2007 the Los Angeles County Metropolitan Transportation Authority (LACMTA) Board of Directors approved funding for the Pasadena ITS Phase II Project and in 2008 a Memorandum of Understanding (MOU) between the City and LACMTA was executed to authorize funds for the City to initiate the project. Today, this MOU is recorded as City of Pasadena Agreement No. 19,810-4.

The Pasadena ITS Phase II project is comprised of the following three components:

1. Enhancements to the fiber optic communication infrastructure for the traffic control system in the Lake Avenue corridor;
2. A pilot project to deploy an Adaptive Operation System on Fair Oaks Avenue; and
3. Mobility enhancements areawide and traffic control operational improvements along Hill Avenue, Foothill Avenue and Sierra Madre Boulevard.

To date, Components 1 and 2 have been successfully implemented and are complete. Component 3 was separated into two phases, the first of which has been completed and consisted of developing and installing specific signal timing strategies to provide traffic operational improvements to the corridors noted above. The second phase of Component 3 is an upgrade of the existing central traffic control software that will provide areawide mobility improvements by enhancing the platform for automated traffic signal control at all 335 signalized intersections within the City. The process for determining the technology requirements for the upgrade of the current Traffic Control System started in mid-2015.

The most critical feature of the Traffic Control System is the ability to instantaneously communicate to individual Traffic Signal Controllers located at all signalized intersections within the City. This enables Department of Transportation (DOT) staff to monitor traffic signal operations, program and perform signal timing modifications from the Transportation Management Center (TMC) to efficiently address the diverse traffic patterns within the city during all hours at all times. The main Traffic Control System resides at the TMC where it communicates with every Traffic Signal Controller citywide.

While DOT staff operates and optimizes signal timing plans and strategies via the automated Traffic Control System at the TMC, Public Works Street Lights and Traffic Signals (SL&TS) staff ensures the proper functionality of all 335 Traffic Signal Controllers located at each signalized intersection citywide. Therefore, it is imperative that an upgrade to the TMC's Traffic Control System be compatible or compatible with minor modifications (minor software upgrades) to the communication protocol existing in all Traffic Signal controllers.

The agreement with Metro is to only upgrade (not completely change out) the existing Traffic Control System at the TMC. Currently, two traffic control systems are in use at the TMC, one provided by McCain Traffic Control Products and the other by Siemen's ITS. Under the terms of the grant agreement, one of these systems would be upgraded. Both systems are proprietary platforms, neither of which is available from any vendors other than McCain and Siemens. Staff solicited quotes from each company to upgrade their respective software platforms with the following results:

System Vendor	Location	Central Software	Controller Software	System Total
Siemens ITS	Orange, CA	\$335,000	\$703,500	\$1,040,000
McCain Traffic Control Products	Vista, CA	\$319,100	\$54,000	\$ 373,100

To make a recommendation, staff considered the cost of the equipment, the complexity of the upgrade in terms of interoperability with Pasadena's field equipment, and the amount of staff time required in the field to changeover to the new system. The McCain system, in addition to having a lower equipment cost, has already been proven to communicate seamlessly with Pasadena's field equipment and, as a result, would require less time from field crews to install. Accordingly, staff recommends selection of the McCain Traffic Control Products solution for an upgrade to the City's Traffic Control System.

COUNCIL POLICY CONSIDERATION:

Completion of the Pasadena ITS Phase II Project promotes efficient vehicular mobility within city streets, consistent with the Mobility Element of the City's General Plan. As well, it assists the Air Quality Management District in pollution reduction efforts and supports all LACMTA goals for interagency / multiregional mass transit mobility since the traffic control system provides for transit vehicle priority at signalized intersections.

ENVIRONMENTAL ANALYSIS:

The Pasadena ITS Phase II Project has been determined to be exempt from the California Environmental Quality Act ("CEQA"), pursuant to State CEQA Guidelines Section 15301, Existing Facilities, and identified as an activity listed in 23 CFR 771.117(c)(3).

FISCAL IMPACT:

The contract to be awarded to McCain, for the upgrade of the Traffic Management Center Traffic Control System Software, is for an amount not to exceed \$410,410 (that includes a 10% contingency). Funding for this contract is available in the Pasadena ITS Phase II Project (75910) that has a current balance of \$510,721. The following table shows the source of funds for the project:

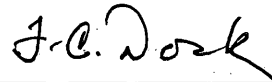
Funding Source	Amount
MTA Grant Reimbursement	\$2,684,000
Private Capital	\$670,000
Total	\$3,354,000

The following table presents a project budget summary.

Base Contract Amount	\$373,100
Contingency	\$ 37,310
Subtotal Contract Award	\$410,410
Contract Administration and Implementation	\$ 10,000
Total Project Cost	\$420,410

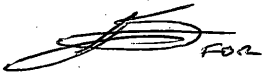
It is anticipated that the entire amount will be spent during FY2017. The Contract Administration and Implementation encompass staffing efforts provided by DOT-TMC staff and Public Works Street Lights and Traffic Signals staff for all required field implementation. The total \$10,000 cost for field contract management and implementation has been appropriated in the FY 2016 Adopted Budget and recommended in the FY 2017 Proposed Budget in the Department of Transportation's operating budget.

Respectfully submitted,



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