Metro

Board Report

Metro

File #: 2016-0457, **File Type:** Contract

Agenda Number: 46.

EXECUTIVE MANAGEMENT COMMITTEE
AUGUST 18, 2016

SUBJECT: REGIONAL INTEGRATION OF INTELLIGENT TRANSPORTATION SYSTEMS (RIITS) MODERNIZATION

ACTION: APPROVE RECOMMENDATIONS

RECOMMENDATIONS

AUTHORIZE the Chief Executive Officer to:

A. AWARD a five-year firm fixed price contract, Contract No. PS520450021002, to Parsons Transportation Group, Inc., in the amount of $4,725,226 for the **modernization of the Regional Integration of Intelligent Transportation Systems (RIITS)**; and

B. APPROVE Contract Modification Authority specific to Contract No. PS520450021002 in the amount of $1,000,000.

ISSUE

RIITS was designed, developed, and deployed as a demonstration project and prototype system in 2004 to integrate, store, share, host, operate, maintain and expand on the sharing of transportation related data in the region. Since the initial prototype deployment, there have been a number of individual component improvements; however, there has not been a complete systematic upgrade and modernization. Modernization is required to ensure the ability of RIITS to effectively and efficiently serve the transportation needs of the region, take advantage of new technologies and enable the exchange of new data as they become available.

DISCUSSION

The RIITS program's roots can be traced back to the1984 Olympics when the need to coordinate inter-agency and inter-jurisdictional traffic management operations became essential. From that need and experience, and as a result of the implementation and deployment of intelligent transportation systems (ITS), which created real-time data, the idea of RIITS was conceived. In 2004, the three party Memorandum of Understanding (MOU) between Metro, the City of Los Angeles, Department of Transportation (LADOT) and Caltrans, District 7 was executed to officially designate/adopt RIITS as a program.

RIITS consists of a network, system, and administrative processes to exchange real-time or near real -time transportation data amongst agencies in Southern California. Initially, the data consisted of freeway traffic data from Caltrans District 7, traffic signal data from LADOT and transit data from Metro. RIITS was able to collect, compile and exchange data amongst the agencies and also provide the combined data to the public. Since 2004, RIITS has expanded the network to include Caltrans Districts 8 and 12, California Highway Patrol (CHP), Foothill Transit, Los Angeles County Public Works (IEN), Waze and others. As more data becomes available through each agency, as a result of the deployment of ITS products, that data is made available to program participants through RIITS.

RIITS may exchange data of any type and quantity including census data for planning purposes, transit related data from buses and rail, traffic related data from signal systems as well as the exchange of video. Traffic data exchanged through RIITS is used for travel times and for the development of navigation applications by private companies. As RIITS is a platform for the exchange of information, it also includes a large communications network throughout Southern California that is used to exchange information on police, fire, and nearly any event within the region that may be used for situational awareness.

As a service, RIITS has not only expanded its available data but has also become the primary data source for the Southern California 511 traveler information system. Additionally, RIITS developed and deployed the prototype Archived Data Management System (ADMS) which successfully used real-time data to store and create a data warehouse providing historic data for near real time analysis of transportation based on current data rather than models based on data that may only be collected once per year or more, enabling better management.

As a result of a variety of factors (including technological advances, implementation of ADMS, expanding implementation of ITS), RIITS as currently deployed is not able to efficiently meet increasing demands and opportunities. The modernization of RIITS will better meet today's needs through the implementation of a modern self-service multi-tenant hybrid-cloud architecture that enables the development and implementation of future transportation programs and projects through a collaborative approach supported by data and technology. The modernization of RIITS will provide a more streamlined, efficient, adaptable, user friendly, open and dynamic data environment concentrated on the needs of the user to enable and promote the collection, sharing and storing of transportation and associated data in order to improve existing transportation systems and spur innovation. More specifically, it will improve RIITS' ability to integrate new data sets from agencies as they are developed and share the data with the appropriate partners. The modernized RIITS will also integrate ADMS as a full production system, provide data to Southern California 511, and support planned transportation advancements, such as integrated corridor management programs, connected vehicle opportunities and other related projects.

As this is a five-year technology contract to meet the transportation and partner data needs, it is highly improbable that all future advancements or needs can be fully identified at this time. As a result, staff is recommending that the delegated contract modification authority be raised to $1 million to facilitate incorporation of new technologies, partners, services, or data that emerge over the course of the period of performance.

Metro's agreed upon role with the partner agencies through the MOU is to administer, develop, upgrade, operate and maintain RIITS. Modernization of RIITS will allow Metro to continue to meet its commitment to the region to develop, upgrade, operate, and maintain RIITS while continuing to promote collaboration and coordination through the use of technology, partnerships and user agreements.

DETERMINATION OF SAFETY IMPACT

Approval of the recommended actions will not have any direct impact on the safety of the public and our employees. There is an indirect improvement in safety to the public as coordinated efforts to distribute data/information through RIITS will provide better, actionable, and more accurate transportation data and information.

FINANCIAL IMPACT

Funding in the amount of $4,618,000 in cost center 3351, project 405526 is included in the FY17 budget. This funding includes the cost of the modernization of RIITS. As this is a multi-year contract, the cost center manager and the Executive Officer of the Congestion Reduction department will be responsible for budgeting for RIITS in future years.

Impact to Budget

RIITS is funded with Proposition C 25% Streets and Highways funds. These funds are not eligible for and have no direct impact on transit operations. The initial development and deployment costs have been included in the FY17 budget request. The operation of the modernized RIITS will be more efficient than the current system and is not anticipated to have a negative impact on future budgets.

ALTERNATIVES CONSIDERED

The Board may choose not to approve this contract to modernize RIITS. This is not recommended as Metro would not be able to meet current demands and will be unable to take advantage of the opportunities provided in today's rapidly emerging field of big data analytics, to compile data, and collaborate with partners to improve transportation and mobility within the region.

NEXT STEPS

Upon approval by the Board, staff will execute Contract No. PS520450021002 with Parsons Transportation Group, Inc. to modernize RIITS.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

Prepared by: Kali K Fogel, RIITS Administrator, (213) 922-2665
        Kenneth Coleman, DEO Highway Operations/Congestion Reduction, (213) 922-2951
        Shahrzad Amiri, Executive Officer, Congestion Reduction,

Reviewed by:

(213) 922-3061
Ivan Page, Chief, Vendor/Contract Management (Interim), (213) 922-6383
Stephanie Wiggins, Deputy Chief Executive Officer,
(213) 922-1023
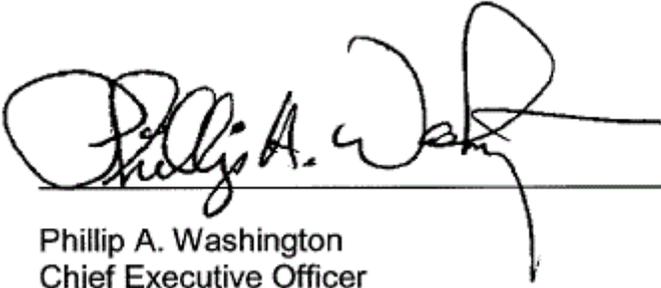
Phillip A. Washington
Chief Executive Officer