



Memorandum

TO: HONORABLE MAYOR AND
CITY COUNCIL

FROM: Hans F. Larsen

**SUBJECT: CONSULTANT AGREEMENT
FOR ITS SERVICES**

DATE: 03-08-10

Approved: 

Date: *3/16/10*

COUNCIL DISTRICT: Citywide

RECOMMENDATION

Approval of an agreement with Kimley-Horn & Associates, Inc. for intelligent transportation system (ITS) technology consultant services for the Wide and Metropolitan Area Network Redesign, Installation, and Configuration from the date of execution to June 30, 2011, in a total amount not to exceed \$272,000.

OUTCOME

Using State and Federal grants, this agreement will enhance the City's ITS infrastructure by improving security and communication capacity for video traffic surveillance and other data exchange.

BACKGROUND

The Federal Highway Agency (FHWA) advocates the use of ITS to help improve the safe and efficient operations of our roadway system. ITS technology helps local agencies to:

- Mitigate traffic congestion quickly through smart signals or remote signal timing adjustments;
- Support public safety services with video surveillance systems that detect roadway incidents for dispatching appropriate levels of response;
- Improve travel reliability with dissemination of real time roadway condition information through electronic message signs;
- Support transit operations with real time location and vehicle status through automatic vehicle location (AVL) systems.

A reliable hardwire or wireless communication infrastructure at a local scale metropolitan area network (MAN) and at a regional wide area network (WAN) scale is necessary to facilitate the transmission of traffic data and video between the field and the traffic management center and essential to enable the use of technology tools to improve service delivery.

The Department of Transportation has secured two separate grant funds to support the update of the regional and local intelligent transportation communication system to facilitate the City's efforts to provide safe and efficient roadway operations at both local and regional levels. These include a \$579,000 federal grant from the Transportation Equity Act for the 21st Century (TEA-21), and a \$15M State grant from the Proposition 1B Traffic Light Synchronization Program (TLSP).

ANALYSIS

A request for qualifications (RFQ) was issued in September 2009 to secure the services of a consultant to redesign and configure the City's and the region's communication networks. Four consultant firms responded. After the evaluation of the statement of qualifications for each candidate, the three most qualified firms were invited for an in-depth interview by a review panel with representatives from the Departments of Transportation and Information Technology, the City of Fremont, VTA, and Caltrans. Based on the evaluation of the statement of qualifications and cost proposals, the review panel ranked Kimley-Horn & Associates Inc. the highest. A summary of the evaluation result is as follows:

<i>Criteria</i>	<i>Kimley Horn</i>	<i>Iteris, Inc.</i>	<i>Delcan</i>
Experience (45 points)	35.4	34.5	31.6
Project Approach (40 points)	29.9	28.7	26.2
Cost Proposal (15 points)	<u>15.0</u>	<u>10.3</u>	<u>14.5</u>
Total Points	80.3	73.5	72.3

A summary of the cost proposals are as follows: Kimely-Horn & Associates, Inc. (\$252,000), Iteris, Inc. (\$368,548), and Delcan (\$259,950). Although cost is not a factor identified in the Qualification Based Consultant Selection (QBCS) policy adopted by Council in 2004 for the selection of architectural, engineering, environmental, land surveying, or construction management services, staff followed Purchasing RFQ template and included cost as a factor (15 points). However, the cost proposals were sealed and reviewed after the evaluation of the statement of qualifications. Therefore, the cost proposals did not influence the qualification evaluation and also would not have made a difference in ranking between Kimely-Horn and the next highest ranked candidate.

The scope of the consultant service agreement includes a review of the existing WAN, and the development and implementation of a system upgrade that will achieve the following:

- Allow more agencies to access and control surveillance cameras available to view roadway conditions in the County
- Provide bandwidth levels to deploy latest digital video technologies
- Enable easier management of the communication network to minimize downtime
- Prevent unauthorized access and control of network assets

The scope also includes a review of the City's MAN to provide a recommendation on how it should be optimized to support advanced traffic monitoring and control strategies. DOT is in the process of upgrading the City's traffic management system to utilize these strategies, which relies heavily on the integrity of a communication system between traffic signals and the traffic management center. These include:

- Replacement all 900 traffic signal controllers and communication devices to provide advanced traffic control features that respond to traffic demands.
- Addition of remote monitoring and control capability to more traffic signals
- Addition of surveillance cameras at 141 more intersections to address reported intersection operation deficiencies, to monitor traffic conditions and make signal timing adjustments to support event or incident traffic

The consultant will work with the IT Department and other agencies' IT staff to identify system requirements.

EVALUATION AND FOLLOW-UP

No additional follow up action with Council is expected at this time.

PUBLIC OUTREACH/INTEREST

- Criterion 1:** Requires Council action on the use of public funds equal to \$1 million or greater; **(Required: Website Posting)**
- Criterion 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criterion 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

This project does not meet any of the above requirements; however, this memorandum will be posted on the City's website for the March 30, 2010 Council agenda.

COORDINATION

This agreement has been coordinated with Information Technology Department, the City Attorney's Office, Planning, Building and Code Enforcement Department, and the City Manager's Budget Office.

FISCAL/POLICY ALIGNMENT

This agreement is consistent with the Mayor's Expenditure Control Strategy and has a neutral impact on the General Fund. The approval of this agreement will also allow construction of a project that will have a beneficial impact to the economy of Silicon Valley.

COST SUMMARY/IMPLICATIONS

1. TOTAL AMOUNT OF RECOMMENDATION: \$272,000

2. COST OF AGREEMENT:

Coordination/Management	\$18,086
Network Design	\$163,921
Deployment/Testing/Training	\$69,993
Contingency	<u>\$20,000</u>
 Total Agreement Cost	 \$272,000

3. SOURCE OF FUNDING: Fund 429 – Building and Structure Construction Tax Fund

4. FISCAL IMPACT: The proposed operating and maintenance costs of this project have been reviewed and will have no significant impact on the General Fund operating budget.

BUDGET REFERENCE

The table below identifies the fund and appropriations proposed to fund the agreement recommended as part of this memorandum.

Fund #	Appn #	Appn. Name	RC #	Total Appn.	Amt. for Contract	2009-2010 Adopted Capital Budget Page	Last Budget Action (Date, Ord. No.)
429	4407	ITS: Transportation Incident Management Center	124653	\$3,275,000	\$197,000	V-945	10/20/09; Ord. # 28653
429	6624	Traffic Signal Communications and Synchronization	154143	\$12,694,000	\$75,000	V-957	10/20/09; Ord. # 28653

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CEQA

CEQA: Resolution No. 68905, File No. PP02-07-193.

/s/

HANS F. LARSEN
Acting Director of Transportation

For questions, please contact Lily Lim-Tsao, Division Manager, Transportation and Parking Operations at (408) 975-3269.