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Title:	Staff Report for a City of San Leandro City Council Resolution to Approve a Consulting Services Agreement for $66,000 with Trafficware Group, Inc., to Provide System Maintenance and Support of the City's Advanced Traffic Management System Software			
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Staff Report for a City of San Leandro City Council Resolution to Approve a Consulting Services Agreement for $66,000 with Trafficware Group, Inc., to Provide System Maintenance and Support of the City's Advanced Traffic Management System Software

SUMMARY AND RECOMMENDATIONS

Staff recommends that the City Council approve and authorize the City Manager to execute a $66,000 Consulting Services Agreement with Trafficware Group, Inc., for three-years of system maintenance and technical support of the Advanced Traffic Management System (ATMS) software used to control the City's traffic signals.

BACKGROUND

The City maintains sixty-two traffic signals that rely on specialized software to control their operation. An agreement with the previous software vendor ended in 2014. The software, operating system, and computer server at City Hall are now obsolete and in need of replacement. The Information Technology Division will upgrade the server and operating system, while Trafficware Group, Inc., will provide and maintain the ATMS software.

The current version of the ATMS software includes features that improve the centralized management and monitoring of the City's traffic signals and that contribute to safe and efficient traffic operations. For example, the software allows the City to operate an adaptive traffic signal control system known as "SynchroGreen" that adjusts the signal timing along a roadway corridor in response to real-time traffic conditions. Marina Boulevard will be controlled by the SynchroGreen system.

Analysis

The City's Advanced Traffic Management System was originally completed in the spring of 2011. The

system included a Traffic Operations Center (TOC) both at City Hall and at the Public Works Department, as well as twelve observation cameras at key intersections viewable on video monitors in the City Hall TOC. In addition, forty-five of the traffic signals are connected to the City's fiber loop allowing remote operation from the TOC.

Currently, the system includes six intersections on Marina Boulevard to be operated by the SynchroGreen system, with four more intersections to be added by the end of 2019 as a result of an upcoming Capital Improvement Project. The latest software and operating system will allow these capabilities to be expanded to other critical roadway corridors in the future to improve traffic flow in the City.

In addition to SynchroGreen, the latest version of the software features the following new modules:

- *Connected Vehicle* module allows government agencies to selectively publish traffic intersection data to the public or 3rd-party software developers for the growing number of Connected Vehicle applications. This data provides valuable intersection information, thus allowing improved route choice, improved safety, and reduced vehicle emissions.

- *Signal Performance Measures* module stores and analyses high-resolution data collected from traffic signals, providing access to the information at any time. This module allows an agency to quickly and easily identify potential signal timing issues before they are noticed by the public. Time and money is saved by allowing staff to pinpoint problems immediately, thus minimizing the need to contract out analysis.

These new modules are the fundamental building blocks in the Smart City Strategy from the adopted Fiber Optic Master Plan, which addresses the following goal:

"Intelligent Traffic Signal Systems to adapt to real-time traffic conditions, making San Leandro streets more efficient."

The following is the cost breakdown to provide the software and system maintenance over a period of three years. The computer server replacement and operating system needed to support the new software will be funded separately by the Information Technology Division.

Description	Qty	Unit Price / Year	Amount / Year	Amount /3 Years
ATMS Software and Maintenance	1		$12,500	$12,500 $37,500
SynchroGreen Annual Maintenance (per intersection)	10	$950	$9,500	$28,500
Total			$22,000	$66,000

Current Agency Policies

- Maintain and enhance San Leandro's infrastructure.

Previous Actions

- On July 6, 2009 by Resolution No. 2009-101, the City Council approved a Contractual Services Agreement to upgrade the City's Advanced Traffic Management System.

Applicable General Plan Policies

- Policy T-5.3 Maintenance. Regularly maintain City streets and traffic control devices to ensure that streets operate safely and efficiently.
- Policy T-5.4 Traffic Flow Improvements. Use a variety of technology-driven measures to improve traffic flow at congested intersections.
- Policy T-5.7 Technology and Roadway Efficiency. Use technology, including smartphone applications, roadway sensors, and real time data on congestion, travel time, and parking supply to create a more efficient transportation system, and to maximize the benefits of the existing road system before investing in its expansion.

Fiscal Impacts

This Consulting Services Agreement obligates the City to pay the software vendor a total of $66,000 over a three year period, or $22,000 per year.

Budget Authority

The following funding was included in the adopted Fiscal Year 2019-20 and 2020-21 Biennial Budget to service this agreement:

Account:	FY 2019-20 Allocation	FY 2020-21 Allocation	FY 2021-22*
140-42-019	$22,000	$22,000	$22,000
Totals	$22,000	$22,000	$22,000

   *Planned appropriation for FY 2021-22

ATTACHMENT(S)

Attachment(s) to Related Legislative File

Consulting Services Agreement with Trafficware Group, Inc.

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