

TO: Andrew P. Powers, City Manager

FROM: Clifford G. Finley, Public Works Director

DATE: May 21, 2024

SUBJECT: Transportation Management System Software Upgrade

RECOMMENDATION:

1. Approve a single source designation and the purchase of a centralized computer software system upgrade and maintenance agreement, Centrac's Advanced Transportation Management System and Centrac's Mobility System Service, from Econolite Control Products, Anaheim, CA in the amount of \$141,221, with a term ending June 30, 2027.
2. Authorize expenditure in the amount of \$141,221 in FY 2023-24 as follows: \$112,650 from A/C #141-5570-631-8640 (Lighting Fund – Signal Maintenance, Subscription Lease) and \$28,571 from A/C #141-5570-631-4300 (Lighting Fund – Signal Maintenance, Software Maintenance).
3. Approve budget appropriation transfer in the amount of \$141,221 in FY 2023-24 from A/C #141-5570-631-3122 as follows: \$112,650 to A/C #141-5570-631-8640 (Lighting Fund – Signal Maintenance, Subscription Lease) and \$28,571 to A/C #141-5570-631-4300 (Lighting Fund – Signal Maintenance, Software Maintenance).
4. Find that this action is not a project as defined under the California Environmental Quality Act (CEQA).

LEVINE ACT ITEM: Yes

FINANCIAL IMPACT:

No Additional Funding Requested. \$150,000 is included in the Adopted FY 2023-24 Lighting Fund Budget for the software system upgrade.

BACKGROUND:

In 1995, the City purchased its first centralized traffic signal software system, Econolite Aries, as its traffic management system from Econolite Control Products. This software system allowed staff to communicate directly with traffic signals from City Hall. Over time, the City upgraded the communication network to fiber optic cable and introduced new generation traffic signal controllers and video detection cameras.

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In 2014, the City upgraded its traffic signal software system from Aries to Centrac's Advance Transportations Management System (ATMS), which is also from Econolite Control Products. There are currently 136 City owned and operated traffic signals citywide. There are 95 signalized intersections connected to ATMS by a mix of fiber optic cable, copper wire, and wireless systems. All 136 traffic signalized intersections have battery backup units, 125 of them utilize Econolite video detection cameras, and 60 have Emergency Vehicle Preemption units (which allow emergency vehicles to travel through the busiest corridors in the City with minimal interruption to response times). Intersection controllers can transmit real-time intersection operations and key data to the Traffic Operations Center in City Hall utilizing the ATMS.

ATMS also monitors 62 traffic signals that are synchronized during the busiest weekday periods along segments of Thousand Oaks Boulevard, Hillcrest Drive, Moorpark Road, Lynn Road-Olsen Road, Rancho Conejo Boulevard, and Ventu Park Road.

DISCUSSION/ANALYSIS:

The City is one of 350 agencies using ATMS, including one of 16 in Southern California. The ATMS has been a valuable tool to allow staff to view and modify traffic signal controller data from City Hall in real-time.

The new Centrac's Mobility software upgrade will move the traffic signal management system to a cloud-based system, which will help enable real-time data and day-to-day modifications to signal timing based on feedback received from intersection video detection cameras. The upgrade also features advanced technology including an algorithm to automatically adjust signal timing to help minimize delays and optimize the synchronization of coordinated signals. The upgrade is not included in the City's current version of the ATMS software system but will provide benefits to staff and motorists in the future (Attachment #1). ATMS and Centrac's Mobility will include a three-year software maintenance agreement which will upgrade the existing ATMS software to the most current version and provide for three additional years of overall ATMS maintenance (Attachment #2). This investment will help further improve high operational efficiency of the City's traffic signal system and provide an improved level of service for motorists within the City in the future. The entire system will be transitioned to a cloud-based system.

Based on the above, staff recommends the purchase of the Centrac's Mobility software add-on feature and a three-year software maintenance agreement. With the addition of the Centrac's Mobility package, additional intersections or corridors can be easily added and monitored from the City's Traffic Management Center, which will save staff time from traveling to field controllers to make signal timing

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modifications. Additional time and cost savings will also be realized by not having to dispatch the City's traffic signal maintenance contractor to perform the timing modifications in the field.

A single-source designation is requested as the City wishes to continue to utilize the existing traffic signal management system which was developed by Econolite for the upgrade to the new Mobility platform. Moving to a different vendor would require the development of a completely new traffic signal management system.

The overall cost breakdown is as follows:

1. \$54,250 - Mobility "add-on" software upgrade
2. \$58,400 - Two-year cloud data storage on Mobility servers (\$29,200/yr)
3. \$28,571 - Three-year overall software maintenance agreement for the entire Transportation Management System.

This action is not a project as defined under the CEQA because this action will not result in a direct or foreseeable indirect physical change in the environment [14 CCR 15060(c)].

This project meets City Council's Top Ten Priorities #6, "Public Works + Infrastructure Investments".

LEVINE ACT (California Government Code § 84308):

This item is subject to the Levine Act. City Council members who have received a campaign contribution of more than \$250 (aggregated) within the preceding 12 months from a party or their agent/representative, or a financially interested participant involved in this proceeding may do either of the following: (1) disclose the contribution on the record and recuse themselves from this proceeding; or if applicable (2) return the portion of the contribution that exceeds \$250 within 30 days from the time the official knew or should have known about the contribution, and participate in the proceeding.

All parties and their agents/representatives must disclose on the record of this proceeding any aggregated contribution of more than \$250 made to any Council member within the preceding 12 months. Council members are prohibited from accepting, soliciting, or directing a campaign contribution of more than \$250 (aggregated) from a party, their agent/representative, or a financially interested participant during a proceeding and for 12 months following the date a final decision is made. In addition, a party, their agent/representative, or a financially interested participant is prohibited from contributing more than \$250 (aggregated) to a Council member during a proceeding and for 12 months following the date a final decision is made.

COUNCIL GOAL COMPLIANCE:

Meets the following City Council goals:

C. Operate City government in a fiscally and managerially responsible and prudent manner to ensure that the City of Thousand Oaks remains one of California's most desirable places to live, work, visit, recreate, and raise a family.

D. Maintain strong commitment to public safety (including Police, Fire, Emergency Medical Services, and Emergency Management) to ensure City remains one of the safest Cities in the United States with a population over 100,000.

F. Provide and enhance essential infrastructure to ensure that the goals and policies of the Thousand Oaks General Plan are carried out and the City retains its role and reputation as a leader in protecting the environment and preserving limited natural resources.

PREPARED BY: Robert Sweeting, Associate Engineer

Attachments:

Attachment #1 – Centracs Mobility Upgrade Agreement

Attachment #2 – Centracs ATMS 3 Year Maintenance Agreement