


# CITY OF LOS ANGELES

## INTER-DEPARTMENTAL MEMORANDUM

Date: April 4, 2014

To: The Honorable City Council  
c/o City Clerk, Room 395, City Hall  
Attention: Honorable Mike Bonin, Chair, Transportation Committee

From: Jon Kirk Mukri, General Manager  
Department of Transportation 

Subject: **AUTOMATED TRAFFIC SURVEILLANCE AND CONTROL (ATSAC)  
SYSTEM CLOSED-CIRCUIT CAMERA REPLACEMENT PROGRAM**

### SUMMARY

The Los Angeles Department of Transportation (LADOT) is seeking approval to execute a sole source, one-time, and limited duration contract for the emergency repair and replacement of ATSAC traffic cameras and changeable message signs citywide.

### RECOMMENDATIONS

1. Concur with the Department of Transportation General Manager that the need to replace and rehabilitate the City's 500 closed-circuit ATSAC traffic cameras, changeable message signs, and on-call fiber optic system is an emergency and these actions are an urgent necessity for the preservation of life, health or property, pursuant to City Charter Section 371(E) and it is more economical to use a contractor.
2. Find, pursuant to Charter Section 1022, that the Department of Transportation does not have personnel available with the expertise to undertake these specialized professional tasks in a timely manner, nor does the Department have the necessary equipment to support these activities, and that it is more feasible and economical to secure these services by contract and the use of competitive bidding would be impractical.
3. Authorize the Department of Transportation to execute the attached contract with Siemens Industry, Incorporated for \$750,000, to be paid out of Fund 540 (Prop C), Department 94, Appropriation Account 94J634 "ATSAC Systems Maintenance," and a term of nine months to undertake the repair of the City's 500 closed-circuit ATSAC traffic cameras, changeable message signs, and on-call fiber optic system, subject to review by the City Attorney as to form.
4. Report to the Council in six months with a recommendation for a comprehensive maintenance plan for both the traffic cameras and the ATSAC system.

## **DISCUSSION**

### **Background**

The City of Los Angeles first deployed the Automated Traffic Surveillance and Control (ATSAC) system in 1984 in preparation for Olympic games in Los Angeles. At that time, only 120 intersections around the Coliseum were part of the project. Today all 4,600 signalized intersections in the City are part of the ATSAC system, which also includes over 500 closed-circuit traffic cameras and 35 changeable message signs.

The ATSAC system is used on a daily basis to monitor and manage traffic throughout the City. During special events and emergencies, the ATSAC system is part of the Department Operation Center (DOC) and works with the Emergency Management Department and field command posts to coordinate and manage all response activities. Integral to this function is the use of the traffic camera system to assess field conditions and deploy resources in an emergency. Additionally, traffic cameras are used by other departments to coordinate incident response. Changeable message signs are used to inform the public of closures, detours, incidents and emergency information, such as Amber Alerts. It is essential that the key components of the ATSAC system be fully operational at all time.

Due to age, damage and lack of staffing and equipment needed to provide adequate maintenance, many of the ATSAC traffic cameras and changeable message signs are no longer working. The current high failure rate of both cameras and changeable message signs puts the entire ATSAC and emergency response system at risk. Without operating changeable message signs, the public is not informed of important road conditions and street closures. Furthermore, the gradual deterioration of existing ATSAC infrastructure now threatens the future ability to integrate with the Los Angeles County Metropolitan Transportation's (Metro) upcoming regional rail projects. It is urgent that the City's ATSAC closed-circuit cameras be repaired as soon as possible.

### **Previous Funding Allocations**

The ATSAC Program's capital costs have relied on external Federal, State, and county grants to implement the system in successive geographical areas of the City. The terms of these grants prohibit the use of the funds for upkeep and maintenance of the infrastructure.

To ensure the continued functionality of the ATSAC system, in 2009, the Department received federal funding through the American Recovery and Reinvestment Act of 2009 (ARRA) to upgrade 50 traffic cameras that were most in need of repair. In order to continue the necessary maintenance work, the FY2012-13 Budget established an ATSAC maintenance fund for the repair and replacement of damaged equipment. The Department has been working to develop a replacement plan and these funds have not been expended. The FY2013-14 Budget provided additional maintenance funds, which were used to purchase new equipment instructions to upgrade the traffic camera system to incorporate newer digital technology so that they can be used by LAPD for surveillance and monitoring, pursuant to C.F. 13-0468.

Facing the challenge of ongoing replacement and maintenance needs, in 2013, the Department reached out to one of the nation's leading Intelligent Transportation Systems (ITS) contractors, Seimens, Industry, Incorporated (Siemens). Siemens not only manufactures and supplies the necessary hardware that is compatible with the ATSAC infrastructure, but also retains specially-trained and experienced technicians with suitable field equipment, such as towering trucks that are not a part of LADOT's vehicle fleet. The Department's staff engineers have reviewed the contents of Siemens' October 2013 "Proposal to Provide Maintenance Services" and are in concurrence with the proposal.

### **Proposed Contract**

The proposed contract with Seimens would be in the amount of \$750,000, currently available in the ATSAC Systems Maintenance accounts. The proposed contract would be for a duration not to exceed nine months, however it is anticipated that most of the repairs would be done in the first six months. The extended duration is to allow for the procurement of long lead items that may be necessary for the repair of some of the changeable message signs.

After the repair and replacement of the traffic cameras is complete, preliminary estimates indicate that ongoing, annual maintenance would cost at least \$100,000, if the work is done by an outside contractor. The Department will undertake a review of these costs, as well as estimate the costs if the work is done by City forces, and report to the Council in six months with a recommendation for a comprehensive maintenance plan for both the traffic cameras and the ATSAC system.

### **FINDINGS**

The need to replace and rehabilitate the City's 500 closed-circuit ATSAC traffic cameras, changeable message signs, and on-call fiber optic system is an emergency and these actions are an urgent necessity for the preservation of life, health or property, pursuant to City Charter Section 371(E) and it is more economical to use a contractor. The repair and replacement of broken or damaged traffic cameras and changeable message signs is beyond the City's current ability because the work requires specialized equipment in the form of at least one large tower truck, as well as a sufficient number of experienced in-house engineers and signal electricians. To date, there are only eight remaining LADOT signal electricians in the ATSAC Field Support Group that has only one remaining veteran. The Department cannot afford to divert more regular signal systems electricians to the ATSAC Field Support, because the signal electricians skilled in ITS require continuous specialty training and mentorship that is above and beyond the typical duty of signal systems electricians, whose primary duty is to ensure the day-to-day citywide traffic signals functionality.

In the interest of public safety, and for the benefit of all of the traveling public, it is essential that the traffic camera system and changeable message signs be restored to full operation by replacing damaged or broken equipment and making other repairs as necessary. Because the necessary city staff and resources do not exist and cannot be obtained in a timely manner, repairs to the traffic camera system must be done by contract

**FISCAL IMPACT**

Sufficient funding exists in Fund 540 (Prop C), Department 94, Appropriation Account 94J634 "ATSAC Systems Maintenance" for this work to be completed.

JKM/SS:bs

Attachments