



# CITY COUNCIL AGENDA REPORT

---

MEETING DATE: FEBRUARY 18, 2014

ITEM NUMBER: \_\_\_\_\_

**SUBJECT: PROFESSIONAL SERVICES AGREEMENT FOR PURCHASE AND INSTALLATION OF EMERGENCY VEHICLE PREEMPTION (EVP) SYSTEM.**

**DATE: JANUARY 28, 2014**

**FROM: FIRE DEPARTMENT  
PUBLIC SERVICES DEPARTMENT - TRANSPORTATION SERVICES DIVISION**

**PRESENTATION BY: DAN STEFANO, FIRE CHIEF**

**FOR FURTHER INFORMATION CONTACT: FRED SEGUIN, FIRE ADMINISTRATION  
BATTALION CHIEF, (714) 754-5106**

**RAJA SETHURAMAN, MANAGER,  
TRANSPORTATION SERVICES DIVISION,  
(714) 754-5343**

---

## **RECOMMENDATION:**

- 1) Award a Professional Services Agreement (Attachment 1) for the purchase and installation of Emergency Vehicle Preemption (EVP) devices utilizing Global Traffic Technologies (GTT) Global Positioning System (GPS) technology at 25 intersection locations, in 20 fire department emergency vehicles and integrating the equipment in a central system located at the Traffic Management Center (TMC) through DDL Traffic, Inc. in the amount of \$234,236.60 (inclusive of sales tax).
- 2) Authorize the Mayor to execute the Professional Services Agreement.

## **BACKGROUND:**

In May 2013, the City Council unanimously approved the CEO recommendations for a reorganization of the fire department. Included in the list of recommendations was the implementation of an Emergency Vehicle Preemption (EVP) system to facilitate faster city-wide emergency response times.

The delivery of fire, rescue, and emergency medical services is a core component of maintaining the public and life safety of the community and consistently rates high in terms of importance to the residents, visitors, and businesses of Costa Mesa.

Increased population density, traffic congestion, and a more streamlined approach to resource utilization can adversely impact emergency unit response times. To assist the immediate traffic flow needs for fire department resources dispatched to an emergency incident, EVP has a proven track record in providing a safe and expeditious method to reduce emergency response times. In fact, EVP studies show that an effective signal preemption system improves emergency response times by an average of twenty percent while simultaneously reducing crashes at controlled intersections.

## **ANALYSIS:**

On October 25, 2013, the City issued a Request for Proposals (RFP) for the traffic signal preemption project. One (1) proposal was received from Global Traffic Technologies, LLC to provide the intended services through DDL Traffic, Inc. The proposal was reviewed for compliance with the City's RFP, and it was evaluated based on project understanding, depth of experience, technical expertise, and associated factors. Based on the proposal and after extensive communications, an on-site presentation and interview was conducted between City staff and GTT and DDL Traffic representatives. After careful review of the proposal and responses during the presentation/interview process, staff finds DDL Traffic, Inc. is well qualified to perform the identified services. The submitted proposal and the responses during the presentation/interview process represents a thorough understanding of the project, complies with City specifications, and documents technical ability and experience with similar projects.

GTT's Opticom technology was first introduced in the 1960's and is deployed in over 70,000 intersections with over 2,800 customers around the world. The current technology and preemption systems are in current use in most cities in Orange County, in addition to many other municipalities throughout California.

EVP is a system that allows the normal operation of traffic lights to be altered in order to favor the movement of emergency vehicles. The preempting of a traffic signal intersection is accomplished by either using older Infrared (IR) technology or the more recent GPS technology. The latest Opticom EVP technology utilizes GPS transponders, located on each vehicle. The telemetry is transmitted to receivers at each intersection, within an established range, which then changes the traffic signals to accommodate the path of emergency vehicles current and intended path. The system is only activated when a properly equipped emergency vehicle is driving "Code 3" (e.g., with emergency lights and siren on) and automatically shuts off when the parking brake is applied. Moreover, the EVP system not only monitors the direction of travel of the emergency vehicle, but also anticipates upcoming turns.

The proposed EVP project will include 25 intersections, focused around Fire Station #2 (Baker) and Fire Station #6 (Metro) and 20 fire department emergency vehicles. The proposed intersection areas of coverage are included (Attachment 2).

The projected timeline of this project has been identified at 60-90 days for completion.

#### **ALTERNATIVES CONSIDERED:**

One alternative would be to not authorize the purchase and installation for this EVP project and continue to utilize current procedures. However, this could result in longer emergency response times than desired.

A second alternative would be to not authorize the project at this time and postpone approval to a later date as determined by City Council.

#### **FISCAL REVIEW:**

The purchase and installation of the EVP project is \$234,236.60 (inclusive of sales tax). Moreover, staff requests an additional appropriation of \$25,000.00 for Caltrans permitting costs and any potential additional costs that may be incurred. Funding for this project will be included in the mid-year budget report.

The recurring cost related to the annual maintenance agreement is projected at \$14,000.00, which includes \$10,000.00 for the 25 intersections and \$4,000.00 for the 20 emergency vehicles.

**LEGAL REVIEW:**

The City Attorney's office has prepared the attached Professional Services Agreement and has approved the document relative to form.

**CONCLUSION:**

After careful review of the one (1) proposal submitted for the Emergency Vehicle Preemption project, it is recommended that the City Council award the Professional Services Agreement to DDL Traffic, Inc.

---

DANIEL A. STEFANO  
Fire Chief

---

ERNESTO MUNOZ  
Public Services Director

---

STEPHEN DUNIVENT  
Interim Finance Director

---

RAJA SETHURAMAN  
Manager, Transportation Services Division

- ATTACHMENTS:     1     [Professional Services Agreement](#)  
                          2     [EVP coverage for 25 intersection areas](#)