



Metro

Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.2000 Tel
metro.net

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**OPERATIONS COMMITTEE
APRIL 17, 2008**

SUBJECT: INCIDENT BASED SURVEILLANCE SYSTEM (IBSS)

ACTION: AWARD CONTRACT

RECOMMENDATION

Authorize the Chief Executive Officer to:

- A. Award a five year firm fixed price lease/managed services contract No. OP35032075, to SmartDrive Systems for incident based surveillance system (IBSS) in an amount not to exceed \$5,869,305 inclusive of three one year options effective May 1, 2008; and
- B. Amend the FY08 budget to add one full-time equivalent (FTE) to coordinate SmartDrive program management, implementation duties and responsibilities.

RATIONALE

We have a continuing initiative to reduce accidents and provide innovative bus operator training and processes to our employees, as well as improving the resources required for accident investigation. The IBSS pilot program initiated in 2005 at Division 3 in the San Gabriel Valley Service Sector has been a success; resulting in a 27% reduction in accident severity. In June 2007 the Board approved an initiative to move forward with implementing IBSS on all buses agency wide, including contracted service buses. The main focus is to implement new and innovative training programs that promote driver safety, decrease accident rates, and reduce Workers' Compensation and Public Liability/Property Damage costs.

The SmartDrive contract scope of work is to provide all equipment, installation oversight/equipment repair, data transmission, event monitoring (managed services), and transfer of video images and reports back to us on a daily basis or as required by staff. Transportation management and training staff will use this data as specified by operations policies and procedures. Key Performance Indicators (KPI's) will be established to measure the efficacy of the program. These KPI's will be reported to the Board at regular intervals upon completion of full implementation.

The SmartDrive Digital Video Event Recorder (DVER) will be mounted on the windshield of our entire fleet of 2,700 buses. The DVER consists of two cameras: one camera pointing

forward, one pointing at the driver. SmartDrive records images and sounds into a digital looping memory buffer, capturing what the operator sees and hears with a wide-angle lens facing forward and another lens showing the bus interior. The system can be triggered either by forward or lateral g-forces that could be caused by an accident, hard acceleration, sudden stop or sharp turn, or manually by the Operator, using a remotely located "self activation" button. When the device is triggered, a red light on the camera blinks, informing the operator that the preceding 15 seconds and the subsequent 15 seconds have been saved to memory.

When a bus returns to the division, the recorded video event files are downloaded from the bus to a server via a secure wireless connection to a remote data review site. The data is organized and reviewed by SmartDrive staff at this remote site based on pre-determined criteria specified by us. All events that meet the criteria for further review are made available to our staff via a secure https connection on a computer desktop. Transportation staff will review the event and disposition as necessary per an approved procedure. The information can be used to identify habits that require driver retraining or counseling. Operator performance may be positively impacted by learning to anticipate and avoid triggering events. In addition, SmartDrive's images can also be used to assist Risk Management in determining liability for accidents and is a form of evidence in legal proceedings, e.g. to defend against lawsuits or to recover costs of collision repairs.

Installation of the SmartDrive units, implementation/verification of managed services, training, equipment logistics, and data management/review will occur in phases. An initial installation (first article) demonstration will occur at two operating divisions. SmartDrive units will be installed on approximately 450 buses. The estimated length of the first article is forty five days. After this period, or whenever all program elements are evaluated and proven operational by us and SmartDrive staff, subsequent installation/implementation will commence fleet-wide at the remaining twelve operating Divisions.

Because of the number of buses in the our fleet, the complexity/amount of data transfer and coordination of managed services, equipment logistic requirements, DVER installation scheduling, training, tracking/reporting of key performance indicators, and other project management related effort, staff is requesting one additional Assistant Transportation Manager FTE (H1N) to manage the SmartDrive program. This position will report to the Executive Office, Bus Operations and will be responsible for all interface between division/functional staff and the SmartDrive project management team.

FINANCIAL IMPACT

Funding of \$975,000 for this service is included in the FY08 budget in cost center 3010, Executive Office Transit Operations under project 300011, Bus Operations and line Item 50316, Professional Services. Since this is a multi-year contract, the cost center manager and Chief Operations Officer will be accountable for budgeting the cost in future years, including any option(s) exercised.

ALTERNATIVES CONSIDERED

The alternative considered is to not proceed with this contract award. This option is not recommended based on the past results of the pilot program and the anticipated benefits of

accident reduction, improved driving safety/training, and the ability to physically show liability for accidents and cost recovery.

ATTACHMENT(S)

- A. Procurement Summary
- A-1 Procurement History
- A-2 List of Subcontractors

Prepared by: Christopher Gallanes, Operations Performance Analysis Manager
Robert Webb, Sr. Contract Administrator

Carolyn Flowers

Carolyn Flowers
Chief Operations Officer

Roger Snoble

Roger Snoble
Chief Executive Officer

**BOARD REPORT ATTACHMENT A
PROCUREMENT SUMMARY**

INCIDENT BASED SURVEILLANCE SYSTEM

1.	Contract Number: OP35032075		
2.	Recommended Vendor: SmartDrive Systems, Inc.		
3.	Cost/Price Analysis Information:		
	A. Bid/Proposed Price: \$5,869,305	Recommended Price: \$5,869,305	
	B. Details of Significant Variances are in Attachment A-1.D		
4.	Contract Type: Firm Fixed Price		
5.	Procurement Dates:		
	A. Issued: November 6, 2007		
	B. Advertised: November 19, 2007		
	C. Pre-proposal Conference: November 13, 2007		
	D. Proposals Due: December 20, 2007		
	E. Pre-Qualification Completed: February 12, 2008		
	F. Conflict of Interest Form Submitted to Ethics: March 17, 2008		
6.	Small Business Participation:		
	A. Bid/Proposal Goal: 0%	Date Small Business Evaluation Completed: N/A	
	Small Business Commitment N/A		
7.	Invitation for Bid/Request for Proposal Data:		
	Notifications Sent: 4	Bids/Proposals Picked up: 49	Bids/Proposals Received: 2
8.	Evaluation Information:		
	A. Bidders/Proposers Names:	<u>Bid/Proposal Amount:</u>	<u>Best and Final Offer Amount:</u>
	1) SmartDrive Systems, Inc.	\$ 5,725,000	\$ 5,869,305
	2) DriveCam Inc.	\$11,730,410	\$11,416,525
	B. Evaluation Methodology: Explicit Factors Details are in Attachment A-1.C		
9.	Protest Information:		
	A. Protest Period End Date: April 22, 2008		
	B. Protest Receipt Date: TBD		
	C. Disposition of Protest Date: TBD		
10.	Contract Administrator: Bob Webb	Telephone Number: 922-6382	
11.	Project Manager: Chris Gallanes	Telephone Number: 922-4828	

BOARD REPORT ATTACHMENT A-1 PROCUREMENT HISTORY

INCIDENT BASED SURVEILLANCE SYSTEM

A. Background on Contractor

Founded in 2004 and based in San Diego with over 300 employees globally, SmartDrive Systems, Inc., is a Measured Safety Program company. SmartDrive's services save lives by measuring and managing driver safety and by preventing risky driving.

SmartDrive has successfully installed several thousand systems, including at the Riverside Transportation Agency, Laidlaw International, and the Salvation Army. In November 2007, SmartDrive announced that it has closed a \$46 million Series D round of funding co-led by Oak Investment Partners and New Enterprise Associates (NEA).

B. Procurement Background

In June 2007, the Board moved to amend the FY 08 budget to fund the implementation of "incident based recording technology" on all buses agency wide, including contract services. In looking at the requirements, staff determined that the purchase of this equipment is not in our best interest. Technology change in these areas is very rapid and vehicle safety technology currently available is expected to evolve significantly within the next several years. Thus, a lease agreement was considered to be in our best interest. In addition, staff considered the best method of screening and reviewing all of the data generated by an incident recording system.

Under the original demonstration project, staff found that reviewing of the tapes is very labor intensive. To minimize this aspect of the project, staff decided to require "managed services" as a part of the procurement. The selected firm will be required to transmit all data every day, perform the initial review of the video and note unsafe driving behavior according to pre-determined categories. This data will be sorted and reports detailing the most unsafe behavior available for review within twenty-four hours. These reports providing the results of the original reviews along with the video will be made available to the Project Manager and to management at the appropriate operating division. The Project Manager will be responsible for coordinating how the reports are used to insure consistency regarding how the results are used in re-training of operators. In addition, the Project Manager will insure that the overall project is properly managed.

The Diversity and Economic Opportunity Department (DEOD) did not recommend a DBE Voluntary Anticipated Level of Participation (VALP) goal for this procurement due to lack of subcontracting opportunities.

Based on these parameters, staff used a competitive negotiation method for source selection.

C. Evaluation of Proposals

The procurement was conducted in compliance with Procurement Policies and Procedures. On December 20, 2007, proposals were received from DriveCam and SmartDrive.

A Source Selection Committee (SSC) consisting of staff from Operations, ITS, and Equipment Engineering evaluated the proposal submittals. The initial evaluation determined that both firms met the technical and qualifications requirements contained in the RFP. Clarification interviews were then conducted with both firms. During the interview with DriveCam, it became apparent that DriveCam had not proposed leasing of the equipment as required in the solicitation. Rather, the firm expected us to purchase the equipment. In addition, the discussion raised additional questions regarding cost of data transmission. The firm was asked to respond to these issues. In the interview with SmartDrive, the Committee requested additional information about the proposed deployment plan, the staffing plan and additional information about the data transmission. Both firms provided responses to our questions.

In addition, the SSC conducted telephone interviews with current system users for each company. While each firm has installed numerous units, we would be its largest client for managed services. Staff wanted to insure that the proposers had the demonstrated capability to perform the required work. Each firm was required to separately demonstrate its capability in a product demonstration using two of our buses. Each company was given time to install its product and then a script was used to attempt to create recordable incidents. Each firm encountered various problems successfully completing this demonstration. However, the SSC determined that each firm had the capability to perform. Because there is still some concern regarding the successful implementation of a project given the size of our fleet, each firm was asked to separately price the 45 day evaluation period, limiting our liability. Each firm was then asked to submit final information and final pricing. The SSC reviewed the final submittals and determined that SmartDrive is technically qualified to perform the work. While SmartDrive slightly increased its price because of a change in our requirements, the firm still offered a significantly lower price and the award is recommended to SmartDrive.

D. Cost/Price Analysis Explanation of Variances

The recommended price has been determined to be fair and reasonable based upon the independent estimate and price competition.

**BOARD REPORT ATTACHMENT A-2
LIST OF SUBCONTRACTORS**

INCIDENT BASED SURVEILLANCE SYSTEM

PRIME CONTRACTOR – SmartDrive Systems, Inc.

Small Business Commitment

Other Subcontractors

0%

None

Total Commitment 0%