



Kelly E. Johnson, C.P.M., C.P.C.M.
Harris County Purchasing Agent

May 4, 2010

Commissioners Court
Harris County, Texas

RE: **Job No. 08/0237**

Members of Commissioners Court:

Please approve the attached Order authorizing the County Judge to execute the attached **First Amendment** to the **Second Agreement** for the following:

Description: Purchase and Installation of Violation Enforcement System Equipment for the Harris County Toll Road Authority

Vendor: **TransCore, LP**

Amount: Existing funding will be reallocated

Reviewed by: X Toll Road Authority X Harris County Purchasing

This First Amendment modifies the Scope of Services to add lane closure services to be provided in compliance with TXDOT standards.

Sincerely,

Kelly E. Johnson
Kelly E. Johnson
Purchasing Agent

Vote of the Court:	Yes	No	Abstain
Judge Emmett	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Lee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Garcia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Radack	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Eversole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MAY 13 10 9:39

Presented to Commissioner's Court

MAY 11 2010

APPROVE G|E
Recorded Vol Page

FOR INCLUSION ON COMMISSIONERS COURT AGENDA MAY 11, 2010

Agenda

1001 Preston, Suite 670, Houston, TX 77002 Tel 713-755-5036 Fax 713-755-6695



Purchasing

JACK R. McCOWN, C.P.M.
HARRIS COUNTY PURCHASING AGENT

June 10, 2008

Commissioners Court
Harris County, Texas

RE: Job No. 08/0237

Members of Commissioners Court:

On May 19, 2008, one (1) proposal was received to provide Violation Enforcement System Cameras and Associated Equipment for the Harris County Toll Road Authority.

After careful review and evaluation of the proposal and a best and final offer, it is recommended by the Office of the Purchasing Agent, based on the consensus of the evaluation committee, that an award be made to TransCore, LP on the basis of only proposal received. Cost information is detailed on the confidential attachment.

Further, it is requested that the attached Order be approved authorizing the County Judge to execute the attached **Second Agreement** for Purchase and Installation of Violation Enforcement System Equipment between Harris County and **TransCore, LP** for the term June 17, 2008 through January 21, 2009, with four (4) one-year renewal options. A purchase order will be issued upon Commissioners Court approval.

This project was developed and issued as a Request for Proposal and, as such, it is requested that the cost information remain **confidential** until award and execution of agreement. At that time, the submittal may be available for public review under the "Public Information Act".

Vote of the Court:	Yes	No	Abstain
Judge Emmett	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Lee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Garcia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Radjack	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Eversole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sincerely,

Jack R. McCown, C.P.M.
Purchasing Agent

Presented to Commissioner's Court

VJG/vlc
Attachments
cc: Toll Road Authority
TransCore, LP

JUN 17 2008

APPROVE: EIC

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FOR INCLUSION ON COMMISSIONERS COURT AGENDA JUNE 17, 2008



CONFIDENTIAL UNTIL APPROVED BY COMMISSIONERS COURT

**Request for Proposal for Violation Enforcement System Cameras and Associated
Equipment for the Harris County Toll Road Authority**

One (1) proposal was received as follows:

<u>Vendor</u>	<u>Estimated Cost</u>
TransCore, LP	\$15,358,645

Upon careful evaluation of the proposal and a best and final offer, the Evaluation Committee selected TransCore, LP based on the only proposal received.

**SECOND AGREEMENT FOR PURCHASE AND INSTALLATION OF VIOLATION
ENFORCEMENT SYSTEM EQUIPMENT**

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

This is an agreement made and entered into by **HARRIS COUNTY** ("County"), a body corporate and politic under the laws of the State of Texas, acting on behalf of the **Harris County Toll Road Authority** ("HCTRA"), and **TransCore, LP** ("**TransCore**"), with corporate offices located at 2705 W. Sam Houston Parkway N., Houston, Texas 77043.

Recitals

Whereas, on January 22, 2008, the parties entered an Agreement (said Agreement, as amended on February 19, 2008 & May 20, 2008, being herein referred to as "First Agreement") for TransCore to provide the Harris County Toll Road Authority with violation enforcement system (VES) equipment and installation services; and

Whereas, Harris County has determined that the amount of VES equipment purchased under the First Agreement is insufficient to meet HCTRA's needs; and

Whereas, under the competitive proposal process of the County Purchasing Act (Texas Local Government Code, Section 262.021, et.seq., as amended), Harris County advertised a Request for Proposal (Purchasing Job #08/0237), to provide, install and test VES equipment and provide a one-year warranty of the equipment; and

Whereas, Harris County desires to enter into an agreement with TransCore to provide the additional equipment and services; and

Whereas, TransCore represents and acknowledges that it is fully qualified and capable of providing the equipment and performing the services called for in this Agreement and is willing to provide that equipment and perform those services.

Now, therefore, County and TransCore, in consideration of the mutual covenants and agreements contained herein, do mutually agree as follows:

1. Scope of Services

TransCore shall furnish the VES equipment and provide installation, integration, and testing of the equipment described in Attachment "A". TransCore will also provide a one-year warranty for the VES equipment. In the event of any conflict between either the terms and provisions of this Agreement and the terms and provisions of the Statement of Work, this Agreement shall control.

2. Compensation

In consideration of the services rendered by TransCore hereunder, the County shall pay TransCore **\$15,358,645.00**, said amount will compensate TransCore for all its time and expenses. All tools and supplies necessary in the provision of services hereunder shall be supplied by TransCore at its own expense. Notwithstanding the above, the County shall have no obligation to

pay for any work, services, or expenditures hereunder which have been rendered or incurred without prior authorization as described in Section 3. Furthermore, in no event will the County be obligated hereunder to compensate ETC more than \$15,358,645.00, nor shall TransCore be required hereunder to provide services which would entitle it to compensation in excess of \$15,358,645.00.

3. Authorization for Services

Prior to the commencement of work under this agreement, TransCore shall obtain authorization to commence work hereunder from HCTRA's designee. TransCore agrees to perform no work until receipt of a duly signed and approved purchase order issued by the Harris County Purchasing Agent. Work performed without such purchase order and written authorization from HCTRA's designee shall be at the expense of TransCore. After receiving such authorization, TransCore shall proceed diligently to complete those services called for under this agreement. During the course of said services, TransCore shall provide HCTRA's designee with written status reports at such times and in such manner as requested by HCTRA's designee. If it should appear that TransCore will not be able to complete any service required by this agreement by the previously set required date of completion, TransCore must notify HCTRA's designee of such circumstances as soon as possible, but at least one week before the required completion date. The County shall have no obligation to pay for services performed after the required completion date for same, as set forth in its authorization, except to the extent the date for required completion is extended and continuation of such service is approved by further written authorization from HCTRA's designee. If HCTRA's designee does not authorize continuation of services for which the maximum authorized fee has been earned or for which HCTRA's designee directs that TransCore cease further performance, TransCore, upon request, shall promptly deliver to HCTRA's designee all information, programs, inventions, software, firmware, designs, documentation and/or data prepared and/or obtained in performing said services.

4. Time of Payment

As a condition of payment, TransCore shall submit to HCTRA's designee a sworn statement for services rendered. Each statement shall be in a form acceptable to the Harris County Auditor and shall include such detail of the services and expenses as may be requested by the County Auditor for verification purposes. The statement shall at a minimum include a description of the services, the day or days and the time or times during the day or days that TransCore performed the services, and the total amount billed for services and expenses. After receipt of a statement, the Director shall review such statement and approve it with such modifications as may be deemed appropriate and thereafter forward the statement with any modifications to the County Auditor for payment. Authorization for payment by HCTRA's designee shall constitute acceptance by HCTRA's designee. The County shall pay such statement, as approved by the County Auditor, within thirty (30) days after approval of said statement by the County Auditor.

5. Term

This agreement is effective upon Commissioners Court approval and shall terminate January 21, 2009, unless extended in accordance with the provisions of this Agreement. This Agreement is subject to four (4) one-year renewal options. Prior to expiration of the initial term or any subsequent one-year renewal term, this Agreement may be renewed, at the County's option, by providing TransCore with written notice of the County's intent to renew at least thirty (30) days prior to the expiration of any one-year term. This agreement may be terminated in accordance with the provisions hereof, provided that no termination of this Agreement shall have the effect of terminating TransCore's duties and obligations under 10 (Indemnity).

6. Termination

The County may terminate this Agreement at any time, either with or without cause, by giving thirty (30) days written notice to TransCore. Upon receipt of such notice, TransCore must discontinue all services in connection with the performance of this Agreement and must proceed to promptly cancel all existing orders and contracts insofar as such orders or contracts are chargeable to this Agreement. As soon as practicable after termination, TransCore shall submit, in accordance with Section 4, its statement showing in detail the services performed under this Agreement to the date of termination. Copies of all completed or partially completed information, programs, inventions, software, firmware, designs, documentation and/or data developed, created or invented under this Agreement shall be delivered to the County when this Agreement is terminated or completed.

7. Addresses of Notices

Notices required or permitted to be given by one party to the other party under this Agreement shall be mailed by certified or registered U. S. Mail, postage prepaid, return receipt requested, or delivered to the address as follows:

Harris County
Toll Road Authority
330 Meadowfern
Houston, TX 77067
Attention: Gary Stobb

TransCore, LP
2705 W. Sam Houston Parkway N.
Houston, Texas 77043
Attention: Tracy S. Marks

with a copy to:

Harris County Purchasing Agent
1001 Preston, Suite 670
Houston, Texas 77002-1890

8. Compliance and Standards

TransCore agrees to perform the services hereunder in accordance with generally accepted standards applicable thereto and shall comply with all applicable state, federal, and local laws, ordinances, rules and regulations relating to the services performed hereunder. TransCore shall not access any information which it is not authorized to receive, and under no circumstances shall TransCore at any time, during the term of this Agreement or thereafter, release or divulge any confidential material, information or documents received during the performance of its services hereunder without the express written consent of the County, nor shall TransCore copy, recreate or use any such confidential information or documents other than for the performance of this Agreement. TransCore shall not divulge or otherwise make use of the trade secrets or other confidential information, procedures, or policies of any former employer, contractor, client, customer or TransCore in the exercise of duties under this Agreement. Neither shall TransCore copy, recreate, or use any proprietary information of any third party in the performance of services under this Agreement except to the extent authorized by such third parties. TransCore will in no way constitute an infringement or other violation of any copyright, trade secret, trademark, patent or other proprietary right of any third party.

9. Public Information Act

TransCore further agrees that this Agreement is subject to Tex. Gov't. Code §552.001 *et seq.*, as amended (the "Public Information Act"), and in the event of any conflict the same shall be of no force and effect. Furthermore, it is expressly understood and agreed that Harris County, its

officers and employees may request advice, decisions and opinions of the Attorney General of the State of Texas in regard to the application of the Public Information Act to any software, or any part thereof, or other items or data furnished to Harris County and/or whether or not the same are available to the public. It is further understood that Harris County, its officers and employees shall have the right to rely on the advice, decisions and opinions of the Attorney General, and that Harris County, its officers and employees shall have no liability or obligations to Supplier for the disclosure to the public, or to any person or persons, of any software, or a part thereof, or other items or data furnished to Harris County in reliance on any advice, decision or opinion of the Attorney General of the State of Texas.

10. Indemnity

TransCore shall at its own expense defend all suits or proceedings instituted against the County, its officers, agents, or employees based upon any claim that the software or designs provided hereunder or any part thereof or process intended to be performed thereby, constitutes an infringement of any patent, copyright, trade secret or other proprietary right, or based upon any claim of whatever nature resulting from an intentional or negligent act of TransCore in the performance of services hereunder, and will pay all awards or damages assessed against the County, its officers, agents, or employees in connection with any such claim, suit or proceeding, or pursuant to any compromise thereof approved by TransCore, provided that the County, promptly upon service of process against it, gives to TransCore notice in writing of such suit or proceeding and permits TransCore through counsel chosen by it, and satisfactory to the Harris County Attorney, to defend the same, and gives TransCore all needed information, assistance, and authority to enable TransCore to do so. County shall have the right to be independently represented by counsel of its own choice in connection with any such suit or proceeding. If in any such suit a restraining order or temporary injunction is granted, TransCore will make every reasonable effort by giving a satisfactory bond or otherwise to secure the suspension of any such restraining order or temporary injunction. Notwithstanding anything to the contrary, TransCore does not assume responsibility for products not belonging to TransCore that may be used pursuant to this Agreement.

11. Limit of Appropriation

Prior to the execution of this Agreement, TransCore has been advised by County, and TransCore clearly understands and agrees, such understanding and agreement being of the absolute essence of this contract, that County shall have available the total maximum sum of \$15,358,645.00 to fully discharge any and all liabilities which may be incurred by County hereunder, including any and all costs for any and all things or purposes, ensuing under or out of this Agreement, irrespective of the nature thereof, and notwithstanding any word, statement or thing contained in or inferred from the preceding provisions of this Agreement which might in any light by any person be interpreted to the contrary. The County's liability for payment under the terms and provisions of this agreement is limited to such sum, plus additional amounts of funds from time to time certified available pursuant to Tex. Loc. Gov't Code Ann, §§111.031 - 111.093, as amended, for the purpose of satisfying the County's obligations under the terms and conditions of this agreement.

12. Successors and Assigns

The County and TransCore bind themselves and their successors, executors, administrators and assigns to the other party in respect to all covenants of this Agreement. Neither the County nor TransCore shall assign, sublet or transfer its interest in this Agreement without the prior written consent of the other. Nothing herein shall be construed as creating any liability on the part of any officer or agent of any public body which may be a party hereto.

13. Entire Agreement

This instrument contains the entire agreement between the parties relating to the rights granted and the obligations herein assumed. Any oral representations or modifications concerning this instrument shall be of no force or effect. This Agreement shall be binding and effective only if and when it has been signed by both parties.

14. Authority of HCTRA

HCTRA's designee is authorized to decide any and all questions of fact which may arise as to the interpretation of this Agreement and all questions as to the acceptable fulfillment of this Agreement by TransCore (see, also, sections 1 and 2 above). HCTRA's designee decision is final. It is mutually agreed by both parties that HCTRA's designee shall mediate all discussions concerning questions arising under the terms of this Agreement between the parties and that the decisions of HCTRA's designee in such discussions is final and binding alike on both parties. Nothing contained in this section authorizes HCTRA's designee to alter, vary or amend any of the terms or provisions of this Agreement. Notwithstanding anything to the contrary, this paragraph does not waive the right of the County or ETC to file a lawsuit in a court of competent jurisdiction in Harris County, Texas.

15. Governing Law


This Agreement will be governed by and construed according to the laws of the State of Texas. Venue for any action or claim arising out of the Agreement shall be Harris County, Texas.

16. Modifications

This instrument contains the entire agreement between the parties relating to the rights herein granted and the obligations herein assumed. Any oral representations or modifications concerning this instrument shall be of no force or effect.

Executed this JUN 17 2008 day of , 2008.

APPROVED AS TO FORM:
MIKE STAFFORD, County Attorney

By 
NICK TURNER
Assistant County Attorney

HARRIS COUNTY

By 
ED EMMETT, County Judge

TRANSCORE, LP

By 
TRACY S. MARKS, Vice President

AUDITOR'S CERTIFICATE

I hereby certify that funds are available in the amount of **\$15,358,645.00** to accomplish and pay the obligations of Harris County under the foregoing Second Agreement for Purchase and Installation of Violation Enforcement System Equipment.

Carol Markes 7/29/08

Barbara J. Schott, County Auditor
Harris County, Texas

ATTACHMENT A.

Statement of Work
For
Violation Enforcement System Equipment
(Second Agreement)

Section 2. Proposed Services

This section describes the upgrades proposed for HCTRA's TollVision VES, including a summary of specific upgrades and descriptions of new equipment.

2.1 Proposed Equipment and Services

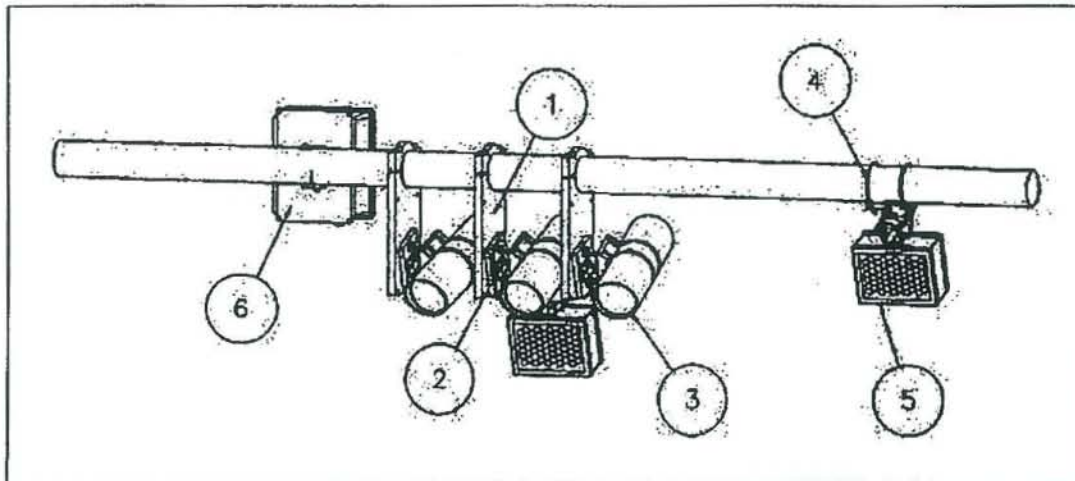
The following table summarizes the specific items proposed for HCTRA.

Item	Upgrade to Existing Equipment	New Installation
1. VES camera	Replace with new EE389 camera and zoom lens.	New EE389 camera and zoom lens.
2. VES camera housing	Remain in place; modify with new camera cable.	Pressurized camera housing, exactly like housings already installed.
3. Camera junction box (1 camera/lane)	Remain in place; modify to accommodate power and signal synchronization for new LED illumination.	One new 1-camera junction box with cables per lane.
4. Camera junction box (3 cameras/lane)	Remain in place; modify to accommodate power and signal synchronization for new LED illumination.	One new 3-camera junction box with cables per lane.
5. LED illuminator	Replace existing quartz lights with LED illuminators. Each lane and shoulder will be equipped with two LED illuminators.	Each lane and shoulder will be equipped with two LED illuminators.
6. LED illuminator bracket	One LED illuminator will be attached to the bottom of the existing VES Express mount on the middle camera, and one LED illuminator will be attached directly to the gantry with an Astro Brac mount.	One LED illuminator will be attached to the bottom of the existing VES Express mount on the middle camera, and one LED illuminator will be attached directly to the gantry with an Astro Brac mount.
7. LED illuminator junction box	Separate junction box for LED illumination is not required.	Separate junction box for LED illumination is not required.
8. VES controller (1-4 cameras)	For single, bounded plaza/ramp lanes with overhead VES, upgrade to integrated ELPAC/PIC.	For single, bounded plaza/ramp lanes with overhead VES, upgrade to integrated ELPAC/PIC.
9. VES controller (1-8 cameras)	For multiple open-road lanes with overhead VES, upgrade to separate ELPAC and PIC.	For multiple open-road lanes with overhead VES, upgrade to separate ELPAC and PIC.
10. Plaza image computer		

Item	Item Description	Item Description
11. OCR system	Existing SAIC Exact Reader OCR Processor computers will be used. For the near real-time OCR system option, one SAIC near real-time OCR Processor will be installed at each plaza.	Existing SAIC Exact Reader OCR Processor computers will be used. For the near real-time OCR system option, one SAIC near real-time OCR Processor will be installed at each plaza.

2.2 Lane Equipment Configuration

The following figure shows the configuration of the cameras, lighting and mounting hardware for HCTRA based on our current understanding of HCTRA's requirements. The numbered components are identified following the figure.



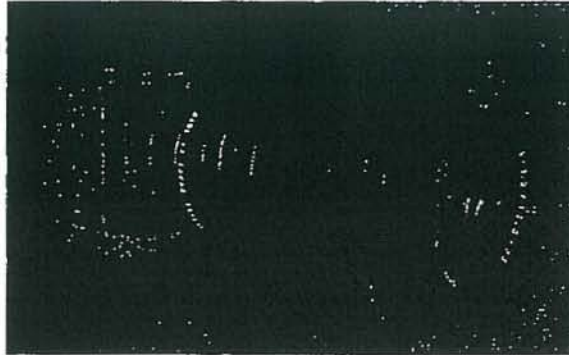
Proposed equipment configuration for HCTRA

1. VES express mount – the currently installed mounting for camera housings, one-camera junction boxes, and quartz lights
2. Ballistic mount – currently installed on camera housings, provides adjustment for camera position
3. Pressurized camera housing
4. Astro Brac mount for one LED illuminator

5. LED illuminator
6. Three-camera junction box – supports the equipment for one lane (three cameras and two LED illuminators)

2.3 Exact Exposure® EE389 Camera

SAIC's new Exact Exposure EE389 high-resolution camera offers several features to improve the performance of HCTRA's VES, including greater light sensitivity for added detail in license plate and vehicle images, and new programming capability for improved operation. The EE389 camera will provide a consistent image format and high-quality images with pixel



density sufficient for OCR and manual review. The cameras will be fitted with a new high-resolution lens and set to a constant f-stop suitable for both day and night operation. Special optical filters will provide optimal performance with low-contrast license plates or colors that are similar when converted to grayscale. The EE389 camera is fully compatible with HCTRA's current camera housings.

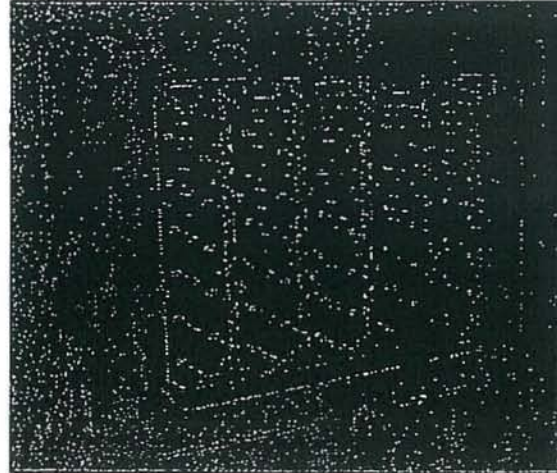
SAIC's Exact Exposure camera technology provides image exposure optimization *through the camera lens* – the best method for correcting image exposure settings for vehicles as they traverse the field of view in the capture zone. Exact Exposure cameras contain a custom microprocessor to provide optimum exposure for pictures in a wide variety of conditions.

Exact Exposure cameras are configured to operate automatically, with no user adjustments between day and night operation. Rainfall or snowfall normally have minimal effect on the camera operation. However, heavy rains or snowfall, fog, direct sun reflection from the license plate into the camera lens, or other natural conditions that visually impair human sight will affect the camera image similarly.

2.4 Large LED Illumination

SAIC's LED illumination provides exceptional low-power lighting in any conditions, day or night.

The lack of ambient light at night can cause loss of vehicle detail, reducing the percentage of usable images. SAIC's visible LED illumination provides the right amount of light to capture detail to determine the vehicle make and model. With this lighting, the TollVision cameras can capture clear images of vehicles traveling over 100 mph.



2.5 Image-Capture System

The TollVision image-capture system performs two functions: capturing images from the cameras, and combining the images with transaction data and sending that information to the host system. The TollVision system uses two software applications to perform these functions:

- ♦ **Exact License Plate Acquisition Computer (ELPAC):** The ELPAC receives triggers from a third-party lane controller (via network or serial interface) and triggers the cameras to capture vehicle images. The ELPAC also forwards transaction data received from the lane controller to the Plaza Image Computer (PIC).
- ♦ **Plaza Image Computer (PIC):** The PIC receives images and transaction data from the ELPACs, combines the images and data for each transaction, and forwards them to the host system (a third-party violation-processing center or data repository).

2.5.1 Exact License Plate Acquisition Computer (ELPAC)

The ELPAC sends trigger commands to the TollVision cameras, captures images from the cameras, and sends the images, along with transaction data received from the lane controller, to the PIC.

The ELPAC is a 19-inch rack-mount computer with one hard drive, Ethernet network support, Microsoft's Windows® XP Professional operating system, and SAIC's ELPAC image-capture application. The ELPAC includes a "watchdog" system-



monitoring application that automatically restarts the TollVision system applications if the ELPAC malfunctions. The ELPAC communicates with the lane controller via a network or serial interface.

The ELPAC disk storage is configured based on the expected image transaction volumes. In the proposed system, each ELPAC will be configured with 80 GB of storage, typically sufficient for 15 days of transactions (depending on violation rates and transaction size). The ELPACs can be expanded to incorporate larger disk systems or RAID 1 (mirrored) storage at additional cost.

2.5.2 Plaza Image Computer (PIC)

The PIC receives vehicle images and transaction data from the ELPACs, combines the images and data into transactions and sends the transaction files to the host system.

The PIC is a 19-inch rack-mount server, with two hard drives in a RAID 1 configuration, Ethernet network support, Microsoft's Windows® Server 2003 operating system, and SAIC's PIC application. The PIC runs a "watchdog" system monitoring application that is designed to initiate application restarts if the PIC malfunctions.

The PIC is configured to suit the expected image transaction volumes, with two disks in a mirrored (RAID 1) configuration to help maintain data integrity and availability. One PIC can support up to four ELPACs. The PIC includes two Ethernet network ports: one for communication with the ELPACs, and one for communication with the host system.

2.6 Option: Near Real-Time OCR Alerts

This proposal includes an option for OCR software to provide near real-time alerts for pre-identified license plate numbers. SAIC is currently developing this software as a new product for the tolling industry. If HCTRA selects this option, SAIC will ensure that the new software meets HCTRA's technical requirements as specified in the RFP.



2.9 OCR Regional Tuning

SAIC's innovative regional tuning process enhances the accuracy of the Exact Reader OCR system by customizing the OCR software for the specific characteristics of local plates.

To start the tuning process, TransCore will provide SAIC with license plate images for at least 2,000 transactions, captured in day and night lighting conditions, representing the full range of plates found at the local toll sites. SAIC will analyze these images, create region-specific control files, and install the files on the OCR system at the sites. (The process does not include on-site tuning of the cameras or OCR system.) SAIC will complete the regional tuning process within 90 days after receiving the images and transaction data.

To meet HCTRA's requirement for three years of OCR maintenance, this proposal includes three instances of regional tuning, intended to be performed at initial installation and at the end of the first and second years of operation. HCTRA may choose to have SAIC perform these services at other times if desired. SAIC will gladly provide a quote for additional tuning services upon request.

2.10 Response Matrix

The following table shows TransCore's responses to HCTRA's technical specifications.

HCTRA Technical Specification		TransCore Response
EE Camera		
SAIC EE 389 Interlaced Camera, or equivalent		This proposal includes SAIC's EE389 camera.
Microprocessor exposure control to provide accurate image exposure without external input		SAIC's Exact Exposure cameras contain a custom microprocessor to provide optimum exposure for pictures in a great variety of conditions. SAIC's proprietary Exact Exposure technology provides image exposure optimization through the camera lens, as this is the best method for correcting image exposure settings.
Will automatically select the optimum shutter speed for clear image capture up to 100 mph, supporting shutter speeds up to 1/100,000 sec without smearing		The EE389 camera is configured with a minimum shutter, and with the Exact Exposure technology described above, adjusts frame-by-frame for optimally exposed images. This allows SAIC's system to capture images of vehicles up to 100 mph without smearing.

Will work equally well with retro reflective and non-retro reflective license plates	SAIC's proposed EE389 camera works with both retro reflective and non-retro reflective license plates. SAIC's proprietary Exact Exposure technology adjusts exposure so that exposure is optimized in both retro reflective and non-retro reflective conditions.
Will not require auto iris lens	SAIC's proposed EE389 camera will be equipped with a manual zoom, non-auto iris lens.
Will include a high resolution, CCD imager, 752 (H) x 582 (V)	SAIC's proposed EE389 camera meets this specification.
Signal-to-noise ratio greater than 54 dB	SAIC's proposed EE389 camera meets this specification.
High resolution, C-mount lens, high bandwidth monochrome	SAIC's proposed EE389 camera meets this specification.
No camera video adjustments will be required, only physical alignment of horizontal field of view, pan/tilt position, and focus.	SAIC's Exact Exposure cameras are setup and ready for installation upon delivery to HCTRA. After cameras are installed in the lanes, each will require alignment for field of view specific to the lane configuration and trigger points.
Camera Specifications: <ul style="list-style-type: none"> ▪ CCD Sensor: 1/3" IL CCD ▪ Active Pixels: 752 (H) x 582 (V) ▪ Sync: Internal crystal coupled, H&V lock, Line Lock ▪ Pixel clock for digital video asynchronous reset, single and double pulse mode ▪ Analog bandwidth: 30 MHz ▪ Vehicle speed: 0 – 100 MPH ▪ S/N ratio: > 54 database ▪ Video output: 1.0 Vp-p composite, 75 ohm BNC ▪ Shutter speeds: 1/60 – 1/100,000 ▪ Lens: C-mount, adjustable back focus ▪ Power: 12V DC, +3V / -4V @ 1.5W ▪ Operating temperature: 5° to 131°F 	SAIC's proposed EE389 camera meets these specifications.

SAIC Exact License Plate Acquisition Computer (ELPAC), or equivalent	SAIC's proposal includes the Exact License Plate Acquisition Computer (ELPAC).
Will support up to 8 cameras per VES Controller	Each Exact License Plate Acquisition Computer (ELPAC) will support 2, 4, 6, or 8 cameras.
Signal received from cameras shall be NTSC analog video via coaxial cable <i>Per email from HCTRA on 27 Nov, 2007: "A PAL signal will be acceptable as well."</i>	SAIC's proposed Exact Exposure cameras will provide a PAL analog video signal via coaxial cable to the Exact License Plate Computers (ELPACs).
19" rack-mountable, specifically designed to be placed in a location at the plaza that is accessible without bucket trucks, lane closures, or special tools.	SAIC's proposed Exact License Plate Acquisition Computers (ELPACs) are designed to be installed in a plaza building or climate-controlled roadside enclosure.
Will support both 10/100 Ethernet and RS-232/422 communications with the lane controller, user-selectable. Existing interface protocols shall be used with no changes being required.	SAIC's ELPAC computer will support either Ethernet network or RS-232/422 communications protocols through user-selectable settings. SAIC's ELPAC computer will accept the current VESC-style protocol, but offers additional benefits (such as front and rear capture and extended time between trigger and disposition) if the new ELPAC-style protocol is employed.
Will include a web-based maintenance interface for remote access to VES status and actual images captured.	SAIC's proposed Exact License Plate Acquisition Computer (ELPAC) and Plaza Image Computer (PIC) provide a web-based interface for maintenance and viewing of images captured.
Will operate with a vehicle separation of 250 milliseconds	SAIC's proposed Exact License Plate Acquisition Computer (ELPAC) will process one transaction every 250 milliseconds.
Will use Windows® XP Professional operating system	SAIC's proposed Exact License Plate Acquisition Computer (ELPAC) meets this specification.
Will include 80GB hard-drive, 1GB RAM, and two (2) 4-port serial cards	SAIC's proposed Exact License Plate Acquisition Computer (ELPAC) meets these specifications.

Plaza Image Computer (PIC)	
Will be installed at each plaza location to support up to four (4) VES Controllers	Each Plaza Image Computer (PIC) will support up to 4 Exact License Plate Acquisition Computers (ELPACs).
Computer Specifications: <ul style="list-style-type: none"> One (1) dual core, 2GHz processor, or better Two (2) 250 GB hard-drives, configured in RAID1 configuration 2GB RAM Windows 2003 Server w/ 5 client licenses 10/100/1000 Ethernet NIC 	SAIC's proposed Plaza Image Computer (PIC) meets these specifications.
Signal Illumination	
All lighting (on-retro and off-retro) will be provided by light emitting diode (LED) bulbs	SAIC's proposed illumination will be provided by LED bulbs.
All required lighting will be able to be mounted at the existing lighting locations and on the existing brackets within each plaza and provide the correct light output for operation of the VES system to meet all required specifications.	SAIC's proposed LED illumination will use the existing brackets in each plaza.
All lighting will have a MTBF of no less than 100,000 hours	SAIC's proposed LED illumination utilizes LEDs that are rated for 50,000 hours of continuous use. However, as the maximum duty cycle of SAIC's LED illumination is only 6.2%, SAIC is confident that the actual life of its illuminators is greater than that.
Field of illumination will be 7ft x 5ft at a distance of 40ft for on-retro LED, 9ft x 7ft at a distance of 40ft for off-retro LED	SAIC's proposed LED illumination delivers a field of illumination of 14ft x 7ft at a distance of 40 feet.
Voltage will be 12-24 VDC with reverse polarity protection	SAIC's proposed LED illumination meets this requirement.
Automatic and resettable current protection	SAIC's proposed LED illumination meets this requirement.
Strobed operation will be selectable between external trigger input and video trigger with selective line control	SAIC's proposed LED illumination meets this requirement.
Will support NTSC, PAL, and progressive cameras with a frame rate of 7-50 fsec	SAIC's proposed LED illumination meets this requirement.
Maximum on time will be 1ms for both video and external modes	SAIC's proposed LED illumination meets this requirement.
Maximum duty cycle will be 6.2%	SAIC's proposed LED illumination meets this requirement.

General Requirements	
General Requirements	
Where required, new junction boxes will be provided for the cameras and lighting cable connections	SAIC's proposal includes new junction boxes for cameras and lighting cable connections when required.
All junction boxes will include the appropriate number and length of cables based on the configuration specified – one lane/one camera, one lane/three cameras, and LED lighting junction boxes.	SAIC's proposal includes combination camera and lighting junction boxes in single- and three-camera configurations. The appropriate number and length of cables are also included in the proposal.
All junction boxes will be NEMA 4X and include a minimum of 12ft connecting cables	SAIC's proposed equipment meets these specifications.
General Requirements	
Computer Specifications: <ul style="list-style-type: none"> 1U dual Xeon, 3.2GHz or better 1 GB RAM 800 MHz FSB (1) 80 GB Hard Disk 1 GB NIC Rack mount hardware Windows XP operating system 	SAIC's proposed OCR Processor computer meets these specifications.
The OCR system must be installed at each plaza for near real-time processing of images, accessible without lane closures, bucket trucks, or special tools.	SAIC's proposed OCR Processor computers are designed to be installed in a plaza building or climate-controlled roadside enclosure.
The OCR must accurately identify at least 90% of the license plates that are determined to be readable by a human.	SAIC's proposed OCR system will accurately identify at least 90% of machine readable license plates as defined in the OCR Clarification document, attached as Appendix A.
The number of false positives – the images that were assigned a high confidence by the OCR but were incorrectly identified – shall not exceed 2% of the total images that were assigned a high confidence by the OCR.	SAIC's proposed OCR system will achieve a false-positive rate of 2% or less of the total images that were assigned a high confidence.
The vendor shall submit their specifications test parameters for determining the OCR accuracy and expected results with their proposal.	See OCR Clarification document, attached as Appendix A.
All OCR tuning for Texas-specific license plates to achieve the performance specifications listed above shall be incidental to delivery of the camera hardware and software.	Regional tuning for Texas-specific license plates will occur after the delivery of the camera hardware, and will be performed on data collected with the SAIC-supplied camera and acquisition hardware.

OCR Maintenance	
The vendor shall include a price for ongoing annual tuning of the OCR system once final acceptance of the initial delivery is provided. This should occur at a minimum of once per year, but could be as often as once every six (6) months as OCR performance dictates. In addition, any OCR tuning that is performed for adjacent states during the term of the contract shall be incorporated into HCTRA OCR system.	SAIC expects that annual OCR tuning will be sufficient to maintain OCR performance. This proposal includes three OCR tuning services, to be performed within the first three years of system operation. SAIC will gladly quote and perform additional tuning services as needed. Any OCR tuning that SAIC performs for adjacent states during the term of the contract will be incorporated into the HCTRA OCR system.
Near Real Time Violation Alerts	
The VES Controller, OCR system, and PIC (VES System) will have the capability to produce near real-time alerts via email and/or local signaling means when a pre-identified license plate number is captured.	SAIC's proposed system will produce near real-time alerts via email when a pre-identified license plate number is captured. It will also provide the ability to initiate local signaling via contact closure.
The alerts will be transmitted within milliseconds from when the vehicle passes through the violation capture zone.	SAIC's proposed system will meet this specification.
The real-time alert functionality will provide a local, user-changeable database of no less than 100,000 license plate numbers to be used to identify the plates that will trigger a violation alert.	SAIC's proposed system will meet this specification.
This database will contain up to 8 data fields for each license plate, with each field having a minimum size of 32 characters.	SAIC's proposed system will meet this specification.
One data field will contain the license plate number and the remaining 7 data fields for each license plate will be user-programmable to include information associated with the license plate.	SAIC's proposed system will meet this specification.
All data fields will be transmitted in the email alert messages, with one being designated as the subject line. The "from" designation will be the cameras logical name.	SAIC's proposed system will meet this specification.
This database will be capable of being modified on an ad-hoc basis and the interface control document for 3 rd party management of this database will be provided within thirty (30) days of award and issuance of a purchase order resulting from this RFP.	SAIC's proposed system will meet this specification.
The real-time alert functionality will provide the capability of counting the number of times a plate has been recognized and make that data available for export.	SAIC's proposed system will meet this specification.
The real-time alert functionality will provide a logging feature that records all alerts and associated information into a searchable database. The alerts will be logged for a minimum of 6 months.	SAIC's proposed system will meet this specification.



HCTRA Functional Specification	
The real-time alert functionality may be dependent upon the VES functionality of the system, but the operation of the VES functionality will in no way be reliant upon the real-time alert functionality being operational.	SAIC's proposed system will meet this specification.
Warranty	
Vendor shall include a one (1) year warranty and also provide the terms for extending the protection beyond the initial warranty period.	SAIC's proposed system meets this specification.
This warranty shall be a "return for repair" type of warranty and any item returned to the vendor shall be either repaired or replaced by the vendor within a 30-day period.	SAIC's proposed system meets this specification.
The vendor shall provide with their proposal a listing of items specifically excluded from their warranty and any warranty conditions or limitations.	SAIC's proposal meets this specification.
Deliverables	
Complete system documentation, to include, as to be installed drawings, cut sheets, system diagrams, wiring details, mounting details, etc. shall be submitted to HCTRA in both PDF and Microstation formats (if applicable).	SAIC will comply with this requirement.
One (1) copy of each format is to be submitted along with one (1) printed 11X17 copy of each set of documents submitted within sixty (60) of delivery of the first release issued on the resultant purchase order.	SAIC will comply with this requirement.

ATTACHMENT "A"

Best and Final Offer:

Item	Unit	Qty	Unit Price	Original Price	Proposed Price
1. VES Camera	Each	600	\$1,779.00	\$1,779.00	\$1,067,400.00
2. VES Camera Housing	Each	360	\$2,226.00	\$2,226.00	\$801,360.00
3. Camera Junction Box (1 camera/lane)	Each	302	\$3,190.00	\$3,190.00	\$963,380.00
4. Camera Junction Box (3 cameras/lane)	Each	93	\$3,945.00	\$3,945.00	\$366,885.00
5. LED Illuminator	Each	500	\$2,919.00	\$2,919.00	\$1,459,500.00
6. LED Illuminator bracket	Each	500	\$130.00	\$130.00	\$65,000.00
7. VES Controller (1-4 cameras)	Each	40	\$8,354.00	\$8,354.00	\$334,160.00
8. VES Controller (1-8 cameras)	Each	65	\$9,101.00	\$9,101.00	\$591,565.00
9. Plaza Image Computer	Each	1	\$9,677.00	\$9,677.00	\$9,677.00
10. a. OCR System - Hardware	Each	12	\$6,894.00	\$6,894.00	\$82,728.00
b. OCR System - Software License	Each	11	\$4,080.00	\$4,080.00	\$44,880.00
SUBTOTAL - MATERIALS					\$5,786,535.00
11. 'Other' Lane Installation (Labor + Materials)	Each	390	\$22,749.00	\$22,749.00	\$8,872,110.00
SUBTOTAL - LABOR					\$8,872,110.00
12. Annual VES Maintenance (Cameras 321 - 400)	Lot	1	\$140,000.00	\$140,000.00	\$140,000.00
13. Annual VES Maintenance (Cameras 401 - 480)	Lot	1	\$140,000.00	\$140,000.00	\$140,000.00
14. Annual VES Maintenance (Cameras 481 - 640)	Lot	1	\$140,000.00	\$140,000.00	\$140,000.00
15. Annual VES Maintenance (Cameras 641 - 800)	Lot	1	\$140,000.00	\$140,000.00	\$140,000.00
16. Annual VES Maintenance (Cameras 801 - 960)	Lot	1	\$140,000.00	\$140,000.00	\$140,000.00
SUBTOTAL - MAINTENANCE					\$700,000.00
TOTAL					\$15,358,645.00

Equipment warranty is for one year.

Equipment can be delivered within 90 days upon receipt of release request for the associated purchase order resulting from this RFP.

RENEWAL

Bidder agrees to renew this contract for the time frame stated below under the same terms and conditions and pricing as the original contract. If bidder does not wish to be considered for renewal, write "N.A." in the space provided.

Renewal Year 1: (2009 - 2010) YES

Renewal Year 2: (2010 - 2011) YES

Renewal Year 3: (2011 - 2012) YES*

Renewal Year 4: (2012 - 2013) YES*

* The pricing for the renewal in years 3 and 4 shall be adjusted by dividing the Consumer Price Index (CPI) (CPI-U for Houston, Texas) of the latest full month for which public statistics are available at the end of renewal year 2, by the CPI value for the month and year on which this Contract is executed. The quotients so derived shall then be multiplied by the unit prices listed above and the new unit prices shall be used for renewal years 3 and 4. The CPI values used in such computations shall be as published in the Monthly Labor Review by the U.S. Department of Labor, Bureau of Labor Statistics.

THE STATE OF TEXAS §
COUNTY OF HARRIS §

Presented to Commissioner's Court

JUN 17 2008

APPROVE _____

Recorded Vol. _____ Page _____

The Commissioners Court of Harris County, Texas, convened at a meeting of said Court at the Harris County Administration Building in the City of Houston, Texas, on JUN 17 2008, 2008, with the following members present, to-wit:

Ed Emmett,	County Judge
El Franco Lee,	Commissioner, Precinct No. 1
Sylvia Garcia,	Commissioner, Precinct No. 2
Steve Radack,	Commissioner, Precinct No. 3
Jerry Eversole,	Commissioner, Precinct No. 4

and the following members absent, to-wit: none,
constituting a quorum, when among other business, the following was transacted:

**ORDER AUTHORIZING HARRIS COUNTY TO ENTER INTO A SECOND
AGREEMENT WITH TRANSORE, LP FOR PURCHASE AND INSTALLATION
OF VIOLATION ENFORCEMENT SYSTEM EQUIPMENT**

Commissioner Eversole introduced an order and made a motion that the same be adopted. Commissioner Lee seconded the motion for adoption of the order. The motion, carrying with it the adoption of the order, prevailed by the following vote:

	Yes	No	Abstain
Judge Ed Emmett	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. El Franco Lee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Sylvia Garcia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Steve Radack	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Jerry Eversole	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The County Judge thereupon announced that the motion had duly and lawfully carried and that the order had been duly and lawfully adopted. The order thus adopted as follows:

RECITALS:

WHEREAS, the County has advertised under the competitive bid process of the County Purchasing Act (Tex. Local Gov't Code § 262.021, *et seq.*) for a Request for Proposal to provide, install and test violation enforcement system (VES) equipment for use on the County's toll road system; and

WHEREAS, the County desires to contract with TransCore, LP for the purchase, installation and testing of the VES equipment in the amount of \$15,358,645.00.

NOW, THEREFORE, BE IT ORDERED BY THE COMMISSIONERS COURT OF HARRIS COUNTY, TEXAS THAT:

Section 1: The recitals set forth in this order are true and correct.

Section 2: The County Judge of Harris County is authorized to execute the Second Agreement for Purchase and Installation of Violation Enforcement System Equipment with TransCore, LP in the amount of **\$15,358,645.00**. A true and correct copy of the Agreement is attached hereto and incorporated herein for all purposes.

Section 3: Harris County officials and employees are authorized to do any and all things necessary or convenient to accomplish the purposes of this Order.