



MARTIN O'MALLEY
GOVERNOR

ANTHONY G. BROWN
LT. GOVERNOR

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MARYLAND STATE POLICE
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COLONEL
TERRENCE B. SHERIDAN
SUPERINTENDENT

February 7, 2011

The Honorable Edward Kasemeyer
Chairman, Senate Budget and Taxation Committee
Miller Senate Office Building Suite 3W
11 Bladen Street
Annapolis MD 21401

The Honorable Norman Conway
Chairman, House Appropriations Committee
121 House Office Building
6 Bladen Street
Annapolis MD 21401

Dear Mr. Chairmen:

In accordance with the 2010 Joint Chairmen's Report, pages 184 and 185, the Maryland State Police is submitting the report on Speed Camera Operations in Maryland work zones. The report was compiled with information provided in consultation with the State Highway Administration, Department of Budget and Management and the Maryland Department of Transportation Authority Police.

Thank you for the opportunity to report this information to you. If you have any questions or concerns, please do not hesitate to call my office at 410-653-4219.

Sincerely,

Terrence B. Sheridan
Superintendent

TBS:TMW:tmw

Enclosure

cc: Ms. Chantelle Green, Department of Legislative Services
Ms. Cathy Kramer, Department of Legislative Services

"Maryland's Finest"

Speed Cameras in Work Zones

A Joint Program of DSP, MDTAP and SHA Work Zone Automated Speed Enforcement

The Maryland Department of State Police (DSP), Maryland Transportation Authority Police (MDTAP) and the Maryland State Highway Administration (SHA) have jointly initiated a work zone automated speed enforcement (ASE) program, called Maryland SafeZones. Maryland SafeZones received legislative authorization to begin ASE use in certain work zones on October 1, 2009. Maryland SafeZones was initiated as a pilot program, the term of which spanned from October 5, 2009 to June 30, 2010. Under the pilot program, three work zone projects in Baltimore and Prince George's Counties were targeted for enforcement using radar-based ASE equipment installed in mobile vehicles. Near the conclusion of the pilot program, Maryland SafeZones improved the technology to a laser-based system, which not only demonstrated improved effectiveness in identifying violating motorists, but also improved the ability of DSP and MDTAP in issuing citations to violating motorists.

In accordance with Page 184, of the Joint Chairman's Report, the DSP in consultation with the MDTAP, Department of Budget and Management and the SHA provides the following information regarding the long term plan of speed camera operations in Maryland.

At a minimum, the report shall include a formalized plan outlining:

- (1) the duties and responsibilities of each agency participating in the program, including a draft copy of a signed memorandum of understanding between the parties;

The signed Memorandum of Understanding outlining the duties and responsibilities of each agency is attached to this report.

- (2) the number of law enforcement positions (DSP and MDTA) needed to successfully operate the program, including a spending plan that is not based on employee overtime;

Attached to this report is the spreadsheet outlining the budget including operational expenses. The DSP uses up to 5 sworn personnel as needed to accommodate the work load. MDTAP has an Electronic Enforcement Unit that manages the review of speed camera citations as a work function within the unit. The unit uses at least 1 officer depending on the camera production levels. As citations have increased so has the need for additional personnel. DSP draws its personnel from restricted duty status. Should the production levels increase beyond the capabilities of the current work force additional personnel will be drawn from the restricted duty list. MDTAP has the Electronic Enforcement Unit already established to handle camera enforcement for toll lane violations and can use their personnel as needed for speed camera violations.

(3) the estimated annual costs of the program, including personnel and vendor costs

Costs of the program are projected in the budget spreadsheet attached to this report. The following assumptions were used to develop the budget:

Revenue Assumptions:

1. Deployment time of vehicles increased from 8 to 16 hours in September. "Fines in the second 8 hours are assumed to be 50 percent of the amount in the first 8 hours". (This will shift a higher proportion of the deployment to evening and night time, which will result in a lower number of citations.)
2. The number of vehicles deployed has increased from 2 to 5. It is assumed that the 3rd, 4th and 5th vehicles will have delayed revenue collection of one month (75 percent collection) primarily because warnings are issued for the three weeks. The 1st and 2nd vehicles are deployed at work zones on 8 lane highways. The 3rd, 4th and 5th vehicles will be deployed at work zones on 4 lane highways and it is assumed that they will collect 50 percent of the revenue collected by the 1st and 2nd vehicles. The revenues in the January to March timeframe are assumed to be 80 percent lower as a result of winter weather conditions.
3. The revenues beginning in October are assumed to be 80 percent lower as a result of driver behavior patterns changing.
4. July and August are actual cash revenues.

Expenditure Assumptions:

1. Each additional vehicle will cost \$34,400 per month per 8 hour deployment based on the new vendor contract which began in FY 2011. There may be additional monthly charges as a result of volume of events/violations, which have not been included in the budget.
2. It is assumed that the project manager, assistant manager, and one staff person will spend a portion of their time on the program. Additional work zones and deployments will require additional staff time and have been included in the budget.
3. Internal administrative costs, such as finance and senior management have been assumed as program expenditure in "SHA Staff with Fringe".
4. Consultant support required: to work with judiciary in new jurisdictions based on work zones being added to the program; for analysis of contractor performance and production of reports for SHA management and StateStat; and for increased correspondence such as letters, safe zones website, and requests made under Freedom of Information Act.
5. DSP cost assumes reimbursement of 5 new positions at a total budgeted cost of \$391,000. This estimate was confirmed as reasonable with DSP.
6. An agreement with the University of Maryland is assumed to be used during the fiscal year to evaluate and report on the program. University staff will also be tasked to collect data used in the evaluation process.
7. Additional work zone locations will require additional signing prior to vehicle deployments.
8. July and August represent actual costs incurred.

(4) the number of mobile enforcement vehicles to be operated statewide.

Currently, Maryland SafeZones has transitioned to a long-term enforcement program with expanded enforcement monitoring hours from eight hours per vehicle per day to 16 hours per vehicle per day. In addition, Maryland SafeZones has expanded from two vehicles to five vehicles, all equipped with the latest laser-based technology. This expanded number of vehicles will allow coverage in multiple work zones for longer monitoring timeframes, which is anticipated to reduce work zone speeds and enhance safety at these locations.

The number of work zones to be monitored is planned to increase, as well. The current plan calls for an increase in the number of work zones to eight in five counties by the end of the current calendar year. The five counties expected to be impacted are Anne Arundel, Baltimore, Frederick, Montgomery and Prince George's Counties. Also, six additional work zone projects could possibly be added in spring 2011, at the beginning of the construction season.

P005484-1

MEMORANDUM OF UNDERSTANDING
for

Automated Speed Enforcement Program

by and among

Maryland State Police
Maryland Transportation Authority
Maryland Department of Budget and Management
and
Maryland State Highway Administration

9th This Memorandum of Understanding ("MOU") executed and made effective this day of July, 2010, by and among the Maryland Department of State Police acting for and on behalf of the State of Maryland, hereinafter called "MSP", the Maryland Transportation Authority, acting for and on behalf of the State of Maryland, hereinafter called "MdTA", the Maryland Department of Budget and Management acting for and on behalf of the State of Maryland, hereinafter called "DBM", and the Maryland State Highway Administration of the Maryland Department of Transportation, acting for and on behalf of the State of Maryland, hereinafter called "SHA", the four of which shall sometimes hereinafter collectively be called the "AGENCIES".

WHEREAS, in 2009, the State of Maryland enacted Senate Bill 277 entitled, "Vehicle Law-Speed Monitoring Systems-Statewide Authorization and Use in Highway Work Zones", hereinafter called "SB277"; and

WHEREAS, the AGENCIES have been tasked with certain roles and responsibilities pursuant to SB277; and

WHEREAS, SB277 requires that SHA and MSP jointly adopt regulations establishing standards and procedures for Work Zone Speed Control Systems authorized under SB277; and

WHEREAS, SB277 allows for the placement of automatic speed enforcement systems ("ASE") in approved work zone sites ("SITES"), along state routes in order to promote a safe environment for workers and motorists; and

WHEREAS, the AGENCIES agreed to a nine (9) month pilot program ("PILOT") for ASE; and

WHEREAS, as part of the PILOT, SHA contracted with a private contractor, ("PILOT CONTRACTOR"), which is currently under contract with Montgomery County, Maryland, and which provides certain services required for the ASE; and

WHEREAS, during the PILOT, SHA, MSP and MdTA have determined the placement of the ASE at various SITES along various state roadways; and

WHEREAS, the PILOT CONTRACTOR, as required by ASE, shall record images of offending vehicles ("VIOLATIONS") within each SITE; and

WHEREAS, the PILOT CONTRACTOR shall review the VIOLATIONS for clarity and enforceability, and post the approved VIOLATIONS ("ACCEPTABLE VIOLATIONS") for AGENCIES' review and approval; and

WHEREAS, after a warning period that expired on November 15, 2009, the MSP and MdTA shall review the ACCEPTABLE VIOLATIONS and shall provide approval of the ACCEPTABLE VIOLATIONS to the PILOT CONTRACTOR as viable citations ("CITATIONS"); and

WHEREAS, the PILOT CONTRACTOR shall issue the CITATIONS to offending motorists; and

WHEREAS, payment of the CITATIONS is collected either directly by PILOT CONTRACTOR, through Maryland courts or through the Maryland Central Collection Unit; and

WHEREAS, SB277 further provides for the distribution of revenues ("REVENUE"), that are collected as a result of CITATIONS; and

WHEREAS, during the term of the PILOT, the AGENCIES have evaluated the results of the ASE and SHA has completed the tasks necessary to advertise a contract ("CONTRACT") for a vendor to perform the services ("VENDOR SERVICES") required for the ASE after the expiration of the PILOT; and

WHEREAS, once the CONTRACT has been awarded by SHA, the winning bidder ("VENDOR") shall provide the VENDOR SERVICES as specified therein; and

WHEREAS, the roles and responsibilities of the AGENCIES under the PILOT shall continue as part of the CONTRACT as specified herein; and

WHEREAS, the AGENCIES agree and acknowledge that the term of the CONTRACT is for two (2) years with an option for annual renewals for three (3) additional years; and

WHEREAS, the AGENCIES agree that the terms and conditions of this MOU are in the mutual interest of the parties and are a benefit to the citizens of Maryland and the traveling public.

NOW, THEREFORE, THIS MEMORANDUM OF UNDERSTANDING WITNESSETH: that for and in consideration of the mutual promises and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, be it understood that the AGENCIES hereby agree as follows:

I. CONTRACT IMPLEMENTATION AND ENFORCEMENT

A. SHA RESPONSIBILITY

1. SHA shall be responsible to establish, monitor, and administer the CONTRACT, including, but not limited to, providing direct oversight and direction to the VENDOR for the VENDOR SERVICES.
2. The VENDOR SERVICES under the CONTRACT shall include, but not be limited to the tasks and responsibilities on *EXHIBIT "A"*, attached hereto and incorporated herein.

3. SHA shall arrange, coordinate and oversee all training and certification required by the CONTRACT. All trainings and certifications shall be completed prior to activation and use of the ASE.
4. SHA shall, in cooperation with the AGENCIES, prepare an annual budget ("BUDGET") necessary for the CONTRACT and ASE and shall provide the BUDGET to the AGENCIES for review and concurrence.
5. SHA shall, in cooperation with MSP and MdTA, make every attempt to provide the VENDOR with a schedule of SITES at least one (1) week in advance of deployment of ASE. The SITES schedule shall include anticipated locations for placement of ASE vehicles.
6. On highways within SHA owned rights-of-way, SHA shall be responsible for work zone traffic control ("WZTC") and advance signage ("SIGNAGE") which is required for the ASE in accordance with established COMAR regulations.
7. On highways within MdTA owned rights-of-way, SHA shall coordinate with MdTA on the selection of SITES and shall only schedule the VENDOR for deployment to SITES approved and prepared by MdTA.
8. SHA shall be responsible for instructing the VENDOR on jobsite safety needed for construction contractor activities as well as ingress and egress at the SITES.
9. SHA shall be responsible, if requested by the AGENCIES or the VENDOR, to coordinate periodic progress meetings concerning the CONTRACT.
10. On a daily basis, SHA, along with the VENDOR, shall monitor the VIOLATIONS, the ACCEPTABLE VIOLATIONS, the CITATIONS and the REVENUE.
11. SHA shall, by the end of each month, print a static report for the previous month ("REPORT"), and shall provide the REPORT to the AGENCIES for review. The REPORT shall contain the following information:
 - a. The number of VIOLATIONS;
 - b. The number of ACCEPTABLE VIOLATIONS and their percentage of the total number of VIOLATIONS documented;
 - c. The number of CITATIONS and their percentage of the total number of VIOLATIONS documented;
 - d. The number of CITATIONS paid and their percentage of the total number of CITATIONS issued,
 - e. The number of administratively voided citations and their percentage of the total number of CITATIONS issued.

- f. The REVENUES, which shall be broken down into separate service and convenience fees which are collected due to electronic and phone payments and which are not part of the REVENUES to be dispersed as defined elsewhere herein; and
 - g. A current BUDGET analysis.
12. SHA shall, on a monthly basis, provide the AGENCIES with a "Statement of Costs Incurred" which shall include, but not be limited to, man-hours, mileage and vehicle usage, VENDOR and CONTRACT costs, signage, and other costs incurred by SHA and MdTA in association with the CONTRACT and ASE. Because the parties of this MOU are all agencies of the State of Maryland, the parties shall not invoice or pay overhead.
 13. On a monthly basis, SHA shall provide information to the AGENCIES concerning known incidents and accidents that occur at SITES including the date and time of the incident/accident and the corresponding relationship to ASE.
 14. Once the CONTRACT term has expired, all activities of the VENDOR shall be transferred to SHA to the extent such tasks will be implemented in future advertised SHA contracts for ASE.

B. MSP RESPONSIBILITY

1. MSP shall provide to SHA the names and contact information of troopers who are to be trained as required by the CONTRACT. MSP shall be responsible to ensure the troopers are available for training and/or selecting alternates for scheduled training, if necessary.
2. MSP shall be responsible to forward to SHA in a timely manner, such information as needed by SHA to complete the BUDGET.
3. MSP shall, in cooperation with SHA, review the SITES on SHA maintained roadways to determine adequate deployment of ASE and shall authorize the development of deployment schedules prior to SHA's notice to the VENDOR of the SITES schedule.
4. MSP shall conduct periodic inspections of the SITES on SHA maintained roadways to ensure proper placement of ASE vehicles and cameras.
5. MSP shall, on a daily basis, review the ACCEPTABLE VIOLATIONS in order to approve each CITATION.
6. MSP shall have the authority to administratively void CITATIONS if after reasonable inquiry and appropriate documentation, the evidence suggests that a violation did not occur or the violation was issued in error.
7. MSP shall, on a monthly basis, by the twentieth day of the following month, provide the AGENCIES with a "Statement of Costs Incurred" concerning the prior month with supporting documentation which shall include, but not be limited to, man-hours, mileage and vehicle usage, court

appearances, and other costs incurred by MSP in association with the CONTRACT. Because the parties of this MOU are all agencies of the State of Maryland, the parties shall not invoice or pay overhead

8. MSP shall, within ten (10) days of receipt of the REPORT from SHA, provide comments or concurrence to SHA on the REPORT.
9. If requested by the AGENCIES or the VENDOR, MSP shall be available for periodic progress meetings concerning the CONTRACT.
10. On a monthly basis, MSP shall provide information to SHA concerning known incidents and accidents that occur at SITES including the date and time of the incident/accident and the corresponding relationship to ASE.

C. MdTA RESPONSIBILITY

1. MdTA shall provide to SHA the names and contact information of officers who are to be trained as required by the CONTRACT. MdTA shall be responsible to ensure the officers are available for training and/or selecting alternates for scheduled training, if necessary.
2. MdTA shall be responsible to forward to SHA in a timely manner such information as needed by SHA in order for completion of the BUDGET
3. MdTA shall, in cooperation with SHA, review the SITES on MdTA maintained roadways to determine adequate placement and deployment of ASE and shall approve the SITES schedule prior to SHA's notice to the VENDOR of the SITES schedule.
4. MdTA shall conduct periodic inspections of the SITES on MdTA maintained roadways to ensure proper placement of ASE vehicles and cameras.
5. On highways within MdTA owned rights-of-way, MdTA shall upon agreeing to ASE for a particular SITE be responsible for WZTC and SIGNAGE which is required for ASE in accordance with established COMAR regulations.
6. MdTA shall, on a daily basis, review the ACCEPTABLE VIOLATIONS in order to approve the CITATIONS.
7. MdTA shall have the authority to administratively void CITATIONS if after reasonable inquiry and appropriate documentation, the evidence suggests that a violation did not occur or the violation was issued in error
8. MdTA shall, on a monthly basis, by the twentieth day of the following month, provide the AGENCIES with a "Statement of Costs Incurred" concerning the prior month with supporting documentation which shall include, but not be limited to, man-hours, mileage and vehicle usage, court appearances, and other costs incurred by MdTA in association with the CONTRACT. MdTA Police costs will be segregated from all other

MdTA costs. Because the parties of this MOU are all agencies of the State of Maryland, the parties shall not invoice or pay overhead

9. MdTA shall, within ten (10) days of receipt of the REPORT from SHA, provide comments or concurrence to SHA on the REPORT.
10. If requested by the AGENCIES or the VENDOR, MdTA shall be available for periodic progress meetings concerning the CONTRACT.
11. On a monthly basis, MdTA shall provide information to SHA concerning known incidents and accidents that occur at SITES including the date and time of the incident/accident and the corresponding relationship to ASE.

D. DBM RESPONSIBILITY

1. DBM shall assist SHA in the preparation of the BUDGET and shall provide review comments or concurrence to SHA within ten (10) days of receipt of the BUDGET from SHA.
2. DBM shall, within ten (10) days of receipt of the REPORT from SHA, provide comments or concurrence to SHA on the REPORT.
3. DBM shall be responsible to notify the AGENCIES of legislative or other regulatory changes that would impact, affect, change, modify or nullify the provisions of SB 277, the CONTRACT or other terms and conditions under this MOU.

II. REVENUE COLLECTION, REIMBURSEMENT, AND DISBURSEMENT

A. SHA RESPONSIBILITY

1. SHA shall, on a daily basis, review and verify that the REVENUE and monies from the paid CITATIONS collected by the VENDOR have been deposited in SHA's bank accounts pursuant to *Exhibit "A"*.
2. SHA shall, by the fifteenth work day of each month, print a report of REVENUE to be disbursed to the various AGENCIES and VENDOR, and prepare a report of disbursements ("**DISBURSEMENT REPORT**") for the costs incurred during the previous month. The REPORT shall be provided to the AGENCIES for review. The DISBURSEMENT REPORT shall contain the following information:
 - a. Payments to VENDOR based on the contract;
 - b. Reimbursement of MSP cost (if any);
 - c. Reimbursement of SHA cost (including MdTA cost) (if any);
 - i. Reimbursement of MdTA cost (if any);
 - ii. Reimbursement of SHA cost (if any);
 - d. Reimbursement of start-up cost for the PILOT (if any) as follows;

- i. Reimbursement of MSP and SHA (including MdTA) start-up cost (if any) shall be reimbursed on a pro rata basis;
 - e. Disbursement of remaining REVENUE to MSP (if any); and
 - f. Disbursement of remaining REVENUE to the Transportation Trust Fund (if any).
3. SHA shall, on a monthly basis, ensure that all appropriate VENDOR invoices under the CONTRACT are paid pursuant to Maryland law.
4. The AGENCIES mutually agree that SHA shall, on a monthly basis, allocate the REVENUE against expenditures for the CONTRACT and ASE in the following priority:
 - a. VENDOR payments;
 - b. MSP costs as indicated on its "Statement of Costs Incurred";
 - c. SHA costs, (including MdTA costs) as indicated on its "Statement of Costs Incurred";
 - i. MdTA costs as indicated on its "Statement of Costs Incurred"; and
 - ii. SHA costs as indicated on its "Statement of Costs Incurred"
 - d. Initial start-up costs for the PILOT which were incurred prior to November 15, 2009;
 - i. Reimbursement of MSP and SHA (including MdTA) start-up costs (if any) shall be reimbursed on a pro rata basis;
 - e. MSP for roadside enforcement as provided for in SB277; and
 - f. transfers to the Transportation Fund as provided for in SB277.
5. SHA shall, on a monthly basis, transfer such funds from the REVENUE and matching expenses necessary to reimburse SHA for the VENDOR costs paid by SHA. In the event inadequate REVENUE exists to fully reimburse SHA for the VENDOR payments, said unrecovered VENDOR payments shall be added to the subsequent month's VENDOR payments.
6. SHA shall, on a quarterly basis, provided sufficient REVENUE exists after payment of VENDOR, reimburse MSP for costs and expenses as indicated on the "Statement of Costs Incurred" provided by MSP. In the event inadequate REVENUE exists to fully reimburse MSP for the MSP costs, said unrecovered MSP costs shall be added to the subsequent month's MSP costs.
7. SHA shall, on a quarterly basis, provided sufficient REVENUE exists after payment of VENDOR and MSP costs, transfer to SHA as necessary to cover SHA and MdTA's costs and expenses as indicated on the "Statement of Costs Incurred" provided by SHA.

- a. SHA shall first reimburse MdTA costs and expenses as indicated on the "Statement of Costs Incurred" provided by MdTA
- b. If sufficient REVENUE exists after payment of MdTA costs, the balance shall be used to reimburse SHA for costs and expenses as indicated on the "Statement of Costs Incurred" provided by SHA.

In the event inadequate REVENUE exists to fully reimburse SHA, (including MdTA), for the SHA (and MdTA costs), said unrecovered SHA (including MdTA) costs shall be added to the subsequent month's SHA (and MdTA) costs.

8. SHA shall, on a quarterly basis, provided sufficient REVENUE exists after payment of VENDOR, MSP costs, MdTA costs, and SHA costs, reimburse MSP and SHA (including MdTA), on a pro-rata basis, as necessary to cover each AGENCY's initial start-up costs incurred prior to November 15, 2009 for the PILOT.
9. SHA shall, on an annual basis, provided sufficient REVENUE exists after payment of VENDOR, MSP costs, MdTA costs, SHA costs, and AGENCY start-up costs, provide the balance of the REVENUE to MSP for roadside enforcement activities from the date of the execution of this MOU until October 1, 2012 as provided for in SB277.
10. Beginning October 1, 2012, SHA shall, on an annual basis, provided sufficient REVENUE exists after payment of VENDOR, MSP costs, MdTA costs, SHA costs, and AGENCY start-up costs, provide the balance of the REVENUE to the Maryland Transportation Trust Funds as provided for in SB 277.
11. SHA shall, on a semiannual basis, meet with the AGENCIES to review the BUDGET in respect to the REPORT and the DISBURSEMENT REPORT and shall make such changes to the BUDGET as necessary.
12. In the event of a dispute between SHA and MSP concerning the BUDGET, the REPORT, or the DISBURSEMENT REPORT, MSP and SHA shall submit such disputes to the Director of Strategic Planning for MSP and the Director of Finance for SHA for resolution. If the Director of Strategic Planning for MSP and the Director of Finance for SHA cannot resolve the dispute, the dispute shall be submitted to the Superintendent of MSP and the Administrator of SHA for resolution. If the Superintendent of MSP and the Administrator of SHA cannot resolve the dispute, the dispute shall be submitted to the Governor's Deputy Chief of Staff whose decision shall be final.
13. In the event of a dispute between SHA and MdTA concerning the BUDGET, the REPORT, or the DISBURSEMENT REPORT, MdTA and SHA shall submit such disputes to the Chief Financial Officer for MdTA and the Director of Finance for SHA for resolution. If the Chief Financial Officer for MdTA and the Director of Finance for SHA cannot resolve the

dispute, the dispute shall be submitted to the Executive Secretary of MdTA and the Administrator of SHA for resolution. If the Executive Secretary of MdTA and the Administrator of SHA cannot resolve the dispute, the dispute shall be submitted to the Secretary of Transportation whose decision shall be final.

B. MSP RESPONSIBILITY

1. MSP shall, within ten (10) days of receipt of the DISBURSEMENT REPORT from SHA, provide comments or concurrence to SHA on the DISBURSEMENT REPORT.
2. The MSP shall, on a semiannual basis, meet with the AGENCIES to review the BUDGET in respect to the REPORT and the DISBURSEMENT REPORT and shall make such changes to the BUDGET as necessary.
3. In the event of a dispute between MSP and SHA concerning the BUDGET, the REPORT, or the DISBURSEMENT REPORT, MSP and SHA shall submit such disputes to the Director of Strategic Planning for MSP and the Director of Finance for SHA for resolution. If the Director of Strategic Planning for MSP and the Director of Finance for SHA cannot resolve the dispute, the dispute shall be submitted to the Superintendent of MSP and the Administrator of SHA for resolution. If the Superintendent of MSP and the Administrator of SHA cannot resolve the dispute, the dispute shall be submitted to the Governor's Deputy Chief of Staff whose decision shall be final.

C. MdTA RESPONSIBILITY

1. MdTA shall, within ten (10) days of receipt of the DISBURSEMENT REPORT from SHA, provide comments or concurrence to SHA on the DISBURSEMENT REPORT.
2. The MdTA shall, on a semiannual basis, meet with the AGENCIES to review the BUDGET in respect to the REPORT and the DISBURSEMENT REPORT and shall make such changes to the BUDGET as necessary.
3. In the event of a dispute between MdTA and SHA concerning the BUDGET, the REPORT, or the DISBURSEMENT REPORT, MdTA and SHA shall submit such disputes to the Chief Financial Officer for MdTA and the Director of Finance for SHA for resolution. If the Chief Financial Officer for MdTA and the Director of Finance for SHA cannot resolve the dispute, the dispute shall be submitted to the Executive Secretary of MdTA and the Administrator of SHA for resolution. If the Executive Secretary of MdTA and the Administrator of SHA cannot resolve the dispute, the dispute shall be submitted to the Secretary of Transportation whose decision shall be final.

D. DBM RESPONSIBILITY

1. DBM shall, within ten (10) days of receipt of the DISBURSEMENT REPORT from SHA, provide comments or concurrence to SHA on the DISBURSEMENT REPORT.
2. The DBM shall, on a semiannual basis, meet with the AGENCIES to review the BUDGET in respect to the REPORT and the DISBURSEMENT REPORT and shall make such changes to the BUDGET as necessary. Upon resolution of any dispute in regards to the BUDGET, the REPORT, or the DISBURSEMENT REPORT, SHA's Director of Finance shall provide DBM with such resolution for its records.

III. GENERAL

1. The recitals (WHEREAS) at the beginning of this MOU are incorporated as substantive provisions of this MOU.
2. The parties acknowledge that SHA is the controlling agency of the CONTRACT that provides for the VENDOR and the VENDOR SERVICES. However, SHA does not guarantee the accuracy of the VIOLATIONS, nor is it responsible for any inadequacy in the number of VIOLATIONS or ACCEPTABLE VIOLATIONS. The AGENCIES hereby hold SHA harmless for any inaccuracies or insufficiencies in the number of VIOLATIONS or ACCEPTABLE VIOLATIONS and for any problems resulting from lack of detail, lack of coverage, or misleading impressions resulting from the number of VIOLATIONS or ACCEPTABLE VIOLATIONS hereunder.
3. Each notice, demand, request, consent, approval, disapproval, designation, or other communications (all the foregoing are herein referred to as a "notice") that a party gives to any other party shall be in writing and shall be given or made or communicated by United States Mail.

Addressed in the case of SHA to:

Mr. Michael L. Paylor, P.E.
Maryland SafeZones Program
Work Zone Automated Speed Enforcement
State Highway Administration
Office of Traffic and Safety
7491 Connelley Drive
Hanover, MD 21076
Phone: (410) 787-5864
Fax: (410) 582-9469
E-Mail: mpaylor@sha.state.md.us

with a copy to:

Mr. E. Glenn Klaverweiden
Agreements Coordinator
State Highway Administration
707 N. Calvert Street
Baltimore, MD 21202
Phone: (410) 545-5677
Fax: (410) 209-5025
E-Mail: gklaverweiden@sha.state.md.us

and addressed in the case of the MSP to:

Lieutenant M. P. Foxwell
Commander, Transportation Security Section, CVED
901 Elkridge Landing Road, Suite #300
Linthicum Heights, MD 21090
Phone: (410) 694-6100
Fax: (410) 694-6135
E-Mail: infoxwell@mdsp.org

and addressed in the case of MdTA to:

Major Kevin M. Anderson
Commander, Special Operations Division
4330 Broening Highway
Baltimore, MD 21222
Phone: (410) 537-7712
Fax: (410) 537-7701
Email: kanderson1@mdta.state.md.us

with a copy to:

Ms. Deborah Shatpless
Chief Financial Officer
Maryland Transportation Authority
2310 Broening Highway, Suite 150
Baltimore, MD 21224
Phone: (410) 537-6767
Fax: (410) 537-1072
Email: deshapless@mdta.state.md.us

and addressed in the case of the DBM to:

Mr. Donald (Jeff) Wulbrecht
Budget Analyst
Department of Budget and Management
Office of Budget Analysis
45 Calvert Street, 2nd Floor
Annapolis, MD 21401-1907
Phone: (410) 260-6071
E-Mail: dwulbrecht@dbm.state.md.us

4. All SHA REPORTS and DISBURSEMENT REPORTS shall be accompanied by sufficient documentation by SHA to evidence actual costs incurred by the AGENCIES. If the AGENCIES require additional documentation, the AGENCIES may have authorized personnel visit SHA to verify all documentation and conduct independent audits. The AGENCIES are to contact:

Mrs. Jackie Steffy, Chief
Receipts and Disbursements Division
Office of Finance
Maryland State Highway Administration
Mail Stop C-504
707 N. Calvert Street
Baltimore MD 21202

5. Whenever the approval of the AGENCIES is required, such approval shall not be unreasonably withheld or delayed. The parties hereto agree to cooperate with each other to accomplish the terms and conditions of this MOU.
6. This MOU shall inure to and be binding upon the parties hereto, their agents, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have caused this MOU to be executed by their respective duly authorized officers on the day and year first above written.

STATE HIGHWAY ADMINISTRATION

WITNESS

BY: Neil J. Pedersen 6/11/10 (SEAL)
Neil J. Pedersen Date
Administrator

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

RECOMMENDED FOR APPROVAL:

Likky C. Rappert
Assistant Attorney General

Gregory D. Welker
Gregory D. Welker
Deputy Administrator/Chief Engineer
for Operations

Douglas H. Simmons
Douglas H. Simmons
Deputy Administrator/Chief Engineer
for Planning, Engineering, Real Estate
and Environment

Lisa B. Conners
Lisa B. Conners
Director
Office of Finance

MARYLAND DEPARTMENT of STATE POLICE

WITNESS:

BY: Terrence Sheridan 6/20/10 (SEAL)
Colonel Terrence Sheridan Date
Superintendent

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

Alfred M. Switzer

RECOMMENDED FOR APPROVAL:

MARYLAND TRANSPORTATION AUTHORITY

WITNESS:

Christine A. Hunt

BY: Ronald L. Freeland 6/22/10 (SEAL)

Ronald L. Freeland Date
Executive Secretary

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

RECOMMENDED FOR APPROVAL:

Valerie J. Smith

DEPARTMENT OF BUDGET AND
MANAGEMENT

WITNESS:

Shirley A. DeLoach

BY: *T. Eloise Foster 7/9/10* (SEAL)
T. Eloise Foster Date
Secretary

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

[Signature]

RECOMMENDED FOR APPROVAL:

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VENDOR SERVICES

The VENDOR shall be responsible to provide the following services and equipment under the terms of the CONTRACT.

VEHICLES, EQUIPMENT AND SERVICES

1. The contractor shall supply a minimum of three (3) fully-equipped and operational mobile enforcement vehicles, equipped with speed camera equipment and speed detection systems capable of capturing violators traveling above the threshold speed established by the AGENCIES, and operating on eight-hour shifts (with the option for 16-hour shifts), five days per week per vehicle, and which are owned and operated by the VENDOR. The contractor shall provide, at the STATE'S option, up to two additional vehicles during the life of the contract and the option years.
 - a. Each vehicle shall be either vans or sport-utility vehicles (SUVs), with SHA-approved warning light systems. Each vehicle must be marked as determined by the MSP at no additional cost to the SHA.
 - b. Each vehicle must be staffed by an operator during system operation. The speed camera system operator must be present at all times during system operation.
 - c. The camera system shall be capable of capturing multiple sequential frames, yielding a short video clip that can provide additional evidence of the violation. The image shall be a minimum of 768 x 576 pixels and shall have a wide enough field of view to capture a minimum of two (2) seconds of video. The Contractor must record digital images for each warning notice and digital images and video for each citation. The cameras must be capable of accurately measuring speeds and collecting readable license plates in various lighting and environmental conditions; on multi-lane, high speed facilities; and, from both sides of the road. Cameras contained within the vehicles must be operable without open windows or panels and operationally powered from the deployment vehicle for a minimum of eight (8) hours.
 - i. The camera system must be capable of automatically providing and storing operating speed data (e.g., average 85th-percentile, 95th-percentile) for a representative sample of vehicles passing the enforcement vehicle. Operating speeds will be calculated and stored in 15 minute intervals and updated once a minute.
 - ii. The speed enforcement system must be capable of automatically adjusting the threshold for capturing violating vehicles based on the higher of the following criteria:
 1. 12 miles per hour above the posted work zone speed limit, or
 2. Any speed above a percentile speed to be specified by the SHA (e.g. 85th percentile speed) for the most recent 15 minute interval.
 - iii. The data embedded onto the speed detection images and other, multiple images recorded before and after the detection image must contain (at least) the following information for each violation.
 1. Unique violation identifier incorporating the City/County ID.
 2. Operator entered Location identifier and direction of travel.

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3. Independently sourced, automatically entered date (MM/DD/YYYY) or (DD/MM/YYYY) and time (24-hour clock) data.
4. Camera ID.
5. Operator ID.
6. Travel Speed.
7. Posted Speed Limit.
- d. All speed data collection equipment that conforms to the International Association of Chiefs of Police (IACP) for speed measurement.
- e. Hardware and software upgrades to the system must be provided by the VENDOR, at no cost to the SHA.
- f. Be required to provide maintenance for each work zone speed enforcement vehicles, including non-scheduled repairs and recurring maintenance.
2. Three (3) SHA-approved and operational speed display trailers (one for each mobile enforcement vehicle).
 - a. Be required to provide maintenance for each work zone speed enforcement vehicles, including non-scheduled repairs and recurring maintenance.
3. Processing services, including warning processing and notice mailing.
4. Mail-in payment and mail processing, pay-by-phone, pay-by-web, Integrated Voice Response, and 24-7 violator online access.
5. Shall provide and maintain a system with a database that is acceptable to the AGENCIES and that can handle all photo speed transactions, including issued citations, payment information, archiving, images and video. This system must be the main processing and operational system to be used by the VENDOR on behalf of the State.
 - a. Shall store captured violation images, video and data from each mobile vehicle deployed, on State approved drives, in downloadable and viewable format.
 - b. Shall securely store and back-up data. The VENDOR must provide secure electronic storage and transmission and shall store data for a minimum of three (3) years following the termination of the CONTRACT.
 - c. Hardware and software upgrades to the system must be provided by the VENDOR, at no cost to the SHA.
6. Interfaces with State owned databases for use of the AGENCIES as well as other State agencies such as MVA.
7. Interface with the Maryland District Court database.
8. Customer services by phone, email, and mail, including walk-in customer support at a Maryland facility, with additional facilities to be agreed upon by the AGENCIES and the VENDOR.
9. Online access for the AGENCIES for citation review, approval and program management/reporting.
10. Signed certificate of calibration for each automated speed enforcement system as evidence that they have undergone an annual calibration check by an independent calibration laboratory to ensure the accuracy and validity of the equipment.
11. A camera maintenance schedule that details all of the maintenance logs and protocols to be used by the VENDOR.
12. An automated violation processing services solution that is capable of supporting high volume program operations. Processing services include pre-processing, support

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- for police authorization, citation printing and mailing, payment processing, reporting and courts support services.
13. After the initial review to extract license plate data, the VENDOR shall conduct a second review to ensure that the registered vehicle information matches the captured images.
 14. Will process and mail all citations approved by MSP and MdTA to violators within fourteen (14) days for vehicles registered in-State and within thirty (30) days for vehicles registered out-of-State.
 15. Shall print the citation on an Automated Speed Monitoring Citation Form as approved by the District Court of Maryland.
 16. To mail a single page (front and back), black and white safety insert to violators with each citation.
 17. Shall mail up to five total notices, including registration flagging notices, for violators with vehicles registered in-State and credit bureau reporting collection notices.
 18. Shall collect and process all payments received in person, electronically paid on-line, electronically paid by phone, and mailed into a Contractor-owned, State approved USPS lockbox, including the daily depositing and reconciliation of all receipts.
 19. Shall deposit into an SHA designated bank account, once every 24 hours and during normal banking days, an amount equal to the gross receipts of the current day's revenue received. Payments deposited must be applied to the VENDOR's database every day and available for online review within 24 hours of deposit/update.
 20. Shall comply with all applicable Maryland rules, statutes and law.
 21. Shall provide, in electronic format, as required by the Motor Vehicle Administration (MVA), before noon on Thursday of each week, a listing of vehicles that: (1) are to be flagged by the MVA for non-payment, and, (2) are to have flags removed due to payment or erroneous flagging. This electronic file shall be submitted to the MVA via their File Transfer Protocol (FTP) based system.
 22. Shall provide a system, at no cost to the State that stores all information for uncollected citations, for the life of the CONTRACT. This information must be reasonably available upon written required, at no cost to the SHA.
 23. Shall defend the citations in court.

Reporting

1. At hoc reports, upon written request, must be provided at no cost to the AGENCIES. The VENDOR must deliver the ad hoc report(s) within ten (10) days of the request.
2. The VENDOR must provide the AGENCIES with the ability to remotely access a reporting system via the Internet and generate, through a user friendly interface, ad hoc reports of work zone mobile speed camera operations using user selectable variables and parameter values, including at a minimum, hours of use by work zone site, results achieved by each camera by site, violations recorded by site to date, citations issued for select periods by a selected mobile unit, equipment malfunctions, status of notices issued, real-time traffic volume and vehicle counts, real-time violation information by time of day and day of week.

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3. A monthly report on the work zone speed camera program shall be submitted on or before the 10th day following the calendar month being reported.
4. The VENDOR must produce daily reports on vehicle operating speeds for the previous day (c.g. 10 mi/h pace, average speed, 85th percentile, 95th percentile, highest speed), total number of vehicles passing during speed monitoring sessions, number of vehicles exceeding posted speed limit, number of violation events captured, number of citations issued month to date and other data.
5. The VENDOR must provide a report upon the completion of the CONTRACT that includes year-to-date statistics, an analysis of the initial program data, and an explanation of the program improvements that have been implemented and/or are proposed.

Customer Service

1. The VENDOR must provide customer services, including handling citizen inquiries or complaints made by phone, email, and mail. Customer service representatives, manning dedicated customer service accounts/phone lines, should be available, at a minimum, between the hours of 8:30 AM and 4:30 PM EST, Monday through Friday, with the exception of State holidays. During the hours of 8:30 AM and 4:30 PM EST, all customers must be serviced within two (2) minutes. Any messages left after hours or on the weekend shall be returned within one business day.
2. The VENDOR must provide a web-based solution for an alleged violator to review violation photos and video, and to pay the citation online. This website should be password protected and provide the ability to track whether the violation was viewed by the alleged violator. This website shall also provide access for the alleged violators to view their citation images and a video of their violation using a password provided on their citation.
3. The VENDOR must participate in media campaigns, satisfactory to the State, in order to provide program awareness to residents of and visitors to the State of Maryland. In addition, the VENDOR may be required to attend public meetings, state and county fairs, and other venues to assist the AGENCIES and any other State staff in demonstrating the automated speed enforcement mobile vehicle and equipment.
4. The VENDOR must develop a Customer Service Manual and policies consistent with SHA customer service policies. The manual and associated training for the customer service representatives must be approved by SHA.
5. The Contractor must develop an issue resolution process in conjunction with the SHA and the MPS to address occasions when the VENDOR is unable to satisfy a citizen complaint or issue.
6. The VENDOR must develop and maintain a State Highway Administration-approved website of public information material to include at a minimum:
 - a. Description of a mobile automated speed enforcement system
 - b. Locations of work zones using automated speed enforcement
 - c. Key statistics on the work zone automated speed enforcement program and its effectiveness
 - d. A list of frequently asked questions and answers to those questions
 - e. Before and after statistics and/or studies
 - f. Work zone safety information/traffic safety campaign information.

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7. The VENDOR may be required to conduct up to two (2) public surveys, at the request of the SHA. The surveys should be sent to a statistically valid, random cross-section of households across Maryland. A minimum of 400 responses should be obtained for each survey. The VENDOR must provide the results and an analysis of the results to the SHA in a timely manner.

Training

1. The VENDOR must provide on-site training and manuals for the MSP and the MdTA officers who will be accessing, reviewing and certifying violations. The training must be provided on an "as needed" basis and will be requested in writing to the VENDOR by the AGENCIES.
2. The VENDOR is required to provide training to all VENDOR work zone speed enforcement system operators in the procedures for setting up, testing, and operating the system. This training will result in a written certification for operators who successfully complete the training. A copy of the training certificate must be kept on file and made available to the AGENCIES through the web-based violation processing and certification system. This training must be provided on an "as needed" basis and will be requested in writing to the VENDOR by the AGENCIES.
3. The VENDOR must provide on-site training to AGENCIES on software operation and use. The VENDOR must maintain and provide the AGENCIES with current/updated training materials, in digital format such as PDF or Microsoft Word, for ongoing new user training for the duration of the contract.

Scenario #3 - Increase # of vehicles from 2 to 3 and increase capture rate by 50% (from 50% to 75%)																				
		April to June 2010				Fiscal Year 2011														
		Apr	May	Jun	Totals	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Totals		
Revenues																				
	Federal Reimbursement			12,400	12,400	10,666	5,866	5,866	5,866	5,866	5,866	13,466	5,866	5,866	5,866	5,870	13,470	90,400		
	Citations Revenues	150,000	150,000	150,000	450,000	337,500	337,500	337,500	337,500	337,500	337,500	337,500	337,500	337,500	337,500	337,500	337,500	4,050,000		
Expenses																				
1	Vendor Costs	114,677	114,677	114,677	344,031	172,016	172,016	172,016	172,016	172,016	172,016	172,016	172,016	172,016	172,016	172,016	172,016	2,064,186		
2/*	SHA Staff with Fringe	6,900	6,900	6,900	20,700	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	180,000		
3	SHA Consultants(RK&K-2)	20,000	20,000	20,000	60,000	11,000	11,000	11,000	11,000	11,000	11,000	8,000	8,000	8,000	8,000	8,000	8,000	114,000		
4	MSP	13,000	13,000	13,000	39,000	32,583	32,583	32,583	32,583	32,583	32,583	32,583	32,583	32,583	32,583	32,583	32,587	391,000		
	MdTA Police	2,000	2,000	2,000	6,000	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	27,600		
	U of MD Evaluations					7,333	7,333	7,333	7,333	7,333	7,333	7,333	7,333	7,333	7,333	7,337	7,337	88,000		
	U of MD Data Collection			15,500	15,500	6,000						9,500					9,500	25,000		
	Public Outreach	6,250	6,250	6,250	18,750	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	75,000		
	Signing					7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	84,000		
	Other	100	100	100	300	100	100	100	100	100	100	100	100	100	100	100	100	1,200		
		162,927	162,927	178,427	504,281	259,582	253,582	253,582	253,582	253,582	253,582	260,082	250,582	250,582	250,582	250,582	260,090	3,049,986		
	Net Results of the Program	(12,927)	(12,927)	(16,027)	(41,881)	88,585	89,785	89,785	89,785	89,785	89,785	90,885	92,785	92,785	92,785	92,789	90,881	1,090,414		
1 Assumes increase of 50% to add a vehicle but does not assume an increase for improved technology																				
2 Assumes M Paylor for one year, then adding for replacement of J Paracha																				
* This does not include support costs such as the Office of Finance and Senior Management oversight																				
3 Bringing Matt on board. Needed to replace Jawad.																				
4 Assume reimbursement for 5 positions added.																				

Work Zone Enforcement Program
 Revenue/Expenditure Report - FINAL (FY 2010)
 From 6/1/2009 thru 6/30/2010

Note:	Above costs does not include support costs such as the Office of Finance and Senior Management Oversight.	
	Also, signage costs were charged to MdTA/SHA related constructions projects. Federal funds may have been reimbursed.	
**	These amounts are from the "MD SHA <i>Client Summary Reports By Jurisdiction</i> " which is based on violation date of the citation.....	
***	These amounts are from the " <i>MD SHA Accounts Receivable Reports</i> " which is based on the mail date of the citation.....	
	NB: The average length of time from the violation date to the mail date is 11 days.....	