



Wicomico County, Maryland

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Internal Auditor's Report

The County Council and County Executive of Wicomico County, Maryland:

Pursuant to Section 305(D) of the Wicomico County Code and Council special request, the Office of the Internal Auditor (IA) has conducted an Audit of the Wicomico County RedSpeed Traffic Law Enforcement System. A report is submitted herewith. The purpose of the audit was to gain an understanding of procedures and controls for enforcing the speed limit laws within County school zones via the established speed camera system along with the level of compliance with those procedures and controls.

IA conducted the audit with due professional care, and IA planned and performed the audit to obtain reasonable assurance about whether the current RedSpeed traffic enforcement camera system practices are in compliance with applicable contractual agreements, policies, laws, and procedures and whether those policies and procedures are adequate to obtain an acceptable level of control.

The audit revealed the existence of a proactive system used to manage speed cameras in Wicomico. IA identifies several findings in subsequent sections of this report that bear discussion.

IA extends our appreciation to the Sheriff, Officers, Deputies, and Staff of Wicomico County Sheriff's Office for their timely assistance, cooperation, and candid assessment of their speed camera system.

Respectfully submitted,

J. Stephen Roser, CPA/CIA
Internal Auditor

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Audit Report

Background

In an effort to augment safety for Wicomico County students during ingress and egress to and from public and private schools, the County implemented a traffic speed enforcement program. Under the direction of the Sheriff's Office, Wicomico currently employs contractual services from RedSpeed Maryland, LLC of Lombard, Illinois. Council approved the establishment of school zones for the purpose of speed enforcement via a series of Resolutions on March 20, 2012. Shortly thereafter, the Sheriff's Office and RedSpeed established two mobile units for enforcing speed limits in the approved school zones.

According to the Sheriff's Office, the process of securing speed cameras for Wicomico County began approximately two years ago. Speed cameras are part of the "Safe Schools" Project. The Sheriff's Office shares responsibility for school safety. School safety includes, among other things, all crossing guards, and school resource officers. Local police departments usually administer speed camera operations elsewhere. Only three Sheriff's Office operations in Maryland have speed cameras.

Audit Objectives

The objectives of the audit were to:

1. Develop an understanding of RedSpeed operations in the County
2. Assure that internal controls are in place and working as intended

Scope of the Audit

The audit period examined on a test basis was FY 2013 to date. The Scope was open ended. Observations and Inquiries with appropriate personnel were conducted, as well as examination of various documents (subject to change based on preliminary surveys and interviews) pertaining to the following:

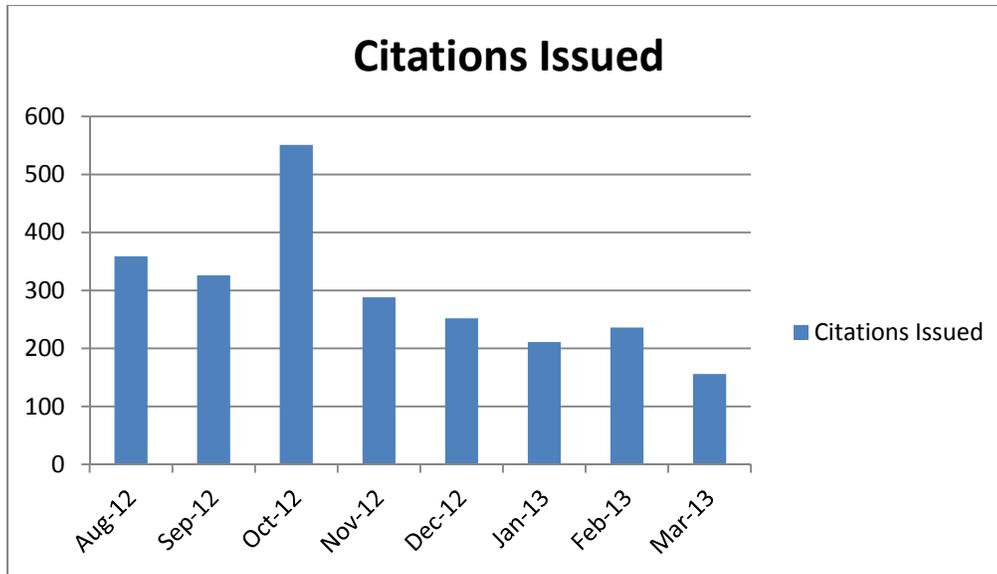
- Review the contract in force with the vendor
- Evaluate vendor contract compliance
- Review codified rules/criteria for determining if alleged violators receive fines and test for compliance
- Map internal controls for handling revenue associated with the program
- Evaluate internal controls and test if warranted
- Interview associates responsible for administering the program
- Establish baselines for future evaluations

General Highlights and Statistics

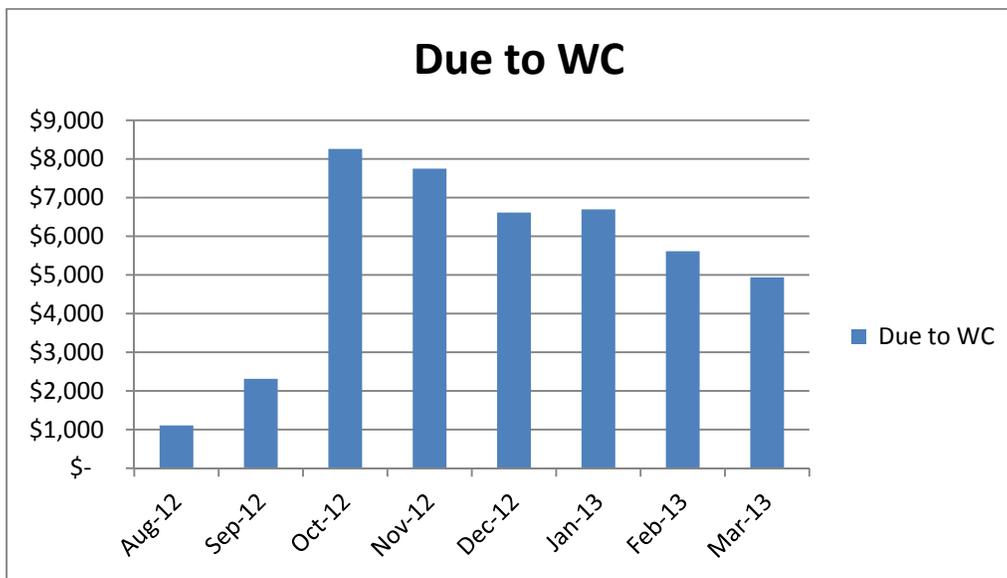
Materiality and Trending

County Legislative Bill 2011-05 established the violations as 12 miles per hour above the posted speed limit and a civil penalty of \$40 per violation. The County ordinance mirrors State Law. According to the contract, the County pays \$13 to RedSpeed for each paid citation leaving the County with the remaining \$27¹. Additional fees are due to RedSpeed for MVA flagging and returned checks. The following chart contains the number of citations issued from August 2012 to March 2013:

¹ Please see finding #5 – Bounty System/Contract Amendment under the *Schedule of Findings and Recommendations/Management Response* section of this report for information concerning Maryland Law and the bounty system



Paid citations for the same period are as follows:



Monthly collections have declined from \$8,262 in October 2012 to \$4,941 in March 2013. According to the Sheriff’s Office, the downward trend is an indication that the program is showing some success for its stated purpose. That is, we have driver behavior modification in school zones toward adherence to posted speed limits thereby improving student safety. As of March 2013, the County collected \$43,299 in fines from the RedSpeed program.

Maryland State Law

Maryland Law² grants the County the authority to establish school zones. The law allows for the establishment of zones (and applicable speed limits) consisting of all public roads within a half-mile³ radius of the named schools.

² See Section 21-803.1 of the Transportation Article of the Annotated Code of Maryland

Additionally, the Maryland General Assembly adopted Chapter 500 (Senate Bill 277) permitting the use of speed monitoring systems in all local jurisdictions. The latest Maryland Legislative Session ended April 8, 2013. During the Session IA tracked eight House Bills and four Senate Bills introduced that concerned speed monitoring. There was a diverse range of issues addressed in the bills. It does not appear that any of the twelve bills completely survived the legislative process for the current year⁴.

Validation

RedSpeed provides the software associated with the County speed camera system. The Sheriff's Office assigns responsibility for electronic monitoring of the program to three deputies. Each member of the team has a laptop computer to access a program provided by RedSpeed. The Sheriff's Office assigns one member of the team, located at the courthouse, the task of validating the possible violations. Please see item number 3 under Schedule of Findings and Recommendations for a list of rejection criteria. IA observed the validation review process and found no material weakness or deficiencies in the process.

Conclusion

Based on evidence gathered, and interviews performed pursuant to the RedSpeed Process Audit, IA is of the opinion that Internal Control for the Wicomico County speed camera program as contracted and described is presently at a satisfactory⁵ level for Wicomico County. We are unable to render an opinion for internal control on the part of the vendor RedSpeed; and as such, no opinion is given.

Schedule of Findings and Recommendations/Management Response

The findings listed below represent some key issues that bear discussion as an added feature to the audit process. It is noteworthy that internal control for the current County speed camera system for Wicomico County, as stated in the conclusion, is satisfactory. The audit revealed no evidence of material weakness or significant deficiencies in the areas tested. The findings are both positive and negative and they do not rise to the level of concern that material weakness or significant deficiencies would garner.

1. Enforcement Effort

Once the Sheriff's Office determines that a violation is valid (please see finding #3 – Rejection Criteria) RedSpeed sends the owner of the offending vehicle a citation indicating the date, time, and location of the infraction. Additionally, the notice indicates the posted speed limit, the vehicle speed, required payment of a \$40 fine, and a due date. Violators are given several options:

- Pay by mail
- Pay via the internet (a link is provided)
- Pay by phone
- Contest the citation (instructions provided)

³ Please note that the half-mile radius is a maximum allowed. Wicomico County, through a series of Resolutions, established school zones for the purpose of automated speed enforcement in twelve County schools consisting of some public roads adjacent to school properties

⁴ Per Sheriff's Office: Capt. Wilson participates in a work group discussion with Legal Council for MACo

⁵ For the purposes of this audit, IA uses a three-tier grading system recommended by the International Professional Practices Framework (IPPF) as expressed by the IPPF Practice Guide issued March 2009. The three tiers are Inadequate System of Internal Control, Adequate System of Internal Control, and Satisfactory System of Internal Control. Satisfactory findings indicate that overall controls are satisfactory, although some enhancements may be recommended. It is the highest rating on the scale.

Violators can pay by check, money order, or credit/debit card. Unpaid or uncontested violations, 31 days after issuance, will trigger a "Notice of Delinquency" giving violators another chance to pay the \$40 fine. The notice warns that failure to pay may result in refusal or suspension of the motor vehicle registration. Violations of this type have no points associated with them as described in various sections of Maryland State Law.

Management Response

Per MD Transportation Code 21-809, two (2) time-stamped digital images of the violation are included.

The citation can also be paid at the Wicomico County Finance Department; several of their personnel were trained by RedSpeed as to the process for accepting payments. To date, there have not been any attempts to make payment through the Finance Department.

On the 31st day the violation is past due, a delinquent notice is mailed and another 31 days given. Flagging is not initiated until at least 62 days past due.

2. Calibration

IA observed calibration procedures on April 25, 2013. RedSpeed and the Sheriff's Office can monitor cameras both remotely and via a monitor on the rear of the camera itself.⁶ RedSpeed and Sheriff's Office personnel randomly calibrate the cameras at least daily. One test is performed with the aid of a tuning fork. Each camera has a tuning fork assigned to it via a serial number. The Doppler calculation is a wavelength translated to the tone of the assigned tuning fork. An electronic record along with an entry into a logbook provides evidence of the test. Other testing includes laser testing and drive-by testing. Additionally, in August 2012, the County dismissed 119 violations and issued refunds due to several complaints received during the period August 20-24, 2012.

The contract in force for the speed camera service requires an annual calibration by an outside agency. RedSpeed uses a vendor in Atco, New Jersey to perform the outside calibrations. The WC Sheriff's Office recommended the vendor (an authorized dealer in radar equipment). A certificate that may be used in court evidences all calibrations.

Management Response

The Wicomico County Sheriff's Office received several complaints regarding the speed camera located on Pemberton Drive. Specifically, the week of August 20-24, 2012 was in question. Through REDSPEED USA, we requested a review of both maintenance and calibration records for the entire month of August. In reviewing these records, we noticed a dramatic increase in the number of citations issued for this particular week. Both maintenance and calibration records supplied by REDSPEED USA reflect the equipment was working properly.

However, as a precautionary measure, with due consideration being given to the new and rapidly developing program, coupled with the citizens' complaints and the unusual high number of citations issued for the week of August 20-24, 2012, Sheriff Lewis requested a full refund or reimbursement of monies to those persons receiving citations for this particular week, and their cases be dismissed. This would ONLY apply for August 20-24, 2012.

Subsequently, RedSpeed issued 119 refunds at a cost of \$40.00 each totaling \$4,760.00.

Captain Wilson and Sheriff Gary Hoffman are Certified Radar and Laser Instructors through the Institute of Police Management and Technology. Classes are conducted throughout each calendar year for Law Enforcement and RedSpeed representatives. RedSpeed has employees who have completed the radar and Laser class.

⁶ Please see Appendix II illustration

3. Rejection Criteria

According to RedSpeed, violations submitted by the speed camera system may be rejected for any of the following reasons:

- Authorized Emergency Vehicle
- Blurred License Plate Image
- Funeral Procession
- License Plate Not Found
- Officer Controlled Intersection
- Officer Discretion
- Safe Turn on Red
- Undercover Police Vehicle
- No Video Clip
- Warning Notice
- Uncontrollable Conditions
- Blurred Video Clip

Please note that some of the rejection reasons seem to focus on traffic light cameras and may not apply here. According to both RedSpeed and the Sheriff's Office, approximately 50% of all violations are ticketed. RedSpeed reviews the camera submissions prior to sending to the Sheriff's Office and routinely rejects approximately 40% of the violations for any of the above reasons. The Sheriff's Office designee then reviews the remainder and typically rejects another 10% for the same reasons. IA reviewed the rejection list for April 2013. The Sheriff's Office rejected 29 of 510 violations representing 5.7% of the violations sent to the County by RedSpeed for April 2013. IA noted that the Sheriff's Office rejected three of the violations for "officer discretion". Closer examination revealed that multiple vehicles in the photo caused two of the rejections, and the remaining violation had a picture that was too dark. IA recommends minimal use of "officer discretion" as rejection criteria. Additionally, Sheriff's Office personnel assured IA that favoritism of any type is strictly prohibited.

Management Response

RedSpeed was contacted [recently] and they have submitted to their IT department a request by WC Sheriff's Office to add the rejection reason "Multiple Vehicles". This will eliminate the need/use of "Officer Discretion" for this reason.

4. Locations

Wicomico County chose 12 locations for the use of school zone speed cameras. Council approved the locations through a series of resolutions⁷ on March 20, 2012. The Resolutions specifically defined the roads upon which the Sheriff's Office may establish speed camera operations. The defined locations include some of the roads adjacent to school property. As mentioned in General Highlights and Statistics section of this report, Council did not use the "half-mile radius" school zone designation, as defined in Maryland State Law. The Planning and Zoning Department assisted in mapping the designated zones.

It is important to note that the Cities of Salisbury and Fruitland employ their own speed camera programs. WC Sheriff's Office works in cooperation with both jurisdictions to prevent duplication. Wicomico County Council designated school zones for the purpose of speed camera enforcement at the following school locations:

⁷ Please see Council Resolutions 36-2012 through 47-2012 inclusive for further information

- Glen Avenue Elementary School
- Parkside High School
- Pemberton Elementary School
- Salisbury Christian School
- Salisbury Middle School
- The Salisbury School
- West Salisbury Elementary School
- Willards Elementary School
- Mardela Middle and High School
- Northwestern Elementary School
- Pittsville Elementary and Middle School
- Westside Primary School

Management Response

The school zones in Wicomico County extend beyond the school property. Hundreds of children walk to and from school daily and motorists travel those same roadways. We should safeguard all those who traverse our roadways and sidewalks in our county to the best of our ability.

Maryland Law allows for implementation of [automated speed enforcement] within a ½-mile radius of a “School Zone”. However, due to the restrictive limitation imposed, the program is not functioning to its designed maximum effectiveness. There are numerous additional ingress/egress routes utilized by students, faculty, and parents to the schools. These additional travel routes are vital to the overall goal of the program, which is modification of driver behavior within “School Zones”. Now that the program has successfully proven its reliability and efficiency, the program may need to be expanded to reach its State designed maximum potential.

[Additionally], the County approved twelve (12) locations of the twenty-three (23) schools located within Wicomico County showing potential for expansion of the program.

5. Bounty System/Contract Amendment

Maryland State Law prohibits any contractor from taking a portion of the fine for each violation as payment for providing services: “If a contractor provides, deploys, or operates a work zone speed control system for a police department, the contractor’s fee may not be contingent on the number of citations issued or paid⁸”. Additionally, in February 2013, a Circuit Court Judge in Baltimore County ruled the County’s contract with its speed camera service illegal because it pays the County a cut of each ticket issued⁹. The thinking, according to numerous sources, is that the bounty system incentivizes the vendor to maximize the number of citations.

IA reviewed a proposed amendment to the contract in force between Wicomico County and RedSpeed. The schedule describing payment as outlined above in the “Materiality and Trending” section of the *General Highlights and Statistics* portion of this report is amended and payment to RedSpeed is as follows:

- \$ 0.99 Captured review & registered owner name/address retrieval
- \$ 5.50 Payment processing, including check and credit card processing at the lockbox or on line
- \$ 5.50 Digital evidence archival
- \$ 0.99 For all customer services offered by RedSpeed

⁸ MD Transportation Code Ann. § 21-810(j)(2)

⁹ State of Maryland vs. Stanley H. Katz, Case No. K-12-4983, Circuit Court for Baltimore County, February 21, 2012

RedSpeed applies some of these fees to each violation even if the Sheriff Office issues no citation. According to RedSpeed, “digital evidence archival” refers to the fact that RedSpeed will archive digital evidence packages, including all notices, payments, and correspondence for each closed (i.e. paid, dismissed, or sent to collection agency) citation. RedSpeed assures the County that the new system was created to be equivalent to the old system while removing the “bounty” characteristics of the pricing structure. IA recommends testing the new pricing system in future periods to determine how it lines up with the old system.

Management Response

We review [the contract] monthly with RedSpeed, Department of Law, and allied agencies to make the necessary changes to the program.

6. Other Jurisdictions

As part of this exercise, IA performed an interview with Chief Mike Phillips of the Fruitland Police Department. Additionally, IA reviewed some of the press coverage of problems occurring in and around the City of Baltimore. Fruitland contracted RedSpeed in the past to enforce school zone speed limits and experienced some problems with the company. IA did not solicit RedSpeed response to the problems indicated by Chief Phillips because problems experienced in Fruitland do not seem to be in evidence for the Wicomico County RedSpeed program. Fruitland and Salisbury currently contract speed camera enforcement systems from the Brekford Company of Hanover, Maryland.

Baltimore Mayor Stephanie Rawlings-Blake formed the Automated Traffic Violation Enforcement System (ATVES) Task Force to look into numerous problems with red light and speed limit enforcement systems. The project is ongoing and the Task Force’s next meeting will take place in June. Some of the preliminary recommendations from the task force are as follows¹⁰:

- Officers should not feel rushed to review citations
- Require issuance of monthly reports to the city
- Require third party camera calibration
- Evaluate school zone speed limits for appropriateness

IA has evidence that RedSpeed is in compliance with the preliminary recommendations and suggests monitoring additional task force recommendations going forward as part of a continuing audit arrangement. Additionally, the article points out that an AAA recommendation to eliminate a “bounty system” is not mentioned in the task force report. Please see finding #5 - Bounty System/Contract Amendment for more information concerning the bounty system for Wicomico.

7. Proceeds

RedSpeed maintains a lockbox system in which it deposits proceeds collected from fines. IA made a vendor inquiry regarding any available audits of the lockbox system, or alternatively, copy of an audit report for RedSpeed itself. We were informed that RedSpeed does not specifically audit its lockbox system. Additionally, audit reports for RedSpeed were not available for public consumption. We were therefore unable to access the presence or veracity of internal control over collection of fines. It is important to note that, according to the Sheriff’s Office,

¹⁰ Calvert, Scott; March 20, 2013; “Mayor’s Task Force Recommends Speed Camera Reforms”; www.baltimoresun.com/news/maryland/sun-investigates/bi-ci-speed-camera-transition-20130320,0,4068755.story

the focus of the speed camera system is behavior modification to increase student safety as opposed to revenue generation.

The RedSpeed contract in force with the County under Schedule B(2) provides related fees due to RedSpeed as follows:

\$ 10.00	MVA flagging fee (per flag released)
\$ 10.00	Return check (per check)
\$100.00	Expert testimony (per hour)

Per the Sheriff's Office, and as mentioned previously, RedSpeed provides company representation at all appeal hearings free of charge. It is not clear when "expert testimony" charges from RedSpeed may occur. Additionally, the proposed amendment to the agreement makes it clear that Schedule B(2) remains intact.

The proceeds from the project as of March 30, 2013 as calculated from the eight statements reviewed total \$43,299. Council passed Resolution 51-2013 appropriating funds from RedSpeed for \$42,193. It appears that the difference equals the proceeds for the month of August 2012. IA recommends an adjustment by whatever means are available in order to true-up the balance by \$1,106.

8. Costs to the County

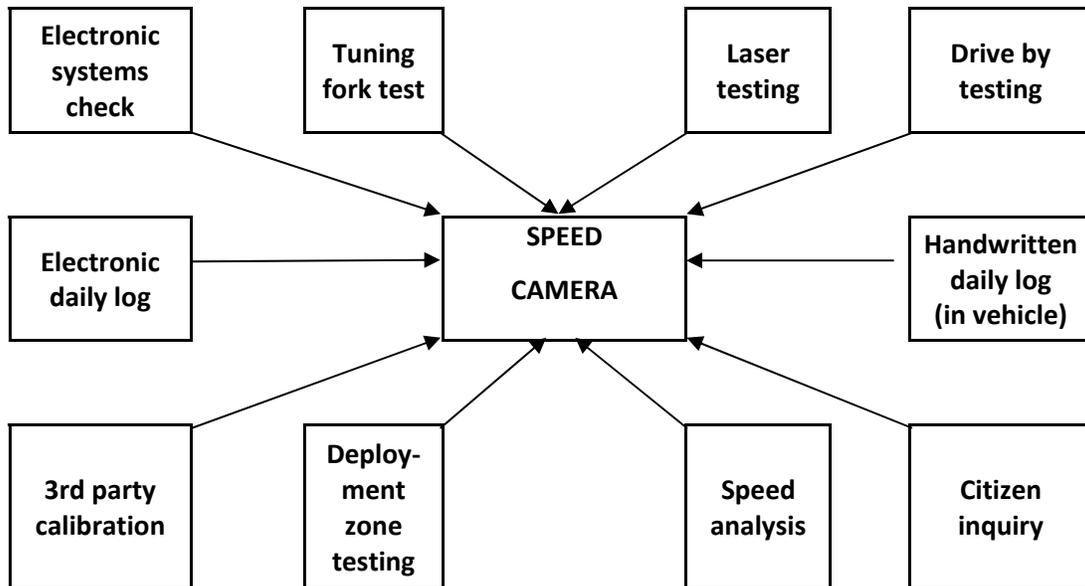
In addition to the fees mentioned above, RedSpeed charged \$1,027 in August for service fees, camera lease, and maintenance. Additionally, the Sheriff's Office and the States Attorney's Office provide personnel to administer the program for the County. WC Sheriff's Office has three members on the team that administer the program. A Deputy assigned to the Courthouse reviews the violations daily. Reviews take from five to thirty minutes per day. Time in court averages less than 30 minutes one day per month. RedSpeed incurs all other expenses, including moving the camera vehicle to and from school locations.

Auditor's Closing Remark

The Wicomico County Office of the Internal Auditor would like to thank management and staff from Wicomico County Sheriff's Office for their timely cooperation and assistance during the audit. Additional special thanks go to Planning and Zoning, IT, Law Department, and RedSpeed for their prompt attention to requests for information and their availability.

Appendix I - Control Schematic

RedSpeed System for Wicomico County Schematic Representing Control



Appendix II – Selected Photographs



A monitor is located on the rear of the camera



Electronic equipment is located on the floor of the vehicle provides internet access