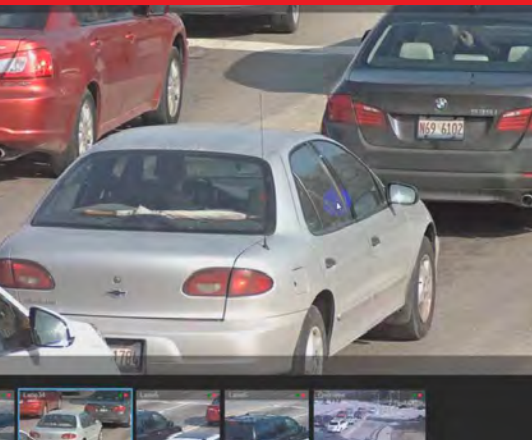




Description of Services (Detailed)

Town of Bladensburg, MD

Automated Enforcement Program. RFQ-FY 2024-004



SCOPE OF SERVICES

SYSTEM MAINTENANCE

VIOLATION PROCESSING

STATISTICAL ANALYSIS & REPORTING SYSTEMS

DATA SECURITY & STORAGE

PUBLIC AWARENESS

VENDOR QUALIFICATIONS

Scope of Services

Town of Bladensburg, MD

Automated Enforcement Program. RFQ-FY 2024-004

RedSpeed®

Red Light Enforcement	Speed Enforcement	Video Surveillance	License Plate Reader
<ul style="list-style-type: none"> • Up to 7 Lanes of Enforcement • Infrared (IR) Illumination – No White Flash • Multiple, Lane-Specific Cameras • HD Video • License Plate Rewind Function™ • Multiple, Simultaneous Violation Capture 	<ul style="list-style-type: none"> • 3D Object Tracking Radar • Lane Identification • Works in All Weather Conditions • Concurrent Tracking of up to 150 Objects • Works Simultaneously with Red Light Enforcement 	<ul style="list-style-type: none"> • Multiple, Lane-Specific HD Cameras Provide Live Streaming Capability • 14 Day Video Archival • Remote Camera Access and Video Retrieval • Ideal for Accident or Crime Reconstruction 	<ul style="list-style-type: none"> • Real-Time LPR Identification • Centralized Archive Across All Cameras • Real-Time Alerts with Notification • Custom Hot Lists • Plate Data Export • Works Simultaneously with Red Light Enforcement
			

MULTIPLE VIDEO CAMERA BENEFITS FOR SPEED AND RED-LIGHT ENFORCEMENT

RedSpeed is the only vendor utilizing lane-specific, brilliant high-definition motion picture video cameras in combination with infra-red (IR) illuminators to maximize the number of violations successfully captured and prosecuted. It is important to emphasize that these lane-specific video cameras substantially increase the number of prosecutable violations. The number increases substantially on roads with heavy queuing traffic or roads used by large scale vehicles such as tractor trailers, construction vehicles, etc., which, when enforced by still image systems (used by competitors) result in lost violations due to obstructed license plate views.

RedSpeed's all-video based camera system solution offers significant benefits:

Reduced Camera Downtime: Unlike many competitors' mechanical shutter-based cameras, RedSpeed's network-based system does not suffer from mechanical maintenance issues, i.e. it does not break down after a certain (and limited) number of photographs have been taken. This feature significantly reduces camera downtime and mandatory maintenance.

Roadway and Intersection Viewing: Having an all-video based system enables Police to simultaneously record video evidence from multiple angles, showing both an overall roadway "scene" as well as each individual lane with resolution high enough to read each passing car license plate. This method is significantly more helpful during accident investigations or scene reconstructions as it can provide an unparalleled level of detail. Most competitors simply rely on a combination of video camera for roadway overview evidence and still, mechanical shutter-based cameras for before/after and zoom-in images.

The Red-Light Enforcement system is designed to capture straight thru, left, and right turn on red violations, and can also be configured to capture specific lanes of enforcement. Individual red signals can be monitored separately, as well as green arrows for protected permitted turns, to prevent capture of erroneous violations on a valid turn signal.

Utilizing a motion picture video camera solution affords RedSpeed another advantage over its competitors.

License Plate “Rewind” Ability: RedSpeed can extract a license plate picture when the images automatically generated by the camera are either unclear or illegible – a feature completely unique to the RICS system. Based on our operational experience in Illinois, we have identified a number of scenarios where the license plate image is either not visible or is obscured by another object, which typically results in the violation being rejected during processing. Common examples include: "washed out" plates due to sun glare, license plates blocked by other vehicles and tractor-trailer or any long wheelbase vehicles not "fitting" into a standard still shot.

Because RedSpeed's system captures and records video from multiple lane-specific cameras, RedSpeed's back-office operators can, for the first time, identify and **REPAIR** these image deficiencies by accessing the archived video directly from the camera and rewinding (or fast forwarding) until a clear license plate image emerges. This capability is essential when monitoring intersections with heavy semi-truck and trailer traffic.

Utilizing the license plate rewind capability allows RedSpeed's violation review team to maximize the number of enforceable violations submitted to the Palatine Police for final review and approval.



SiteOps™ LIVE ROADWAY VIEWING

RedSpeed's proprietary, web based SiteOps™ software can be utilized by authorized municipal users to access "live" video and archived video data on specific roadways without suspending the enforcement function. Having an all-video based system enables Police to simultaneously view and record video evidence from multiple angles, showing both an overall roadway "scene" as well as each individual lane with resolution high enough to read each passing car license plate.

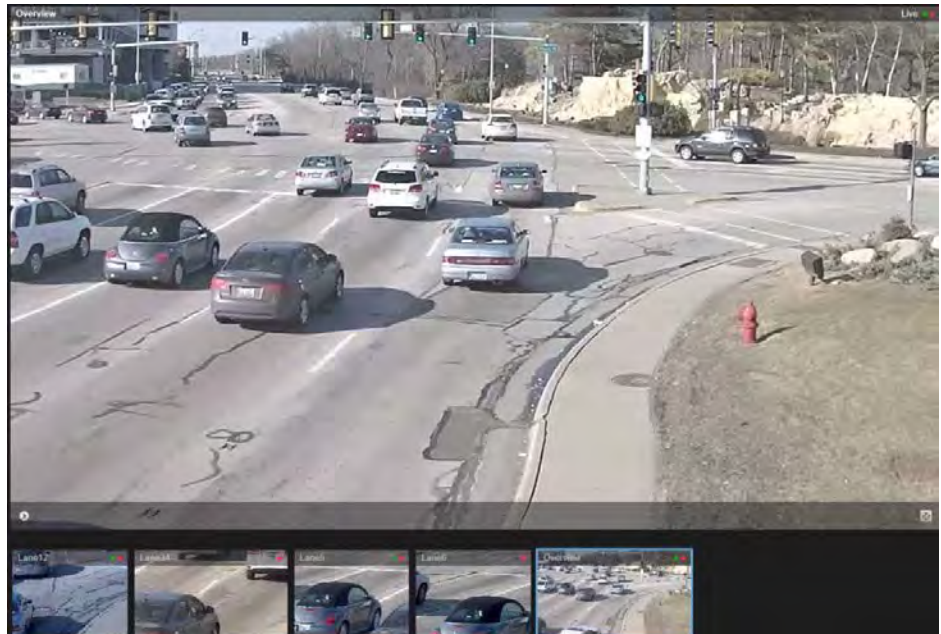
This method is significantly more helpful during accident investigations or scene reconstructions as it can provide an unparalleled level of detail. Most competitors rely on a combination of video camera for roadway overview evidence and still, mechanical shutter-based cameras for before/after and zoom-in images.

While other vendors may offer an overview option, they cannot provide the zoom capability necessary to allow Police users to identify and confirm license plate numbers.

By logging onto <https://Siteops.RedCheck.org>, authorized users may view:

Live Roadway Overview

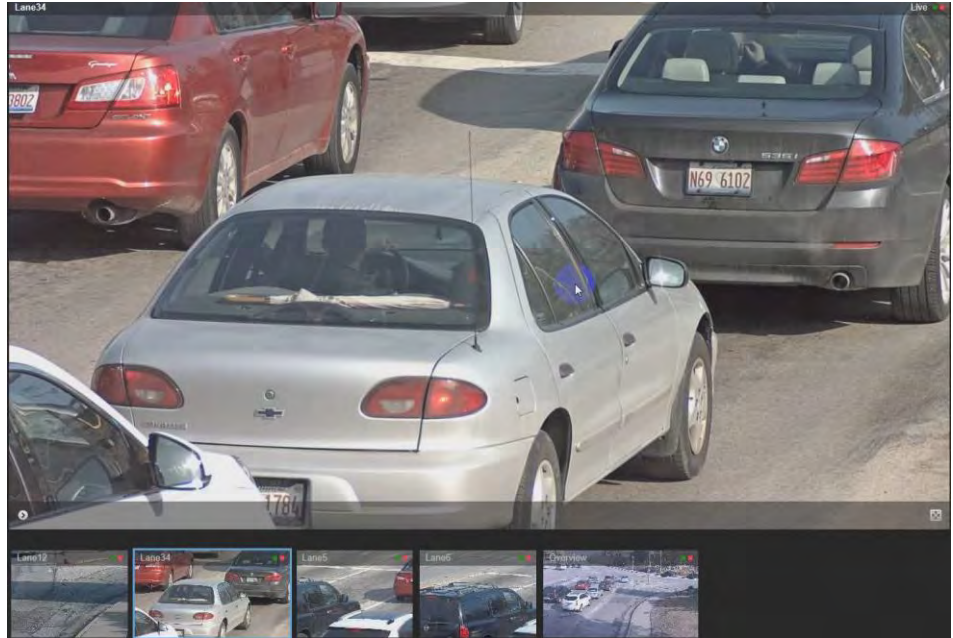
View real time overview of roadway traffic at enforced approaches in 30FPS, full HD 1080P.



Lane Specific View

Unique to RedSpeed, the high definition, lane specific video cameras record all lanes simultaneously, enabling authorized users to select a specific lane on the overview screen and zoom in to identify license plate numbers.

This is a valuable tool during instances such as Amber Alerts. **Other vendors cannot provide the zoom capability** which allows Police to identify and confirm license plate numbers.



Download Archived Video Footage

Configurable 15-45 days of video data archival is available.



Once the requested data has been exported, selecting the download feature allows the User to save the data directly to their PC.



Live roadway viewing / streaming is accessible on all mobile devices including I Pads, Tablets and Smart Phones. This functionality is particularly valuable since it enables officers to immediately access live streaming and archived video footage for accident reconstruction while on scene.



To date SiteOps™ has been integral in solving homicides within the Illinois suburbs of Western Springs and Blue Island, IL. It also assisted the Village of Elk Grove, IL in apprehending an individual responsible for multiple home burglaries as well as assisting the Village of Justice, IL in identifying and apprehending an individual responsible for extensive neighborhood vandalism and property destruction. Within Florida the Police department for both Sarasota and Coral Gables have credited RedSpeed's SiteOps functionality with helping identify and apprehend individuals involved in a car theft operation and other high profile criminal activity.

The enclosed USB includes a short video demonstration of the SiteOps™ functionality.

License Plate Recognition System – Amber & Silver Alert Functionality

RedSpeed’s License Plate Recognition System (LPRS) is an optional add-on module that works in parallel with the Speed enforcement system. Optional A.I. surveillance is also available.

**Speed and Red-Light enforcement need not be suspended to run the LPR system.
The LPR System remain active and collecting data regardless of the enforcement parameters applied to the Speed or Red-Light Camera functionality.**

The USB enclosed in section 11 includes a short video demonstration of the LPRS functionality.

Since LPRS utilizes existing camera hardware, no camera or roadway modifications are required. LPRS provides authorized police users with:

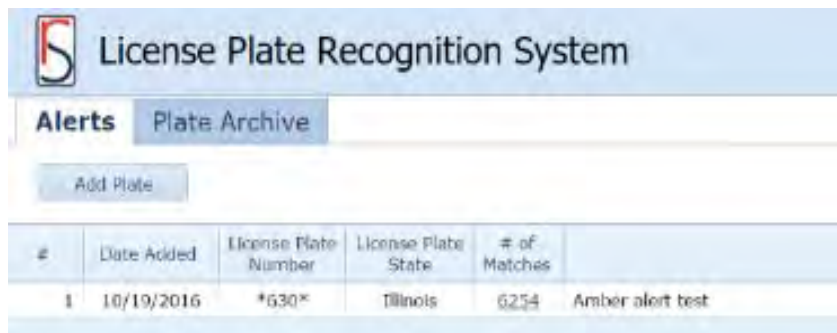
- Real-time Amber or Silver Alert functionality
- Access to a 30-day (configurable upon installation) archive of all license plates detected by the system.
- Ability to merge captured data into ELSAG, Genetec and/or Vigilant database systems, in addition to the County’s Smart County’s Operation Platform.

Authorized users access the system via a web-based, secure portal at <https://lprs.redcheck.org>



Once authenticated, users can either create or modify new alerts or search historical data.

If LPRS is installed on multiple approaches within a Municipality, the system allows for alerts and searches to be enabled either system wide within the community or by individual sites.



When creating a new alert, the user is required to provide an exact or partial license plate number (for example, when searching for plates containing "123", the user could enter *123*. If the plate ends with 123, the search will be *123).

In addition to plate number, additional alert attributes must be added: vehicle color, state, make, case#, etc.

Each alert is set to expire in either 7 or 14 calendar days.

User can be notified in real time of any matches using either email or text message. The LPRS provides an overview of all active alerts, number of matches and expiration dates. Authorized users can create new alerts or edit/delete existing ones.

The screenshot shows the 'License Plate Recognition System' interface. At the top, there is a navigation bar with 'Alerts' and 'Plate Archive' tabs. Below the tabs is an 'Add Plate' button. The main content area features a table with the following data:


#	Date Added	License Plate Number	License Plate State	# of Matches		Expires	Created by	Action
1	10/19/2016	*630*	Illinois	6254	Amber alert test	11/02/2016	Robert Liberman	Edit Delete

Detailed alert results show the location, date and time of the record license plate image matches, as well as a high-resolution original image. Using the date/time/location, authorized user can then access RedSpeed's SiteOps

S Search Result of "630*"

Vehicle info Plate #: 630* State: Illinois Make: Acura Color: Blue		Search info Case #: 123-34567 Reason: Amber alert test		Registration info Created by: Robert Liberman Date added: 10/19/2016 at 10:38 Notification: Expire: 11/02/2016	
---	--	---	--	--	--

#	Date/Time Recorded	License Plate Number	Location	Zoom Plate Image
6243	10/19/2016 06:05:05 AM	V381307	Lisle (V): OGDEN & YACKLEY W	
6242	10/19/2016 05:58:58 AM	2615305	Lisle (V): OGDEN & YACKLEY W	
6241	10/18/2016 08:50:35 PM	6304458013	Lisle (V): OGDEN & YACKLEY W	
6240	10/18/2016 05:21:07 PM	S306304	Lisle (V): OGDEN & YACKLEY W	
6239	10/18/2016 05:19:30 PM	Q630328	Franklin Park (V): GRAND & MANNHEIM S	
6238	10/18/2016 05:15:46 PM	K447630	Franklin Park (V): GRAND & MANNHEIM S	
6237	10/18/2016 05:04:03 PM	A630201	Lisle (V): OGDEN & YACKLEY W	
6236	10/18/2016 04:42:20 PM	A630322	Lisle (V): OGDEN & YACKLEY W	
6235	10/18/2016 04:40:18 PM	63014696100	Lisle (V): OGDEN & YACKLEY W	
6234	10/18/2016 04:27:31 PM	156308H	Franklin Park (V): GRAND & MANNHEIM S	
6233	10/18/2016 04:05:02 PM	630479720	Franklin Park (V): GRAND & MANNHEIM S	



Page 1 of 126 (6254 items) 1 2 3 4 5 6 7 124 125 126

RedSpeed® LPRS 1.0.3 © 2014-2016 RedSpeed-USA. All rights reserved.

Finally, the "Plate Archive" tab allows authorized users to search the historical archive of all plates captured by the system or multiple LPR systems (if the municipality has activated the LPRS functionality across all cameras within their community).

Searches of the archive can be conducted by specifying plate, date, time or location.

S License Plate Recognition System Welcome, Robert Liberman | Log Out |


Alerts **Plate Archive**

Search by Plate Number:

Filter Results by Location: **All Locations**

Filter Results by Capture Date-Time: From: 10/19/2016 9:43 AM To: 10/19/2016 10:43 AM

#	Date/Time Recorded	License Plate Number	Location	Zoom Plate Image
1485	10/19/2016 10:43:05 AM	2645465	Franklin Park (V): GRAND & MANNHEIM S	
1484	10/19/2016 10:43:05 AM	9659	Franklin Park (V): GRAND & MANNHEIM S	
1483	10/19/2016 10:43:00 AM	9706148	Franklin Park (V): GRAND & MANNHEIM S	
1482	10/19/2016 10:42:48 AM	57890P	Franklin Park (V): GRAND & MANNHEIM S	
1481	10/19/2016 10:42:42 AM	J1AU	Lisle (V): OGDEN & YACKLEY W	
1480	10/19/2016 10:42:33 AM	7JJI	Lisle (V): OGDEN & YACKLEY W	
1479	10/19/2016 10:42:32 AM	BECKLP	Lisle (V): OGDEN & YACKLEY W	
1478	10/19/2016 10:42:30 AM	7522968	Lisle (V): OGDEN & YACKLEY W	



REDSPEED SPEED ENFORCEMENT CAMERA SYSTEM

RedSpeed is proud to present the Town with 2 fixed deployment options – a street level fixed Cabinet solution or a Pole mounted solution. Either solution features RADAR vehicle speed detection technology with state-of-the-art digital imaging and is supported by RedSpeed’s proprietary RedCheck™ Total Violation Management System. As part of the proposed turn-key solution, RedSpeed will provide and install all equipment including, but not limited to, poles, cabinets and related operational equipment associated with the Speed Camera System. The system is specifically designed to withstand the harshest of weather conditions (-30 to 110°F), with enclosures being fitted with temperature monitors to control cooling fans based upon the unit’s internal temperature. The camera enclosures are water and salt resistant, dust proof, bullet proof and highly scratch resistant. The systems have been designed for installation in extremely hostile environments where safety and security are a high priority, secured with heavy duty locks and hinges. All metalwork is constructed from either aluminum or stainless steel, zinc dipped, and powder painted according to the County’s standards to minimize any visual impact. The adaptable and streamlined designs result in an efficient integration into street infrastructure with a minimal footprint. The proposed systems are fully networked and continuously time synched to a central server to ensure consistency between all systems, in addition to supporting site analytics such as speed, traffic counts and volume.

FIXED CABINET SOLUTION

The system itself is compact, intuitive, and very simple to operate. The purpose of this compact unit is to offer a solution for single lane or smaller roads where available deployment space is limited. The complete, real time embedded operating system and unique software specifications enhance the system’s efficiency and stability. Dual monitoring watchdogs (software / hardware) technology guard against system downtime. Multiple HD cameras and 45-days of storage work in conjunction with the radar unit to facilitate full ALPR functionality and live video footage viewing (with 15-45 days of recorded footage) with a direct link for the Police Department.



SPECIFICATIONS

The narrow beam RADAR unit utilizes Doppler shift to determine vehicle speed.

The system can track up to 4 lanes in one direction, capturing only the rear license plates as required under Virginia State Law.

The system utilizes LED Infra-Red illumination during any periods of low light level conditions – eliminating the need for the distracting white flash illumination utilized by other vendors.

RedSpeed Technicians monitor all Cameras daily to ensure operational efficiency. Cameras can be accessed remotely to make any necessary adjustments, including brightness and contrast.

4G Cellular or fixed land line communications are utilized to transmit the encrypted violation data packages to RedSpeed’s back-office processing facility using AES and MD5. All costs association with the communication lines are the responsibility of RedSpeed.

The system always ensures correct daily speed measurements thru an internal self-test function

Annual System Calibration and Certification is conducted by an independent 3rd party utilizing the latest electronic frequency generators rather than conventional tuning fork tests.

DUAL SPEED AND RED-LIGHT FIXED POLE MOUNTED SOLUTION

The sleek pole mounted system can be installed in one of two ways:

1. Mounted onto an existing infrastructure component such as a streetlight pole,
2. Utilizing the 18' tapered aluminum break-away pole shown below installed 75-100' from the stop bar.

- The streamlined, 15' aluminum break-away pole was designed to be as minimally intrusive to its surroundings.
- Enclosures are climatically monitored to control the AC Units based upon the unit's internal temperature.
- All components are fashioned so that maintenance and other operations can be accomplished quickly and easily without impacting public safety.
- 3D/UHD Tracking Radar which can cover up to 7 lanes.
- Multiple 5Mp HD Network based Video cameras with up to 45 days of storage.
- Dual LED IR Illumination panels (no distracting white light)
- Main enclosure is fitted with full AC to control internal temperatures.
- System supports full remote monitoring and access by RedSpeed Technicians.



SPEED DETECTION ACCURACY

RedSpeed utilizes the most advanced 3D/UHD object tracking radar technology. It provides highly accurate and reliable speed and position data, tracking multiple vehicles in parallel lanes simultaneously. The system scans more than 20 times per second from 0.1 m/s to 88 m/s (320 km/h). RedSpeed's radar technology also incorporates a double redundancy:

- 1) By utilizing two independent receive antennas, the values measured by both must be perfectly matched to generate a reported speed,
- 2) Vehicle speeds are first measured by the Doppler shift and then by the range progress over time, the two measurements being independent and redundant. (Speed accuracy Typ.< ±0.28 m/s or ±1%)

MOBILE SPEED ENFORCEMENT UNIT

This in-vehicle method allows the WHPD to deploy the unit in the most optimum location, easily navigating curbs and road shoulders, while providing a stable and controlled platform for the camera. The vehicle is specifically designed to enable low maintenance, fully functional remote access for day / night speed enforcement. The system is easily configurable via a touch screen display and can be set up quickly without creating a public safety hazard.

Mobile Speed Photo Enforcement System (MSPES) consists of a vehicle, HWS800A-MT+ speed photo enforcement system, communications equipment, and power monitoring/ battery unit.



HWS800A-MT+ Features

- Fully embedded design without PHD insures stable and reliable system operation, compact design and total protection from PC virus and OS vulnerabilities.
- The HWS800A-MT+ series features full real-time embedded operating system and unique software specifications enhance the system working efficiency and stability. The dual watch dogs (software and hardware) technology prevents the system downtime.
- HWS800A-MT+ series product integrates the high-definition camera, host, LCD, power, speed

measurement radar, storage disk and etc in one compact package. Small footprint allows for either stationary or mobile environments.

- The built-in large capacity flash disk meets the requirement of data safety for mobile speed measurement device. It supports the short-term local storage and data backup. At the same time, the system can upload the image to the central server which insures dual storage at the local-end and the back office.
- HWS800A-MT+ uses narrow wave K band radar that can effectively monitor both directions of travel simultaneously.
- The built-in Lithium battery can on average support up to 8 hours of continuous operation.
- 8-megapixel high definition CCD camera can overlay information such as the vehicle speed, snapshot time, snapshot position and watermark each picture take to prevent tempering.
- System supports remote maintenance functions including remote malfunction diagnosis, malfunction alarm and remote restart.
- HWS800A-MT+ supports wireless communication via CDMA/GPRS/3G. It can be widely used in any location with 3, 4 OR 5G connection.
- System average power consumption is below 20w.



ADDITIONAL VEHICLE SPECIFICATIONS

Remote Start Transponder (accessible via iPhone / SmartPhone App).

Self-Start Monitoring of Battery Voltage and Internal Vehicle Temperature. Batteries are automatically charged by the vehicle's engine, eliminating the need to remove the battery and make external connections. Vehicles may be left for long periods without repeated recharging.

Independent Battery Power System which powers the system and auxiliary components for up to 20 hours.

Full System Remote Access.

GPS Location Tracking allows for monitoring of the unit's deployment history. Provides real time location information should the vehicle be stolen via geo-fencing alerts.

Removable IR pulse flash installed on front of vehicle to enhance night illumination without creating a visual distraction to oncoming vehicles.

Tripod Mounting Stand installed in front passenger area allows easy camera set up and operation.

Vehicle Run-Time before refueling is required is 2-4 days.

Customized External Signage may be added to the vehicle.

Vehicle Security System with wireless alert.

All routine and manufacturer recommended vehicle maintenance will be the responsibility of RedSpeed.

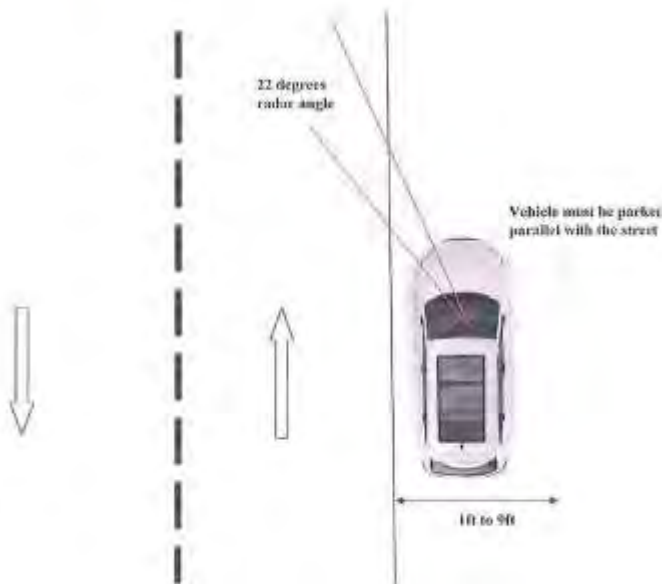
ADDITIONAL SPEED CAMERA SPECIFICATIONS

- Embedded system structure, with industrial PC.
- Supports 500GB HDD storage capable of saving more than ten thousand pictures and violation video
- Supports distinguishing lanes, detecting the multiple objects' speed and distance
- Supports license plate recognition
- Supports 3G/4G Wireless transmission
- Supports GPS locating, support NTP protocol to synchronize time.
- Snapshot resolution of 8MP, 3296*2536
- Video resolution of 2MP, 1600*1200
- Monitors 1-4 lanes



MSPES Deployment

HWS800A-MT+ is equipped with an automatic self-calibration function on startup. During initial startup and immediately following every violation all parts of the speed measurement circuitry undergo a self-test.

Vehicle Placement

If any part of the test fails, the system alerts the operator and suspends operations.

Auto calibration can also be initiated by the operator remotely or in person.

To begin enforcement vehicle should be positioned parallel to the road, facing the direction of enforcement and 1-9' from the lanes.

HWS800A-MT+ must be offset at 22 degrees (the red line on the image denotes the correct angle). To simplify the process and ensure accuracy, the laser pointer can be pressed and aimed at the Laser Aim Marker located on the dashboard.

No other verifications are necessary. Once properly sighted and verified the system can begin autonomous operation.

HAND-HELD SPEED CAMERA ENFORCEMENT SOLUTION

The hand-held speed camera pictured below utilizes LIDAR with the following performance specifications.



- Video target and capture range from 10 ft - 8,000 ft.
- Target specific speed measurement with video or still photos modes.
- Multiple speed limits for different vehicle classes.
- Speed range setting from 10-200mph
- Optional IR torch emitter for nighttime operation.
- Easy setup with programmable presets.
- Wi-Fi file transfer
- AES 256 encryption for added security.
- Integrated GPS.
- Battery Life of 11+ hours.

SPEED CAMERA SET-UP

RedSpeed's Speed Cameras are designed so that deployment is easily configurable to specific school calendars, speed, and time thresholds via a user-friendly setup screen. Once the enforcement parameters are entered, the camera will only be operational during the pre-determined times.

RedSpeed personnel will be continually verifying the deployment details to allow for special school holidays, institute days or closures because of inclement weather. Authorized Police and School District users may also access this application to verify accuracy

Site Details

General

Municipality:	HENRY COUNTY	Location:	120 E Lake Rd W/B, McDonough
Site Code:	GA004	Site Type:	Dahua
Setup Date:	11/11/2019	Start Date:	12/19/2019
IP Address:	10.64.8.1	Lanes:	1
Speed Limit:	45	School Zone Limit:	35

Enforceable Dates

Name	From	To	Operational
2019-2020	8/1/2019	5/22/2020	<input checked="" type="checkbox"/>
Thanksgiving Break	11/25/2019	11/29/2019	<input type="checkbox"/>
Semester Break	12/23/2019	1/7/2020	<input type="checkbox"/>
MLK Day	1/20/2020	1/20/2020	<input type="checkbox"/>
President's Day	2/17/2020	2/17/2020	<input type="checkbox"/>
Winter Break	2/18/2020	2/21/2020	<input type="checkbox"/>
Spring Break	4/6/2020	4/10/2020	<input type="checkbox"/>

Speed Limit by Time

From	To	Trigger Speed	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Low Limit
07:15 AM	07:30 AM	56	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
07:30 AM	08:30 AM	46	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
08:30 AM	02:45 PM	56	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
02:45 PM	03:45 PM	46	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
03:45 PM	04:15 PM	56	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SYSTEM SELF TESTING AND AUTOMATED CAMERA SETTINGS

Continuous monitoring of all sites by RedSpeed violation reviewers and field engineers in our Lombard facility ensures all sites are maximizing performance. These daily operational performance checks enable RedSpeed to immediately detect and resolve potential problems prior to site repairs being required or downtime incurred. The RICS camera units carries out a self-check calibration every 24 hour to confirm all system functionalities are operating correctly. Below are Samples of the generated Pass and Fail Logs.

Sample Pass Log File

```

CAMERA DETAILS
Unit SN: PZJ2MN63600035
Site code: IL00001
Site address: 25th-Harrison
Time:14:50:00
Date:04/27/2013
ITS Camera: OK
Video Camera: OK
Loops: OK
Traffic Signal: OK
System Functioning: OK
    
```

Sample Fail Log File

```

CAMERA DETAILS
Unit SN: PZJ2MN63600035
Site code: IL00001
Site address: 25th-Harrison
Time: 10:40:00
Date: 04/27/2013
ITS Camera: Disconnected
Video Camera: Disconnected
Loops: Fail
Traffic Signal: Fail
System Functioning: Abnormal
    
```

Automated Video Camera Settings

RedSpeed’s multiple HD Video Camera solution is specifically designed to allow for full remote access and maintenance (via a high-speed copper Internet line) as well as automatic self-adjustment. Whether a function is Fixed or Automatic is dependent upon what the specific camera is designed to capture. In both cases, the Field Services Engineer can make manual adjustments to ensure optimal camera performance and capture.

Camera 1 – Intersection Overview Camera

- Lighting – Automatically self-adjusts to compensate for lighting conditions.
- Focus – Fixed
- Aperture – Automatically self-adjusts to ensure IR compatibility during low light or nighttime operation.

Camera 2+ - Lane Specific Cameras

- Lighting – Fixed
- Focus – Fixed – manually set to focus on a specific set point at the stop bar
- Aperture - Fixed

VEHICLE DETECTION

Violation triggering is one of the most important aspects of any photo enforcement system. With optimized triggering technology, a red-light or speed camera can capture the greatest number of violations while simultaneously reducing the number of false triggers.

RedSpeed has the capacity to utilize either above-ground (Radar) or in-ground (Sensys pucks).

3D Object Tracking Radar - Above Ground Vehicle Detection



RedSpeed's 3D tracking radar is an above-ground, all weather, dual Red-Light and Speed triggering technology. Utilizing the 3D radar detection method RedSpeed **provides the ability for the Town to enforce BOTH Red-Light and Speed violations from the same camera system without requiring any additional supplemental hardware or modifications, and without suspending the enforcement of either red-light or speed violators.**

Equally importantly 3D radar offers over **6 times** the violation capture rate as compared to in-ground Sensys pucks used by most competitors, as radar tracking enables the system to monitor the movement of multiple target vehicles more precisely and for a longer period.

Additional benefits of using 3D Radar tracking as a detection method include:

- The trigger locations and sensitivity levels for the radar can be easily reconfigured, either on-site or remotely, and
- There is zero impact on the existing roadway, infrastructure, or landscape.
- Road conditions including snow or ice conditions, pothole repairs and resurfacing which negatively impact the performance of in-ground detection methods have no effect on radar detection.

The combination of the RedSpeed RICS with 3D Object Tracking Radar captures the most violations while simultaneously offering Police officers speed data to assist them with red light violation review decisions.

In-Ground Vehicle Detection (Red-Light Enforcement)

Another method of vehicle detection available to RedSpeed is the use of Sensys Wireless Sensors.

These sensitive magnetometers are equipped with a low-power radio and packed in small, hardened plastic cases.

The benefits of using Sensys in-ground vehicle detection sensors include:

- Sensors are minimally intrusive, with installation completed in under 10 minutes. No lead-in cabling or long saw cuts are required, and the circular pavement hole produces the least amount of damage and stress to the roadway.
- Sensors are equal in accuracy to inductive loop detectors, offering a **capture rate of 96-99%**,
- Sensors will not interfere with any pre-existing in ground sensors,
- Sophisticated signal processing algorithms enable each sensor to discriminate vehicles in adjacent lanes or vehicles that are traveling close to each other in the same lane.
- Sensors monitor individual lanes without interference from high profile vehicles (commercial trucks) obscuring video detection,
- Sensors are unaffected by false triggers from radar reflections.



Small, hardened Sensys wireless sensors can be installed exactly where detection is needed (this model sensor is shown)

A Sensys wireless sensor is placed in the middle of a traffic lane where it will detect the presence and passage of vehicles. To measure vehicle speeds and length, two wireless sensors are installed in the same lane with the exact distance between them measured and configured in the software upon installation. This distance is then factored into an equation which produces an accurate measurement of speed based upon distance travelled.

Sophisticated signal processing algorithms in each Sensys wireless sensor provide highly accurate vehicle detection as well as the ability to discriminate vehicles in adjacent lanes or vehicles that are traveling close to each other in the same lane.

With the use of in-ground sensors individual lanes are monitored without interference from other lanes, such as high sided (i.e. commercial trucks) vehicles obscuring a video detection or false triggers from radar reflections.

Minimally Invasive Traffic Signal Detection

Minimally Invasive Signal Detection

RedSpeed utilizes toroidal current sensing transformers, the least invasive but most accurate means of traffic signal status detection. Voltage and/or current monitoring of the signal lamps is the most reliable means of signal status detection and ensures the system “sees” what the driver “sees”. These inductive coils are placed around the individual conductors for the appropriate color and movement and then attached to a RedSpeed specific cable that carries the signal though newly installed conduit to the RedSpeed system.

The use of toroids gives a physical isolation between the traffic controller and the RedSpeed system, while optically isolating the RedSpeed Lamp Monitoring Unit. These two levels of isolation ensure that a malfunction in either the RedSpeed system or the traffic controller cannot cause damage or dangerous faults in the other system. This type of signal detection also ensures there are no physical modifications to the traffic system equipment, eliminating any liability issues for the Town.

DUAL-PANEL, INFRA-RED (INVISIBLE) FLASH



IR Flash Unit

One of the unique features setting the RICS system apart from all competitors is that it is equipped with dual-panel infrared LED illuminator which **invisibly** illuminates a roadway up to 150' in low light conditions and allows the camera to record high-resolution video and images.

Researchers from Florida State University's Dept. of Psychology published a study linking white flash illumination (utilized by other vendors) to distracted driving. They determined that younger and older drivers were particularly susceptible to the effects of the white flash, as it delayed the ability to process safety related events and caused confusion.

The need for bright and disruptive white flash, (which frequently results in driver complaints), is eliminated. The light source is continuous and undetectable to the naked eye.

We believe RedSpeed is the Only Vendor offering this Infra-red, Flash-Free Solution.

BENEFITS OF INFRA-RED ILLUMINATION (IR) RedSpeed®USA

- Researchers from the Department of Psychology at Florida State University recently published a scientific study.
- It suggests that white flashes associated with photo enforcement cameras **distract younger drivers, pulling attention away from the roadway and delaying processing of safety-related events.**
- Considering the perceptual and attentional declines that occur with age, **older drivers may be especially susceptible to the distracting effects of white flashes**, particularly in situations in which the flash is more salient (a bright flash at night compared to during the day).
- RedSpeed's speed and red light photo enforcement system is the **only system currently on the market that utilizes infra-red (IR) illumination and eliminates the need for distracting and dangerous white flash.**

DOUBLE INFRA-RED (IR) ILLUMINATORS

License Plate Sprays and Covers Rendered Ineffective. As the use of automated enforcement cameras to enforce speed laws has become more common, so has the pervasiveness of license plate fogging sprays and reflective covers. Products intended to obscure or distort the camera's ability to detect and read vehicle license plates are ineffective against RedSpeed's RICS system.

- Since no strobe or white flash is utilized during daylight hours, reflective materials typically employed to trick cameras are ineffective.

RedSpeed violation reviewers can also adjust the negative, brightness and contrast of the plate image to further facilitate the correct identification of the numbers / letters. With High Resolution Video RedSpeed has hundreds more images per violation to work with than still cameras.



RSI0109 12:19:15 PM 12/19/14 4.5 L1
GOLF & RAND E



RSI0109 12:19:16 PM 12/19/14 4.5 L1
GOLF & RAND E

MULTIPLE, SIMULTANEOUS RED-LIGHT VIOLATIONS CAPTURE

As a result of RedSpeed's industry leading multi-video lane specific camera approach, multi lane, multi-violation capture is accomplished without sacrificing image clarity as shown below. Since the system is video based, there is no need for a still camera to "re-set" before capturing the second (or simultaneous) violation. This solution, coupled with the re-wind capability only available thru a video-based system, guarantees that numerous violations which were previously unenforceable using still camera solutions are captured.



The RedSpeed Intelligent Camera System (RICS) captures a set of high resolution digital still images of offending vehicles and the license plates, whether the violation is a straight thru Red-Light violation or violating left or right turn restrictions. These images are captured 24 hours a day regardless of lighting or weather conditions. This applies to the capture of multiple, simultaneous violations as well.

The system differentiates between vehicles and other "non-enforceable" objects such as pedestrians, bicyclists and does not capture these images as potential violations. In addition to the still images, the system produces a 12 second video of the violation at a resolution of 704 x 480, 30 frames per second.

Please refer to electronic files included with this Submittal for additional Sample Violation Images and Video Clips of both Speed and Red-Light Violations captured under all weather conditions.

CAPTURED VIOLATION IMAGES - SPEED VIOLATION



VIOLATION DATA BAR

A secure data bar is embedded to each of the digital images collected at the instant the violation is captured. The data bar is simultaneously encrypted with the violation images to ensure there is no possible opportunity for evidence tampering.

Emphasis should be placed on the data bar being **embedded and not attached** into the image, as attaching the image could (in a court of law) potentially be misrepresented as a manipulation of the image.

Each violation is assigned a 16-digit permanent and encrypted RedCheck™ Identification Number which remains with the violation through the violation's entire lifecycle. This tracking number enables both RedSpeed and the Town authorized users to monitor and audit every violation captured by the system, and functions as a digital signature confirming the authenticity of the data.

The Data Line in all RedSpeed captured images will be **customized** to include all the specific requirements of the Town. The Data Line is clear and legible on the printed violation as well as on the on-line or computer screen image. As indicated on the sample violation images above, the existing bar includes, but is not limited to:

- Date of Violation
- Time of Violation
- Location of Violation
- Speed Travelled
- Posted Speed Limit-
- Lane of Travel
- Camera ID Number

System Maintenance

Town of Bladensburg, MD

Automated Enforcement Program. RFQ-FY 2024-004

RedSpeed®

SYSTEM MAINTENANCE

The maintenance and operation of RedSpeed enforcement equipment is paramount, and the staff provides all customers with prompt and professional service which results in swift problem resolutions. RedSpeed provides round the clock, 365 days per year on-call operators for prompt initial response. RedSpeed understands and accepts that all maintenance activities necessary to ensure the effective and consistent operation of the speed enforcement equipment (inclusive of cameras and ancillary equipment) shall be the sole responsibility of RedSpeed. All costs associated with electricity or other related power sources necessary to operate the systems shall also be the sole responsibility of RedSpeed.

We intend to safeguard the operational efficiency of the County's equipment using daily operational checks, preventative maintenance schedules and proprietary site monitoring software. Drawing upon our years of experience, RedSpeed has designed a comprehensive and proven Maintenance and Support Program which will maximize the daily performance of each of the enforcement systems. The result will be continued industry leading capture and efficiency rates. In addition, the data collected thru the procedures and site monitoring software will provide valuable information to support Town public education efforts.

RedSpeed's proposed program is comprised of three tiers:

- ✓ Preventative Maintenance,
- ✓ Daily Remote Monitoring and Response Maintenance
- ✓ Emergency Response.

It is RedSpeed's belief that a solid Preventative Maintenance Plan is critical to an enforcement program's success, allowing for the identification of potential problems before a malfunction (and subsequent downtime) can occur. These maintenance activities will be coordinated by RedSpeed's Field Services Engineering Manager and performed by RedSpeed field engineers during every site visit. A detailed rotation schedule ensures that every site is visited **a minimum of one time per month** by trained RedSpeed engineers.

Visual Mechanical Inspection conducted during a site visit includes:

- Visual inspection / examination of the base, pole, collar, camera and controller housing for damage, corrosion, cracks and alignment. This inspection is to confirm the equipment is both operationally and aesthetically sound.
- Visual inspection of all controller cabinets and camera housings to safeguard against leaks, general wear, or damage.
- Visual inspection of the pole and camera housing to ensure security of all earth connections, terminations, and ground rods.
- Visual examination of the ground reinstatement for the camera pole, controller, footway chambers and ducting.
- Visual inspection of the flash alignment and function. The proper functioning of the flash unit is confirmed by the technician firing the flash –observing the flash visually in addition to taking a live view image.
- Check protective finishes on all enclosures including paint, PVC and galvanizing.
- Checking of security and alignment of all hinges, brackets and camera enclosure fixing bolts. Adjustments and retightening will be performed according to specified torque settings. Damaged or missing fixings will be replaced.
- Checking of all controller cabinet and pole housing wiring and connections.
- AC Power -The AC power will be checked using a DVM (digital voltmeter). If the incoming AC is +/- 10%, both CDOT and BOE will be immediately notified of the reading by the Field Engineering Manager.

- Verify warning or circuit identification labels are not missing, damaged or illegible. Providing new labels if required.

During the site visit field engineers will also perform the following cleaning tasks:

- Cleaning of the camera enclosure glass to maximize image clarity.
- Removing all loose dust, grime, mud, and snow if weather permits.
- Removing all labels, stickers, posters, and graffiti.
- Washing down all external finished surfaces with suitable detergent.
- Repainting of metalwork if required.
- Removing dust and dirt from the interior pole base compartment and camera housing.
- Cleaning inside the inner surface of camera and flash lens cover.
- Lubricating padlocks following the cleaning operation to help prevent locks from freezing and rusting.

Visual Inspection of Roadway and Signage includes:

- All lanes will be inspected for street deterioration such as potholes or cracking and to confirm pavement markings and striping are in good condition. Should the technician identify a concern, the engineering manager will be advised, and the appropriate Town personnel notified.
- Verify all required Enforcement Notification signs are correct and present.
- Visual examination of in-ground detection devices for signs of wear or damage.

all maintenance activities performed on site are entered into an electronic maintenance log. Town authorized users may access copies of specific enforcement location maintenance logs via the SiteOps

The screenshot displays the RedSpeed SiteOps interface. On the left, a sidebar shows a tree view of site locations under Florida, with 'Bee Ridge Rd & S Tamiami Trail / US' selected. The main content area shows a checklist for this location, with tabs for Information, Live Camera View, Monthly Maintenance Log, Speed Report, Traffic Count Report, Support, and Settings. A table lists recent log entries with columns for Log ID, Log Date, Signage, Sensys Detection, Camera Lens, Metalwork Inspection, Auxiliary Items, and Technician Name. Below the table is a 'Create New R' button and a 'RSI SiteOps - Checklist Preview' section. The checklist includes sections for Signage, Sensys Detection, Camera Lens, Metalwork Inspection, and Auxiliary Items, each with a list of items to be checked and a 'Pass' status column.

Log ID	Log Date	Signage	Sensys Detection	Camera Lens	Metalwork Inspection	Auxiliary Items	Technician Name
3	9/6/2018	Yes	Good	Yes	Yes	Pass	Engineer 1
2	8/8/2018	Yes	Good	Yes	Yes	Pass	Engineer 1
1	7/13/2018	Yes	Good	Yes	Yes	Pass	Engineer 1

RSI SiteOps - Checklist Preview

Page 1 of 2

TECHNICIAN NAME: Engineer 1 Log DATE: 09/06/2018
 Site: Bee Ridge Rd & S Tamiami Trail / US 41 W/B Site ID: RSFL0019

- Signage** Verify presence & mounting

Sign 1	Yes
Sign 2	Yes
- Sensys Detection** Verify presence, condition & operation

Lane 1	Good
Lane 2	Good
Lane 3	Good
Lane 4	Good
- Camera Lens** Check for dirtiness or damage

Head 1 lens cleaned	Yes
Head 2 lens cleaned	Yes
- Metalwork Inspection** Check for damage & cleanliness

Camera 1 enclosure	Yes
Camera 2 enclosure	Yes
IR (Infrared) lenses (confirm operation)	Yes
Base	Yes
Blade	Yes
Collar	Yes
Shield (internal or pole mounted enclosure)	Yes
- Auxiliary Items** Check functionality & damage

Voltages & connectivity	Pass
Traffic signal & speed timing initiation module	Pass
USB Sensys interface module	Pass
PC module	Pass
Communication module (TCP/IP interface)	Pass
34AMP VAC transformer	Pass
Network cables	Pass
Time format & synchronization	Pass

Remote Maintenance

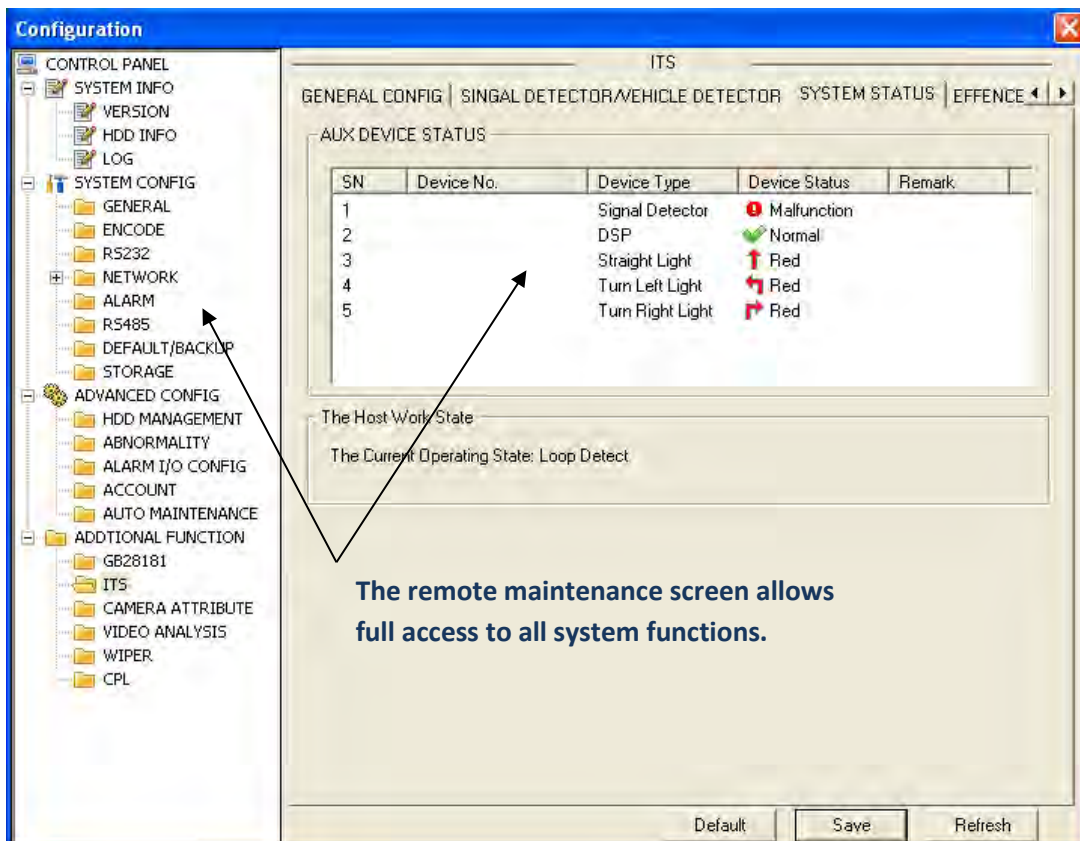
Continuous monitoring of the County’s sites by RedSpeed violation reviewers and field engineers in our Lombard facility ensures all sites are maximizing performance. These daily operational performance checks enable RedSpeed to immediately detect and resolve potential problems prior to site repairs being required or downtime incurred. When a fault is detected, the Field Engineering Manager will immediately notify the appropriate Village personnel of the occurrence and provide updates until the fault is resolved.

Daily Remote Quality Checks and Remote Site Monitoring

The proposed RedSpeed Intelligent Camera System (RICS) is designed to enable field engineers to view, monitor and configure all cameras remotely on a 24/7 basis to confirm and maximize peak functionality.

The following key items listed are only part of the systems capabilities:

- Ability to monitor all traffic signal phases, plus the ability to suspend individual lanes should the Village require it. i.e. construction taking place (the system will automatically highlight any malfunctions).
- Ability to monitor cameras at desired location and adjust settings accordingly, including adjustment of pre & post time settings for the violation video.
- Ability to monitor on site storage for all violation packets, including archival video storage for 14 days of data.
- Ability to view live video direct from site location – (this functionality is also accessible via Site Ops)
- Ability to download up to 14 days archival video – (this functionality is also accessible via Site Ops)



RICS units also produce a daily system operational log file which can be transmitted at any predetermined time. The camera unit carries out a self-check calibration and confirms that all system functionalities are operating correctly. Once the log files are confirmed, they are stored on Site Ops™ for future verification.

Remote site monitoring is also accomplished using RedSpeed's proprietary Site Monitoring Utility (SMU). Once the engineers have confirmed communications are operational via the SMU, they remotely view violation images from every approach at each of their assigned locations. This process will enable them to confirm the site is performing properly as they check the camera's phasing sequence, image quality, camera alignment and flash function.

The RedCheck™ system runs in conjunction with the back-office facility through a permanent high-speed communications link, providing direct access to each system through a secure network. When a violation is captured, the information is stored on a hard drive within the RedSpeed server and transmitted to RedSpeed's violation review team. Since the review process is carried out daily, any disruption in either the number of incoming violations from a particular site or the image quality of the incoming violations would be immediately apparent to the reviewing team. The reviewers, therefore, function as a secondary operational check to the SMU and field engineers.

As the RedSpeed violation reviewers are processing the incoming violations to be forwarded to the County's Police Department, they are also analyzing the images for potential problems. RedSpeed reviewers are specifically trained to immediately log any discrepancies, including blurred license plate images, insufficient lighting, incorrect camera angle or faulty video clips, by entering a fault into RedSpeed's web-based Fault Monitoring Utility (FMU) shown on the following page

The continuous monitoring of the FMU by both engineering and violation review personnel results in a double layer of monitoring. This redundancy guarantees that any discrepancies or malfunctions occurring at one of the County's systems (including the violation viewing website) will be:

- Immediately reported to the appropriate Palatine personnel,
- Addressed and resolved by RedSpeed.

If a member of either team discovers a quality problem, the fault is immediately logged into the FMU database, and a Worker Order (WO) is generated and distributed to the field engineering manager and the field engineer assigned to that site.

For expediency sake, the field engineer will first attempt to resolve the problem remotely. If a remote repair does not remedy the situation, the field engineer will be immediately dispatched to site. Once the malfunction has been corrected and confirmed, the Field Engineering Manager will close the Work Order.

The FMU is an invaluable component in RedSpeed's maintenance and support program for several reasons.

- First, it proves a digital log for tracking the status of both open and closed work orders. As a result, RedSpeed will guarantee that no fault will remain unresolved and that recurring issues can be quickly identified and addressed.
- Second, regularly review of the reports and statistical information produced by this tool to enable the RedSpeed management team to assess both site operational performance and field engineer efficiency levels. If a specific fault appears frequently, steps will be taken to identify why the fault is occurring and what measures must be taken to correct it.

A Real Time offence simulation system check is performed during the "green phase" of the signaling to verify proper operation and sequencing of image sets. This final check simulates an offense to verify all system parameters including image capture and encryption packaging are functioning properly.

Emergency Response Plan

Recognizing that emergencies do not always occur during normal business hours, RedSpeed will establish a 24/7 engineering support hotline specifically for use by Town authorized personnel. This communication channel is available to address any service requests from a simple service disruption to a total system knockdown.

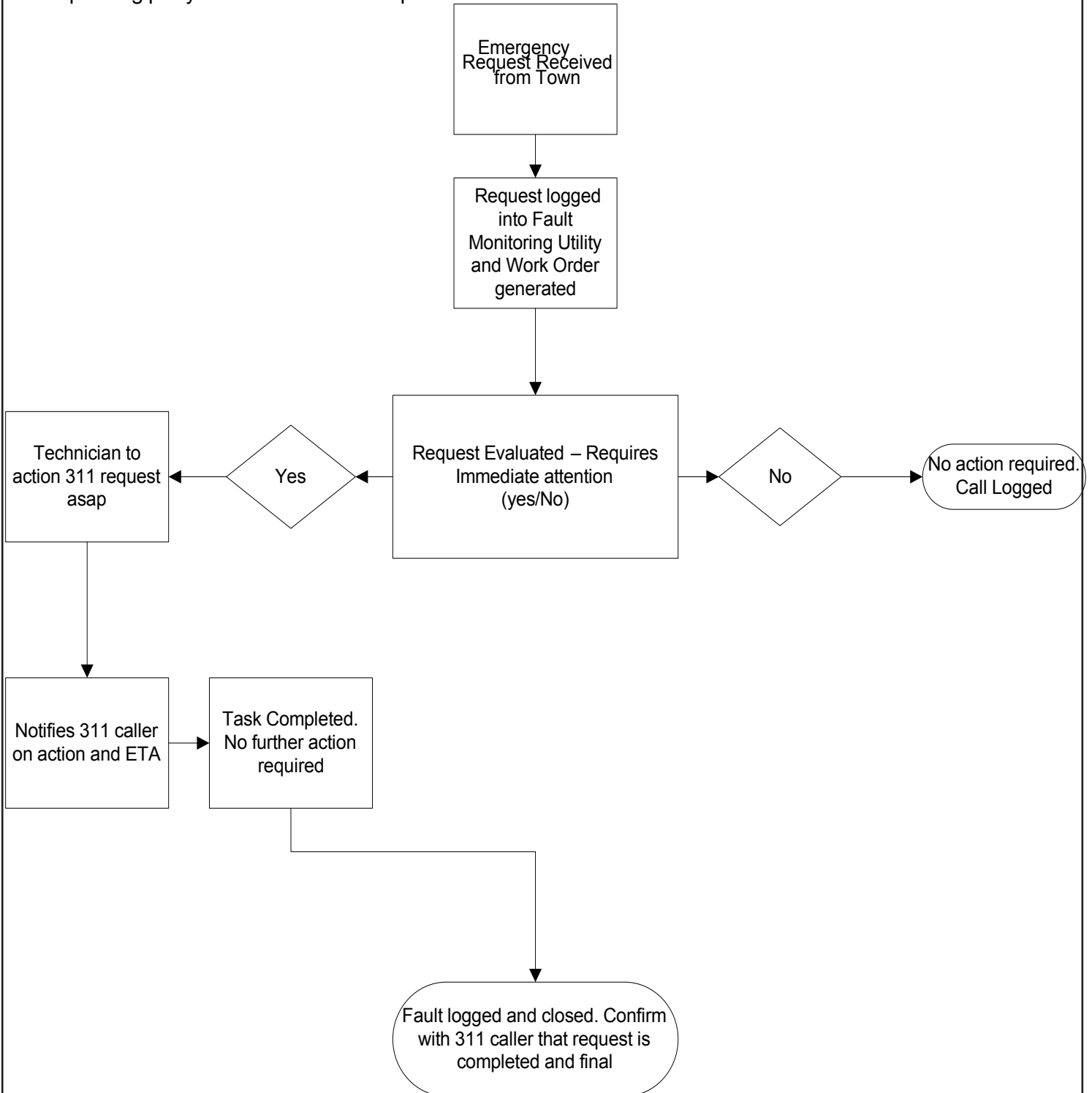
Since all systems are being continuously monitored via RedSpeed’s system monitoring utility, if a malfunction at an individual site is detected the on-call Field Services Engineer will immediately advise the appropriate Town personnel of the incident and will advise the steps that will be taken to correct the situation.

The table below identifies some common Client requests and RedSpeed’s committed response time.

PRIORITY REQUESTS	RESPONSE TIME
Knockdown – Make safe	During Normal Business Hours – 2 hours max After Hours – Within 4 hours
Knockdown – Repair & Reinstatement to full operational status	Within 72 hours
311 Requests- Managed ASAP	According to request (Urgent)
Routine Daily Maintenance Repairs	Within 2 – 8 hours
Disruption in service of any system malfunction	Within 24 Hours
Street cable replacement	Within 48 hours
Sign Replacement	Within 48 hours
Remove Graffiti and Touch-up Equipment	Within 48 hours

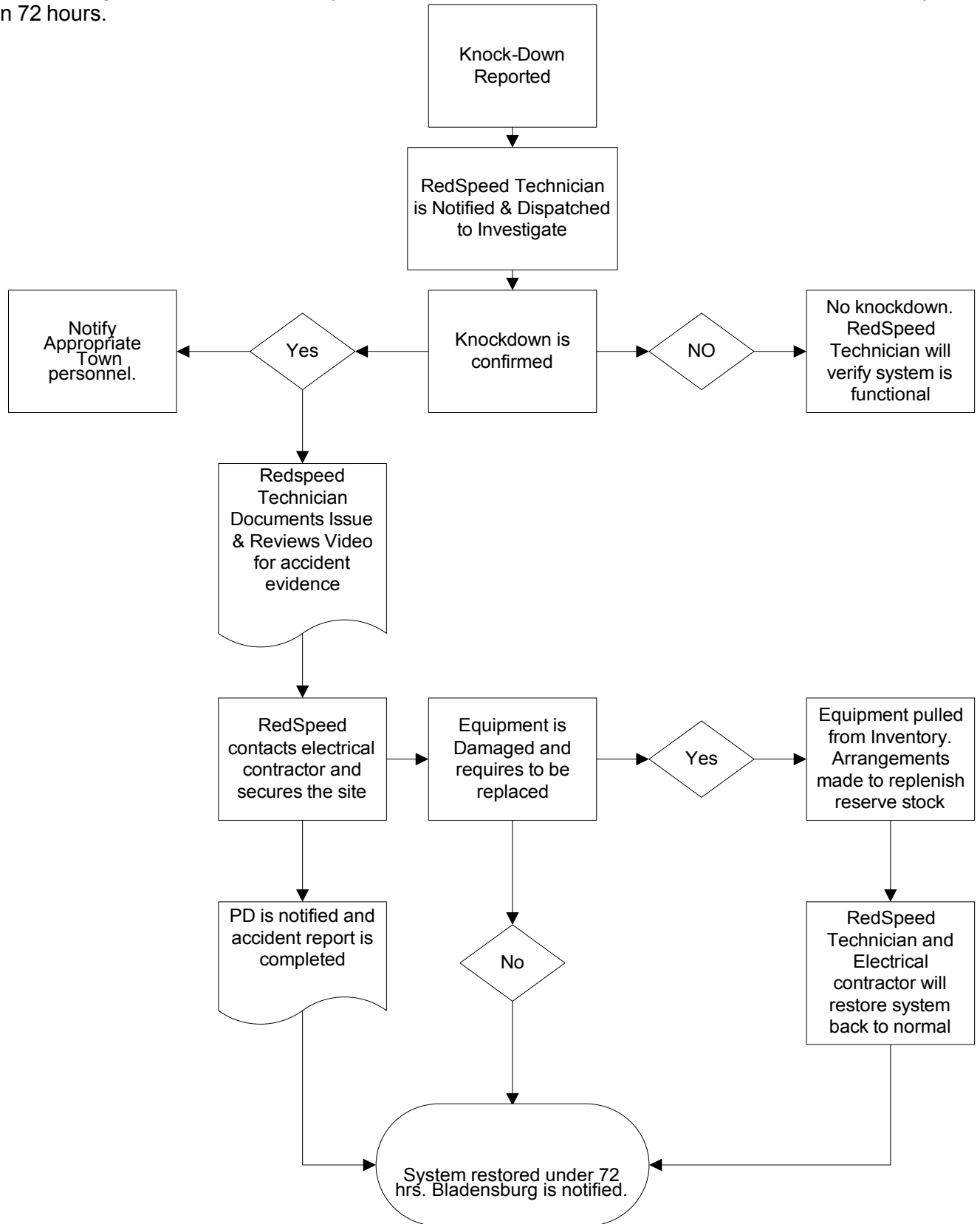
Emergency Response Flow Chart

Upon receiving the County's call or email request, the on-call field engineer will take down the pertinent details and immediately document the request within the Fault Monitoring Utility to generate a work order. If the request is relative to the operation of a site, the field engineer will work to identify the source of the problem and determine if the problem can be corrected remotely. If a remote correction is an available option, the field engineer will take the necessary steps to restore the site's functionality and advise the requesting party once the work is completed.



Knockdown Procedure Flow Chart

During a critical situation such as a knockdown, RedSpeed understands that nothing less than an immediate response is acceptable. The following flow chart demonstrates RedSpeed’s action plan for these instances. Working in cooperation with the relevant Town departments and our partner subcontractors, RedSpeed will guarantee the downed systems will be replaced and restored to full operational capacity within 72 hours.



Violation Processing

Town of Bladensburg, MD

Automated Enforcement Program. RFQ-FY 2024-004

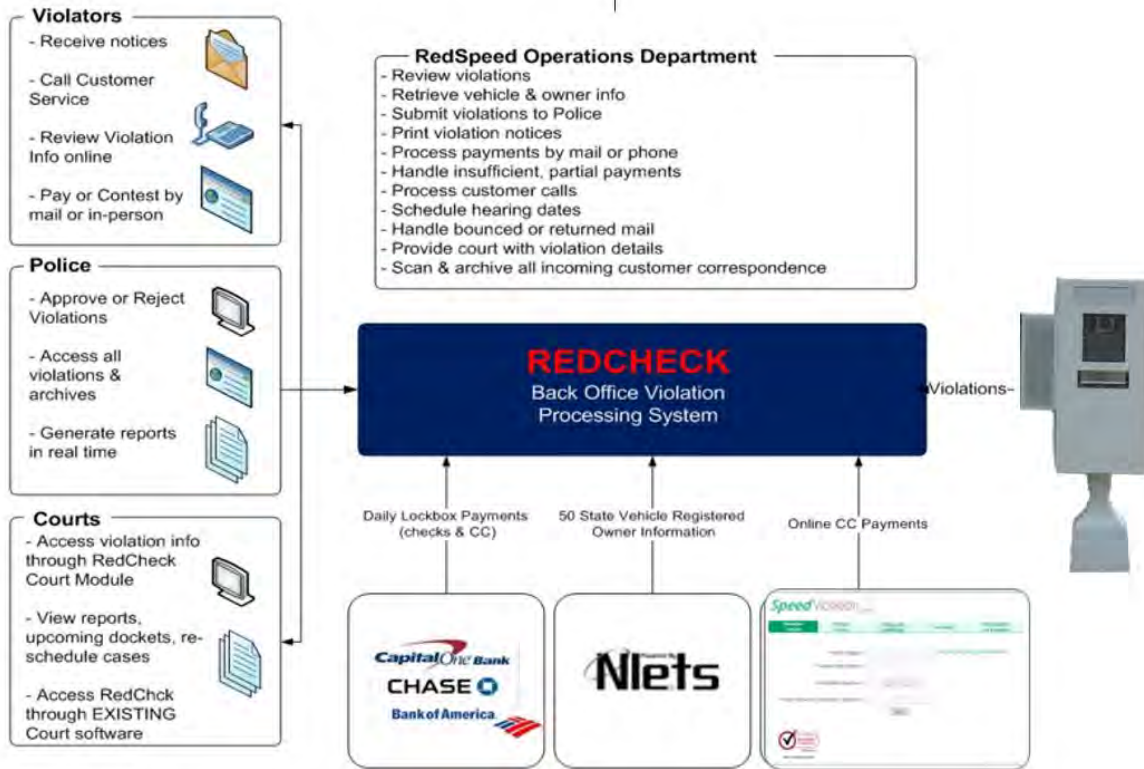
RedSpeed®

WEB BASED VIOLATION PROCESSING AND DOCUMENT MANAGEMENT SYSTEM

RedCheck™ - RedSpeed's proprietary, Violation Management Software, is an entirely web-based, complete Document Management System. RedCheck™ provides authorized municipal users with the freedom and flexibility to perform 100% of the violation reviewing functions 24/7 from any location where Internet access is available. In addition, authorized municipal users may view notice documents and produce statistical reports (depending upon the roles assigned to their log-in credentials).

BENEFITS OF THE INTERNET-BASED REDCHECK™ SYSTEM

- RedSpeed's Violation Processing and Document Management System is completely Internet based, so there is no need for additional software to be installed on the County's machines and no risk of compatibility issues with Seat Pleasant's existing data infrastructure.
- The RedCheck™ software system is easily customized to the needs of specific municipal agents, and technical support is available 24 hours a day / 365 day a year.
- RedCheck™ reviewing software is compatible with the following browsers: Internet Explorer / Edge, Google (Chrome and Safari), Fire Fox.
- PC (Minimum System Requirements): Windows 7 SP1 & Higher, Mac OS 10.10 and higher.
- Cloud based and secure, RedCheck™ allows remote, authorized users 24/7 access to a violation's lifecycle from any web-enabled computer thru a secure Internet portal. For optimum utilization, it is recommended that a Windows based browser be employed.
- Utilizing simple "point and click" navigation, authorized users can swiftly and easily review violator information, view static and video images, approve, and reject violations in less than 12 seconds.
- Accuracy logic has been programmed into the interface, indicating vacant information fields, or incorrectly input data, maintaining the validity and integrity of the RedCheck™ Database System.
- Software updates can easily be applied by RedSpeed without disrupting municipal user workflow.
- All captured violation data is immediately transmitted back to the RedSpeed data center thru a secured VPN connection and imported directly into RedCheck™. As a result, no long-term data storage devices are required at the camera site.
- **All** processing of violations is done by vetted RedSpeed employees at the RedSpeed corporate headquarters in Lombard, Illinois. No data is sent out of the country for processing.
- ***It is understood that all still and video images recorded by RedSpeed systems at designated sites within Bladensburg are the property of the Town. In the event the relationship between Bladensburg and RedSpeed is severed, all data captured prior to that event will be processed in full and made available to the municipality***



RedCheck™ Login Screen

Authorized municipal users access RedCheck™ by entering a unique and secure login and password on the Log In screen shown below. Individual user accounts authenticate the identity of a user and are used to grant or deny users access to resources through the assignment of specific “User Roles”. User viewing privileges and functionality are based on a pre-established set of entitlements which would be assigned according to the County's direction. All users are not required to have the same set of privileges, with roles being assigned according to the user's position and function.

The assignment of specific access to individuals ensures accurate auditing of the users within the RedCheck environment. Any modifications, calls taken, or notes can be audited and traced. All information, including the violation numbers, dates and times of incidents, license plate numbers, registered owners' information, and the status of violations are viewable and easily retrievable all from one screen to authorized municipal users.

Municipalities requiring an additional level of security above our username/password and digital certificate authentication strategy, can use Red Speed's optional Two Factor Authentication strategy. This mechanism uses a combination of something a user knows (username/password) and something a user has (one-time password). Users can plug in a USB key fob and generate their own one-time password, this in combination with their username, will allow access to the RedCheck™ Software application for police reviewing.

RedSpeed®USA

Log In

Please enter your username and password.

Account Information

Username:

Password:

Keep me logged in

or click [here](#) if you forgot your password.

Once the Log-in process has been completed, a list of violations awaiting Operator Review will display. This list is comprised of violation data which was encrypted at site when captured and decrypted upon arrival at the RedSpeed Lombard, IL headquarters as it is uploaded into RedCheck™.

Captured Violation Images –Speed Zone Violations

Step 1 – RedSpeed Initial Violation Verification

Specially trained RedSpeed Violation Review personnel review the still images of a violation for possible discrepancies and to evaluate the clarity of the captured images.

RedSpeed's multiple video camera system is designed to capture only the rear of vehicles travelling thru the enforced school zone or intersection. **At no time will any digital images captured by the camera include facial images which could identify the driver, passenger, or contents of the vehicle.**

The RedCheck™ System allows both RedSpeed and Police reviewers to “play and view” not only a full motion 12 second video of each violation but also four unique still scenes:

- (1) An image of the vehicle at the report line,
- (2) An image of the same vehicle a specific distance further in the enforcement zone,
- (3) A full shot of the back of the vehicle including license plate image, and
- (4) A close-up image of the license plate.

The RedSpeed Reviewer crops the zoomed-in license plate image from an image specifically captured for this purpose. This optimized license plate image is used to establish the vehicle's ID and is also printed directly to the notice.





Captured Violation Images – Red Light Violations

RedSpeed Violation Reviewers perform the same function for the initial review of red-light violations as they do for Speed Zone violations.

RedSpeed's multiple video camera system again captures only the rear of vehicles travelling thru the enforced intersection. **At no time will any digital images captured by the camera include facial images which could identify the driver, passenger, or contents of the vehicle.**

In addition to the full motion 12 second video (6 seconds before the violation and 6 seconds after) four unique still scenes are presented:

- (1) An image of the vehicle behind the reporting line,
- (2) An image of the same vehicle and scene captured with the vehicle beyond the reporting line,
- (3) A full shot of the back of the vehicle including license plate image, and
- (4) A close-up image of the license plate.

RedSpeed Violation Reviewers then view the full motion video for verification a violation has taken place and meets the criterion set forth by the Town. RedSpeed will work closely with the County's Program Manager to establish these reviewing guidelines as it will facilitate consistency between the RedSpeed Violation Review Team and the county's Police Reviewers.

The RedCheck™ Client System provides the ability for the acceptance or rejection of infraction sets and provides multiple violation reject reasons to pinpoint the specific cause of a rejection. Any vehicles designated by the Town as "exempt" (such as vehicle's participating in funeral processions or moving thru an officer controlled intersection) can be sorted out and rejected during this initial review phase.



Tamiami Tr / US 41 & Bahia Vista St S/B

Site code	Date	Time	Amber time	Red time	Lane	Frame
RSFL0021	09/04/18	08:04:16.3 AM	4.5	0.1	L2	A
Site Name Tamiami Tr / US 41 & Bahia Vista St S/B						



Tamiami Tr / US 41 & Bahia Vista St S/B

Site code	Date	Time	Amber time	Red time	Lane	Frame
RSFL0021	09/04/18	08:04:17.1 AM	4.5	0.9	L2	B
Site Name Tamiami Tr / US 41 & Bahia Vista St S/B						



Site code	Date	Time	Amber time	Red time	Lane
RSFL0021	09/04/18	08:04:16.4 AM	4.5	0.1	L2
Site Name Tamiami Tr / US 41 & Bahia Vista St S/B					



STEP 2 – Secondary RedSpeed Supervisor Review / Registered Owner Identification

Following this initial review, a supervisor reviews and verifies the images and video of the violation for a 2nd time before submitting the license plate number and type of plate (passenger, temporary, or other) for verification thru the Division of Driver Services and the Maryland Motor Vehicles Administration (MVA), or a third-party data provider such as Nlets or LexisNexis Collection Services. RedSpeed has also been approved by the Virginia Dept. of Transportation to query Virginia tags directly thru their portal. After undergoing an extensive and stringent security check, RedSpeed has been approved as a Strategic Partner with the National Law Enforcement Telecommunications System (**Nlets**). This partnership provides immediate (within 6 seconds of making the request) Department of Motor Vehicles information for each record: Make of Vehicle; Year of Vehicle; VIN; Registration Date; Registered Owner Name(s); Registered Owner(s) Address, County, State, and Zip Code; Ownership Status from a database covering **all 50 States**.



Once the registered owner information has been received, the violation is reviewed a 3rd and final time by a RedSpeed Violation Review Supervisor before it becomes available to the County's Police Reviewers through the Web Based RedCheck™ Client System.

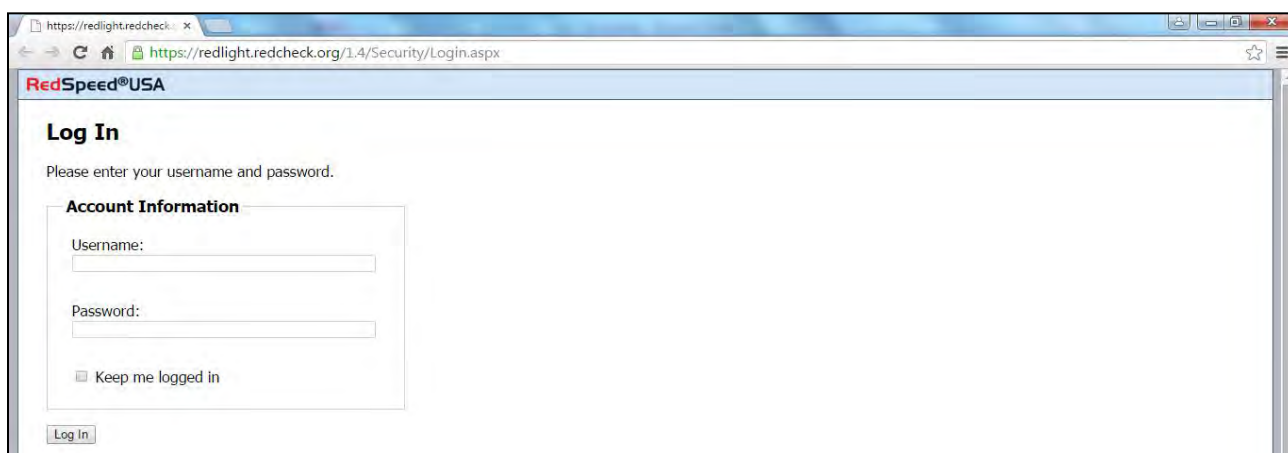
TOWN POLICE DEPARTMENT VIOLATION REVIEW AND APPROVAL

Authorized municipal users have the freedom and flexibility to perform 100% of the reviewing functions 24/7 from any location where Internet access is available thru the web based RedCheck Violation Processing System. In addition, authorized municipal users can view notice documents and produce statistical reports (depending upon the roles assigned to their log-in credentials).

- ✓ Through the RedCheck™ System an Officer can review all the static images, the video clip and violator information and render a decision to approve or reject the violation in less than 12 seconds.
- ✓ State law requires Palatine to designate a deputized law enforcement officer to review these violations and approve or reject them as enforceable infractions,

RedSpeed will provide, at no cost to the Town, all training and training manuals necessary to ensure all individuals responsible for the reviewing and approving of violations are knowledgeable and proficient with all the components of the RedCheck™ system.

Authorized users would begin by accessing the RedCheck™ Violation Reviewing system through <https://redlight.redcheck.org>. Users are then required to input their username and password for authentication on the log-in screen shown below.



https://redlight.redcheck.org/1.4/Security/Login.aspx

RedSpeed®USA

Log In

Please enter your username and password.

Account Information

Username:

Password:

Keep me logged in

Once the username and password have been authenticated, Police and Municipal users will automatically be presented with a list of violations awaiting approval on the Review Violation Screen below.

Violation Review Screen

Webpage Screenshot

RedSpeed®USA Reports Welcome, Mike Abbst [Log Out]

Search criteria

Violation #:

Owner:

Address:

Plate #: State:

From: To:

Violation Status

All Status

Wait for Police Approval

Hearing Scheduled

Contest by Mail

1st Notice

Determination of Liability

Location

All Locations

RS10127 - E New York St & N Farnsworth Ave E/B

RS10129 - E New York St & Commons Dr E/B

RS10130 - E New York St & Commons Dr W/B

RS10133 - E New York St & N Eola Rd E/B

RS10134 - E New York St & N Eola Rd W/B

Municipality

All Municipality

IL Aurora (C)

Name	Location	Date/Time	Lane	TIR	Speed	Status
JACKSON, CRYSTAL	E New York St & N Eola Rd W/B	3/9/2016 4:18 PM	4	1	49.01	Wait for Police Approval
BURIAN, EMILY	E New York St & Commons Dr E/B	3/9/2016 3:07 PM	5	1	17.04	Wait for Police Approval
GONZALEZ, ERNESTO G	N Farnsworth Ave & Molitor Rd N/B	3/9/2016 3:02 PM	1	18	11.83	Wait for Police Approval
CASTILLO, JORGE	E New York St & N Farnsworth Ave E/B	3/9/2016 2:57 PM	3	1	21.47	Wait for Police Approval
PICASSO, THALIA	E New York St & Commons Dr E/B	3/9/2016 2:54 PM	1	1	19.39	Wait for Police Approval
RIOS, JOSE	E New York St & Commons Dr E/B	3/9/2016 2:42 PM	2	1	20.22	Wait for Police Approval
DE LEON, GRACIELA	N Farnsworth Ave & Molitor Rd N/B	3/9/2016 2:14 PM	3	1	22.41	Wait for Police Approval
CORTEZ-ORTIZ, KARINA	N Farnsworth Ave & Molitor Rd N/B	3/9/2016 2:04 PM	2	1	38.74	Wait for Police Approval
QUALITY METALS CORP	N Farnsworth Ave & Molitor Rd N/B	3/9/2016 2:03 PM	1	1	25.03	Wait for Police Approval
PV HOLDING CORP	N Farnsworth Ave & Molitor Rd N/B	3/9/2016 1:11 PM	2	0	38.77	Wait for Police Approval
DALEIDEN, DANIEL O	E New York St & Commons Dr E/B	3/9/2016 12:42 PM	2	0	48.63	Wait for Police Approval
CORRAL BUSTAMANTE, CRISTAL	N Farnsworth Ave & Molitor Rd S/B	3/9/2016 12:42 PM	1	3	11.86	Wait for Police Approval
GONZALES, MARIO F	N Farnsworth Ave & Molitor Rd N/B	3/9/2016 12:35 PM	1	1	15.81	Wait for Police Approval
ALI, FARHAN	E New York St & Commons Dr E/B	3/9/2016 12:30 PM	3	1	42.57	Wait for Police Approval
OCHOA, ALVA R	E New York St & Commons Dr E/B	3/9/2016 12:24 PM	4	1	60.89	Wait for Police Approval
LOPEZ, ROBERTO	N Farnsworth Ave & Molitor Rd S/B	3/9/2016 12:16 PM	1	10	5.9	Wait for Police Approval
TAMBO, CECILIA A	N Farnsworth Ave &	3/9/2016				Wait for Police

Click Here To Play Video

Violation #: 1708000372274919 Type: RedLight Owner: RIOS, JOSE

Plate number: V280992 Plate state: IL Address: 414 SUPERIOR ST

Make: FORD Year: 2006 C/S/Zip: AURORA IL 605052882

VIN: 1FMEU75846UA0972 Exp. date: 02/01/2016 Origin: SOS - Match On Plate Only

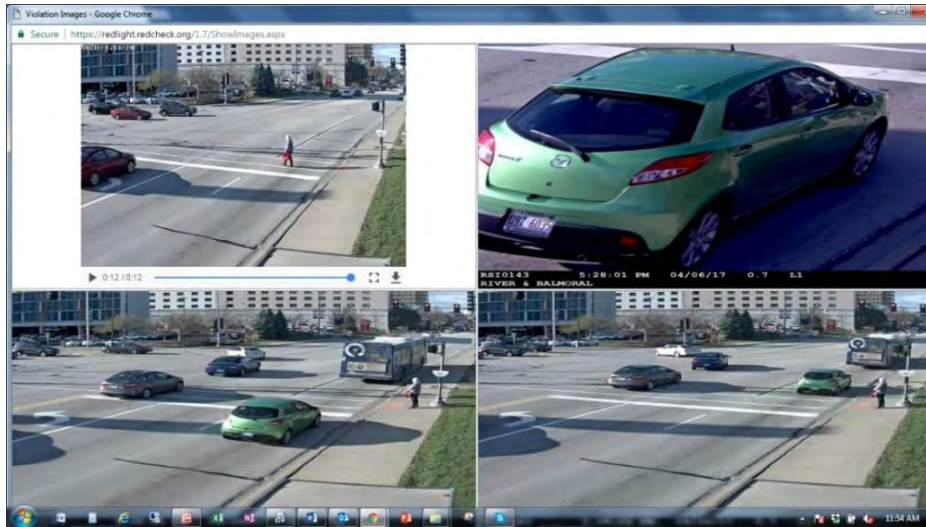
Status: Wait for Police Approval Info:

2462 Awaiting Review | 0 Approved | 0 Rejected

https://redlight.redcheck.org/1.5/default.aspx Mon Mar 21 2016 12:12:56 GMT-0500 (Central Daylight Time)

1. The total number of violations awaiting review is displayed at the bottom of the display and will provide a running tally as violations are approved or rejected.
2. When the first violation is selected to review, the video will begin playing automatically. There is no need to pre-download videos.
3. Registered Owner Names are displayed both in the violations listing as well as directly below the Video box.
4. Information requiring verification – such as License Plate Number and Vehicle Make - is displayed directly below the Video box.
5. Selecting Approve or Reject will automatically forward to the next violation and the video clip will begin playing.
6. The Name, Location and Lane columns can be sorted by clicking within the specific column heading box.

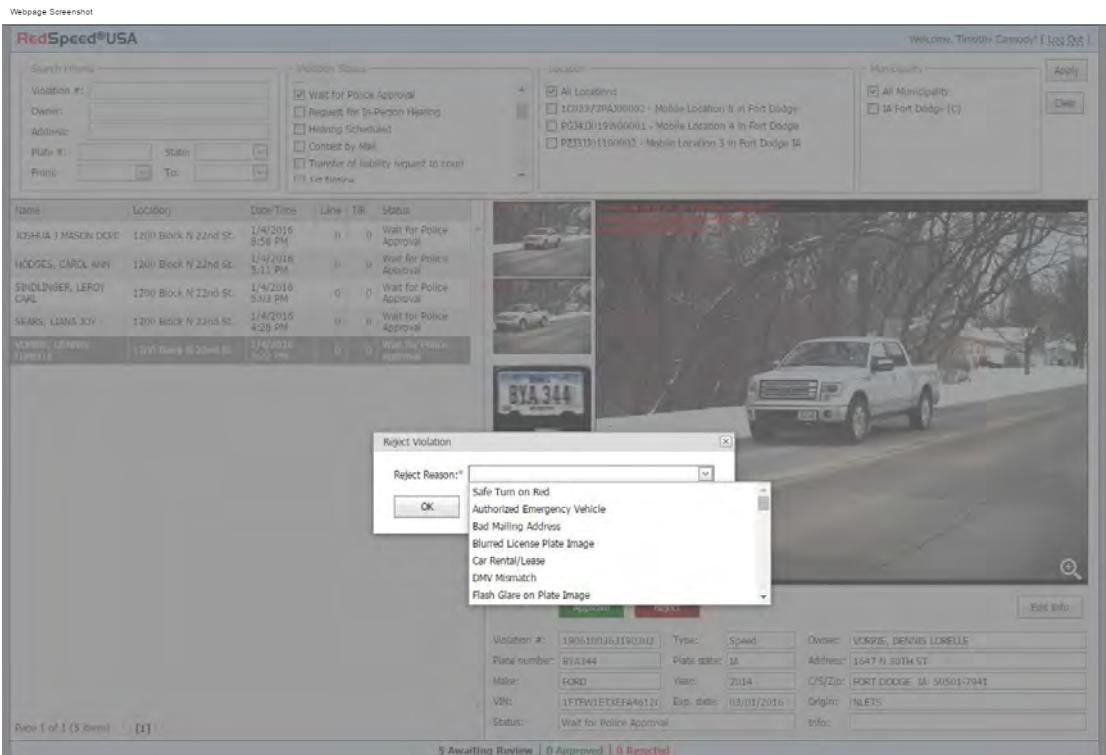
All original, captured images can be viewed in a full screen enlargement mode with a single click.



The Town of Bladensburg will always have the final decision on whether a citation is issued.

Approval or Rejection of violations is carried out by selecting either the Approve or Reject box after the still images and video clip have been reviewed.

When rejecting violations, users are prompted to enter a reject reason from a pre-defined, drop-down list as shown below. "Batch" approvals or rejections are not allowed by the RedCheck™ software.



After viewing the violation video clip and confirming the vehicle information corresponds with the still images, the officer may elect to Approve or Reject the violation by clicking the appropriate icon.

Once the reviewing Police Officer has approved the violation a Notice of Liability will be printed and mailed via First Class mail to the vehicle's registered owner.

To ensure no violations are approved outside of the allowed reviewing window, violations approaching the cut-off time are color coded for easy identification as pictured below.

RedSpeed®USA Actions Reports Welcome, Todd Tschetter! [Log Out]

Search criteria

Violation #:

Owner:

Address:

Plate #: State:

From: To:

Violation Status

NDV Affidavit [0]

Supervisor Review [37]

Uniform Traffic Citation [0]

Final Administrative Order [18]

Administrative License [15]

Location

All Locations

RSFL0006 - Tuttle Ave & Bahia Vista St S/B

RSFL0007 - Bahia Vista St & S Tuttle Ave E/B

RSFL0008 - Tuttle Ave & Bahia Vista St N/B

RSFL0009 - Beneva Rd & Fruitville Rd S/B

RSFL0010 - Tuttle Ave & Fruitville Rd S/B

Dismissal

All Dismissal

CROSS LANE TRIGGER

EMT/POLICE/FIRE/GOV/DIPLOMAT

FLAGMAN / WAVETHRU

FUNERAL PROCESSION

Name	Location	Date/Time	Lane	T/A	T/R	Speed	Status
	Bahia Vista St & S Tuttle Ave E/B	9/30/2018 2:32 PM	2	4.0	0.8	23.69	Supervisor Review
	Tuttle Ave & Fruitville Rd S/B	10/2/2018 9:55 AM	1	4.5	0.8	23.69	Supervisor Review
	Tamiami Trail & Bee Ridge Rd S/B	10/2/2018 2:16 PM	1	4.9	0.1	14.96	Supervisor Review
	Fruitville & N Lockwood Ridge E/B	10/2/2018 4:35 PM	1	4.9	0.1	30.27	Supervisor Review
	Tuttle Ave & Fruitville Rd S/B	10/3/2018 6:38 AM	1	4.5	0.1	17.42	Supervisor Review
	Tamiami Trail & Bahia Vista St N/B	10/4/2018 12:46 AM	2	4.5	13.2	18.26	Supervisor Review
	Tamiami Trail & Bahia Vista St N/B	10/4/2018 5:09 AM	3	4.5	0.1	33.78	Supervisor Review
	Tamiami Trail & Bee Ridge Rd S/B	10/4/2018 12:14 PM	1	4.9	0.2	12.48	Supervisor Review
	Bee Ridge Rd & Tamiami Trail W/B	10/5/2018 11:13 AM	1	4.9	0.1	11.72	Supervisor Review
	Tamiami Trail & Bee Ridge Rd S/B	10/5/2018 4:56 PM	1	4.9	0.3	48.47	Supervisor Review
	Fruitville & N Lockwood Ridge E/B	10/5/2018 5:55 PM	1	4.9	0.1	12.78	Supervisor Review
	Bahia Vista St & S Tuttle Ave E/B	10/8/2018 2:34 PM	3	4.0	0.2	37.78	Supervisor Review
	Bahia Vista St & S Tuttle Ave E/B	10/9/2018 10:38 AM	1	4.0	0.3	12.68	Supervisor Review
	Bee Ridge Rd & Tamiami Trail W/B	10/10/2018 1:47 PM	1	4.9	0.2	18.54	Supervisor Review
	Fruitville Rd & N Tuttle Ave W/B	10/10/2018 3:08 PM	1	4.9	0.2	14.70	Supervisor Review
	Tuttle Ave & Fruitville Rd S/B	10/12/2018 7:49 AM	1	4.5	2.4	15.14	Supervisor Review
	Washington Blvd & Fruitville Rd N/B	10/12/2018 9:18 AM	1	4.1	0.1	18.30	Supervisor Review
	Bee Ridge Rd & Tamiami Trail W/B	10/12/2018 11:00 PM	3	4.9	135.	15.55	Supervisor Review
	Tamiami Trail & Bee Ridge Rd N/B	10/13/2018 1:13 PM	1	4.9	0.5	14.12	Supervisor Review

Video Playback

Click Here To Play Video

Violation/Vehicle

Violation #: 201020000348877B Type: RedLight

Plate number: 2179QI FL Expires: 04/30/2019

Make: FORD Model:

Color: WHI Year: 2005

VIN #: 1FMZU63K35UAS4903 Type: AU

Status: Supervisor Review (OTHER)

Registered Owner

Owner: FARKAS GABOR FUSZFAS

Date of Birth: 04/30/1971

Address: 2256 DATURA ST

C/S/Zip: SARASOTA, FL, 34239-3913

License #: F212247711500

Origin: FLHSMV

VIOLATION NOTIFICATION

Warning Notices

When no enforcement locations are launched, Warning letters are printed (for a period designated by the Town) for captured violations. After the initial warning period, through the violation Status feature of the system, infraction notices are printed automatically using RedChecks's date-based violation print schedule. This automated functionality ensures no violation notices are sent outside the legally defined issuance parameters.

Notice Printing and Mailing

As part of the turnkey, back-office processing solution proposed by RedSpeed, all supplies necessary to produce and distribute violation notices on behalf of the Town shall be provided by RedSpeed. Printing and mailing of full color first Notices of Violation via first class mail will be done by RedSpeed employees at the corporate headquarters in Lombard, Illinois. Notices approved by the Town are printed and mailed the following business day.

All Notices of Violation generated by RedSpeed on behalf of the Town will include one set of images showing the cited vehicle at the report line plus a cropped and optimized zoom shot of the license plate. In addition, notice recipients will be provided with detailed information regarding:

- Payment options with a remittance envelope is included with each Notice of Violation.
- On-line Violation Viewing and Payment instructions for <https://secure.redlightviolations.com> or <https://secure.SpeedViolation.com> and
- Toll free customer service hotlines for bi-lingual "live" operator assistance in both English and Spanish plus the street address for the in-person customer service store front.

The number of printed citations prepared for mailing is verified multiple times prior to being delivered by a RedSpeed employee to the post office the same day as printed.

This verification includes:

- ✓ Confirming number of violations selected and sent to the print queue,
- ✓ Confirming the number of citation notices passed thru the envelope inserter matches number sent to the print queue,
- ✓ Final manual count of the prepared citation envelopes.

Any citations returned bearing a yellow forwarding address label affixed to them by the Postal Service are updated and reissued within 48 business hours of receipt.

Audit Trails

As stated previously, both RedSpeed Violation Review Specialists and Municipal Users access RedCheck™ by entering a unique and secure login and password. Individual user accounts authenticate the identity of a user and are used to grant or deny users access to resources through the assignment of specific "User Roles".

The assignment of specific access to individuals ensures accurate auditing of ALL users within the RedCheck environment. Any modifications, calls taken, or notes can be audited and traced. All information, including the violation numbers, dates and times of incidents, license plate numbers, registered owners' information, and the status of violations are viewable and easily retrievable all from one screen to RedSpeed team members and authorized municipal users.

The screenshot displays the RedSpeed USA Reports interface. At the top, there are search filters for Violation #, Owner, Address, Plate #, State, and From/To dates. Below these are filters for Violation Status (e.g., Wait for Law Enforcement Response, Wait for Supervisor Confirm) and Location (e.g., All Locations, MD 203267, etc.).

Name	Location	Date/Time	Lane	T/B	Speed	Status
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/12/2019 8:17 AM	3	0.0	48.29	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/12/2019 7:56 AM	3	0.0	47.65	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/12/2019 7:45 AM	2	0.0	55.48	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/12/2019 7:43 AM	1	0.0	47.2	Wait for Police Approval
NB SILVER HILL ROAD @ SCOTT KEY - ATWOOD	NB SILVER HILL ROAD @ SCOTT KEY - ATWOOD	6/12/2019 7:28 AM	2	0.0	55.25	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/12/2019 6:48 AM	2	0.0	50.33	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/12/2019 6:45 AM	1	0.0	47.2	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/12/2019 6:43 AM	3	0.0	48.77	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/12/2019 6:43 AM	2	0.0	47.2	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/12/2019 6:35 AM	2	0.0	50.11	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/12/2019 6:21 AM	2	0.0	53.24	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/12/2019 6:02 AM	3	0.0	50.50	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/12/2019 6:02 AM	1	0.0	54.58	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/12/2019 7:58 PM	2	0.0	48.09	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/11/2019 7:53 PM	1	0.0	48.77	Wait for Police Approval
SB Silver Hill Road @ Scott Key Drive - Atwood	SB Silver Hill Road @ Scott Key Drive - Atwood	6/11/2019 7:52 PM	2	0.0	47.2	Wait for Police Approval

The detailed view on the right shows a video of a red car on a road. Below the video are buttons for 'Approve', 'Reject', 'Images', 'Download', 'Notices', and 'Edit Info'. The 'Notices' button is highlighted with a red box. Below these buttons is a form with fields for Violation #, Plate number, Make, VIN, Status, Type, Speed, Plate state, Year, Exp. date, Owner, Address, City/Zip, and Origin.

Authorized users may view and print copies of all notices sent regarding a violation by simply selecting the Notices icon as indicated above. All correspondence remitted by the violator is also scanned into the violation history where it may be downloaded or printed by authorized users.

The Notice List dialog box contains a table with the following data:

Notice Type	Print Date
Delinquency Notice	01/22/2019
1st Notice	12/18/2018

At the bottom of the dialog, there is a page indicator 'Page 1 of 1 (2 items)' and an 'OK' button.

The Download Violation's Files dialog box asks 'What kind of documents should be included?' and has the following checked options:

- Images
- Video
- Notices
- Other Docs

Buttons for 'OK' and 'Cancel' are at the bottom.

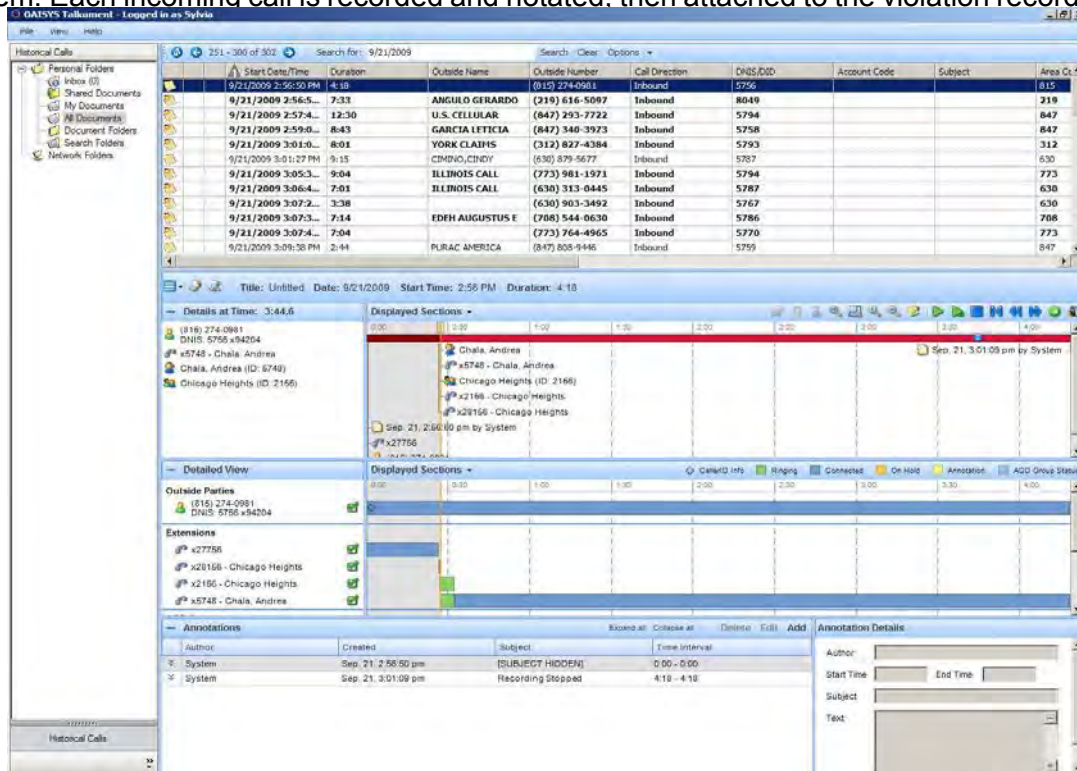
Violator Support Call Center and Walk-In Center

RedSpeed operates a full-service Call Center, headquartered in Lombard, Illinois (**NOT outsourced to another Country as most competitors do**) available Monday through Friday, from 8 a.m. to 5 p.m. Accessible thru a Town Specific Toll-Free number, callers are connected to live Call Center Operators fluent in English and Spanish (RedSpeed also offers operators fluent in other languages as necessary). All systems conform to ADA requirements with TTY available for the hearing impaired. These operators have on-line access to all violation information, including the still and video images associated with a violation. A manual of Frequently-Asked-Questions (FAQs) is used by Call Center staff to respond uniformly to all inquiries.

Customer Service calls are recorded and monitored by Supervisors for quality assurance and training purposes, with hold times not exceeding 2 minutes during the hours of operation. Calls shall be answered and handled within five (5) minutes.

A **“Pay-by-Phone”** option is also available, for callers wishing to pay their violations outside of normal business hours using a credit or debit card.

The highest level of customer service is assisted by the RedCheck™ Oasys Call Retrieval and Archival System. Each incoming call is recorded and notated, then attached to the violation record.



Call Center Representatives can assist callers with a multitude of services including:

- In-person hearing scheduling,
- Violation Payment Processing via credit or debit card.
- Addressing Frequently Asked Questions by referencing an FAQ Manual to ensure all inquiries are responded to uniformly per the Village’s specifications

Each Representative is specially trained to:

- Work well with the public and provide real solutions to any problems incurred by callers,
- Be intuitive to sense a caller’s frustration and the ability to create a calming effect,
- Strong verbal communication with an emphasis on maintaining a non-confrontational voice.



Upon award of the contract, RedSpeed will install an ADA accessible pay station within Bladensburg at a location to be designated by the Town to serve as a walk up customer service center. Available Monday thru Friday from 8:00am-5:00pm, this pay station will be equipped and posted with informational instructions to :

- ✓ Process payments,
- ✓ Submit requests for in-person court appearances,
- ✓ Release MVA flags after processing (or confirming) payment and
- ✓ Answer general questions and inquiries.

This securely mounted compact unit will be equipped with an Internet enabled computer where violators may view their violation images by visiting RedSpeed's online violation viewing portals <https://secure.redlightviolations.com> or <https://secure.speedviolation.com>.

On-Line Violation Viewing and Payment Portal

RedSpeed maintains an on-line system, available 24 hrs. per day 365 days per year, which enables citation recipients (speed or red-light violations) to not only view three high resolution scene images including the plate image but also “play” a full motion video of their violation.

All original, captured images can be viewed in a full screen enlargement mode with a single click. To ensure security, access to the individual’s violation is only available after the individual inputs their citation number, license plate number and verification characters.

RedSpeed employs multiple mechanisms to safeguard this online payment portal from hackers and other unauthorized users.

A Secure Socket Layer (SSL) URI scheme and VeriSign SSL certificate are used to encrypt and authenticate the Hypertext Transfer Protocol (HTTP) connection.

To ensure each transaction through the website is being made by a user and not an automated computer attack, a CAPTCHA test is required which requires the user to enter distorted numeric verification characters not recognizable to computers.

RedLightViolations

The screenshot shows the RedLightViolations website interface. At the top, there is a navigation menu with links for Violation Details, Support, Privacy Policy, Terms and Conditions, Security, and Información en Español. The main content area contains a form with the following fields:

- Notice Number: (with a link: [You can click here to see a sample](#) [a new window will open])
- License Plate Number: (with a note: Please enter you license plate **exactly** as it appears on the notice)
- Verification Characters: (containing the CAPTCHA image '565718', which is highlighted with a red box)
- Enter the above Verification Characters:

Below the form are 'Submit' and 'Clear' buttons. A message states: "To view Video Clip or Pay online, input all requested information and click **SUBMIT** button". A Norton Secured logo is visible at the bottom left of the form area. At the very bottom, there is a footer with contact information: "If you experience problems with this site please contact customer support at support@redlightviolations.com. This site must be used with Internet Explorer 6 or higher."

<https://secure.speedviolation.com>

SpeedViolation.com

The screenshot shows the SpeedViolation.com website interface. At the top, there is a navigation menu with links for Violation Details, Privacy Policy, Terms and Conditions, and Security. The main content area contains a form with the following fields:

- Citation Number: (with a link: [You can click here to see a sample](#) [a new window will open])
- License Plate Number:
- Verification Characters: (containing the CAPTCHA image '548584')
- Enter the above Verification Characters:

Below the form is a 'Submit' button. A message states: "To Pay online, input all requested information and click **SUBMIT** button". A Norton Secured logo is visible at the bottom left of the form area. At the very bottom, there is a footer with contact information: "If you experience problems with this site please contact customer support at support@speedinvasion.com."

Once the individual has securely signed into the website, they may view all digital evidence of the violation in original format / resolution.

RedLightViolations

Violation Details **Support** Privacy Policy Terms and Conditions Security Información en Español

Click on pictures to zoom-in (new browser window will be opened).

Violation Number: [Redacted]
 License Plate Number: [Redacted]
 License Plate State: IL
 License Plate Type: OTHER
 Vehicle Make: GMC
 Municipality: Melrose Park (V)
 Violation Location: 5TH & NORTH AVE E
 Violation Date: 09/17/16
 Violation Time: 09:24 AM
 Ordinance Number Violated: 1036 CH. 10.64
 Ordinance Number Description: DISOBEYING TRAFFIC CONTROL SIGNAL
 Duration of Red Signal Prior to Violation: 1.1
 Violation Status: Determination of Liability
 Total Amount Due:
 Respond By Date: 11/22/16

Click Here To Play Video

Please read the following before making your payment:

VIOLATION PAYMENT
 Payment of the fine and any applicable penalty operates as a final disposition of the violation. Payment will NOT impact your driving privileges OR insurance.

DISTRIBUTION OF INFORMATION
 We do not rent, sell or trade any personal information about you to third parties.

WHAT SECURITY IS PROVIDED
 We are committed to protecting the security of your personal information. Payment transactions are protected through Secure Sockets Layer (SSL) encryption, so that only appropriate personnel who have agreed to keep such information in strict confidence are able to decode your information.

Please note that most Internet browsers also offer security alerts that permit you to determine whether or not your transmission is secured.

Pay Notice Cancel

If you experience problems with this site please contact customer support at support@redlightviolations.com
 This site must be used with Internet Explorer 6 or higher

SpeedViolation.com

Violation Details Privacy Policy Terms and Conditions Security

Click on pictures to zoom-in (new browser window will be opened).

Citation Number: [Redacted]
 License Plate Number: [Redacted]
 License Plate State: IA
 License Plate Type: PASSENGER
 Vehicle Make: FORD
 Municipality: Fort Dodge (C)
 Violation Location: 1400 Blk 20th Avenue N
 Violation Date: 02/16/15
 Violation Time: 11:51 AM
 Ordinance Number Violated: Ordinance #2138 Code Section Chapter 10.60
 Recorded Speed: 37 MPH
 Posted Speed Limit: 25 MPH
 Violation Status: 1st Notice
 Total Amount Due: \$75.00
 Respond By Date: 03/23/15

Please read the following before making your payment:

VIOLATION PAYMENT
 Payment of the fine and any applicable penalty operates as a final disposition of the violation. Payment will NOT impact your driving privileges OR insurance.

DISTRIBUTION OF INFORMATION
 We do not rent, sell or trade any personal information about you to third parties.

WHAT SECURITY IS PROVIDED
 We are committed to protecting the security of your personal information. Payment transactions are protected through Secure Sockets Layer (SSL) encryption, so that only appropriate personnel who have agreed to keep such information in strict confidence are able to decode your information.

Please note that most Internet browsers also offer security alerts that permit you to determine whether or not your transmission is secured.

Pay Notice Cancel

Should individuals require assistance at any time during this process, a **Support** tab is available on every screen enabling users to email questions directly to a Violator Support Specialist.

RedLightViolations

Violation Details **Support** Privacy Policy Terms and Conditions Security Información en Español

Thank you for contacting customer support. In order for us to better assist you, please provide the following information:

16 digit (no letters) violation number (beginning with "170" or "200"):

**If you do not have your violation number, please enter all of the following:*

License plate number of the cited vehicle:

Registered Owner's First / Last name:

Email:

Name of Issuing Community (if available):

***Red Lights Violations**
 A red-light violation occurs when a vehicle crosses the legal violation point and proceeds through the intersection after the traffic light has turned red.
 Vehicular traffic facing any steady red signal, must remain stopped on the white line until the signal activates green. If making a right turn, "...cautiously enter the intersection to turn right... after stopping...". A stop is defined as a complete and total cessation of movement.

***Contesting a Violation**
 Detailed instructions on how to contest, submit an affidavit or request a hearing on a violation are available on the back side of the initial violation notice you received. Please call the community specific toll free number provided on your notice for additional assistance. **Please DO NOT submit Contests, Affidavits or Hearing requests below as they cannot be accepted via this website**

How may we assist you:

Verification Characters:

876888

Submit Clear

If you experience problems with this site please contact customer support at support@redlightviolations.com
 This site must be used with Internet Explorer 6 or higher


RedLightViolations

Violation Details | Support | Privacy Policy | Terms and Conditions | Security | Información en Español

Payment Information

Violation Number: 1700500477879524
Amount Due: \$100.00
e-Payment Convenience Fee: \$3.50
Total Amount: \$103.50

Enter card information

* Card Type: 

* Card Number:

* Expiration Date:

* Security Code: [Card Identification Numbers](#) (a new windows will open)

Enter account holder information exactly as it appears on the credit card

* First Name:

Middle Initial:

* Last Name:

* Address:

* City:

* State:

* Zip:

* E-mail address:

Violators may Pay fines thru this portal using a credit or debit card.

Credit card information is used only to process transactions and is not collected or gathered for future use. All personal information obtained during the lifecycle of the violation (including images) is kept strictly confidential to protect the privacy of the vehicle's registered owner.

The credit card processing fee is paid by the individual with no fees being passed on to the Town.

This fee is displayed to the individual prior to any credit card information being input on the screen.

Upon completing the transaction, the violator will receive the email payment confirmation pictured below which should be retained for their records.



Payment Processing - Lockboxes

High levels of accounting audit control and redundancy are in place to ensure the total accuracy and timely input of incoming payments. RedSpeed maintains, for accountability and complete transparency of operation, an outside bank lockbox operation and credit card acceptance / reconciliation system. This system is a fully automated lockbox process utilizing the technology of a Total Remittance Processor in which payments are processed, applied, and reconciled daily. The bank uses a bonded courier service to pick up and deliver payments from the postal lockbox to the bank lockbox processing facility and provides on-line same-day-receipt viewing capabilities of all payment stubs and payments (money orders and checks). Cash payments are converted to a bank money order for processing purposes.

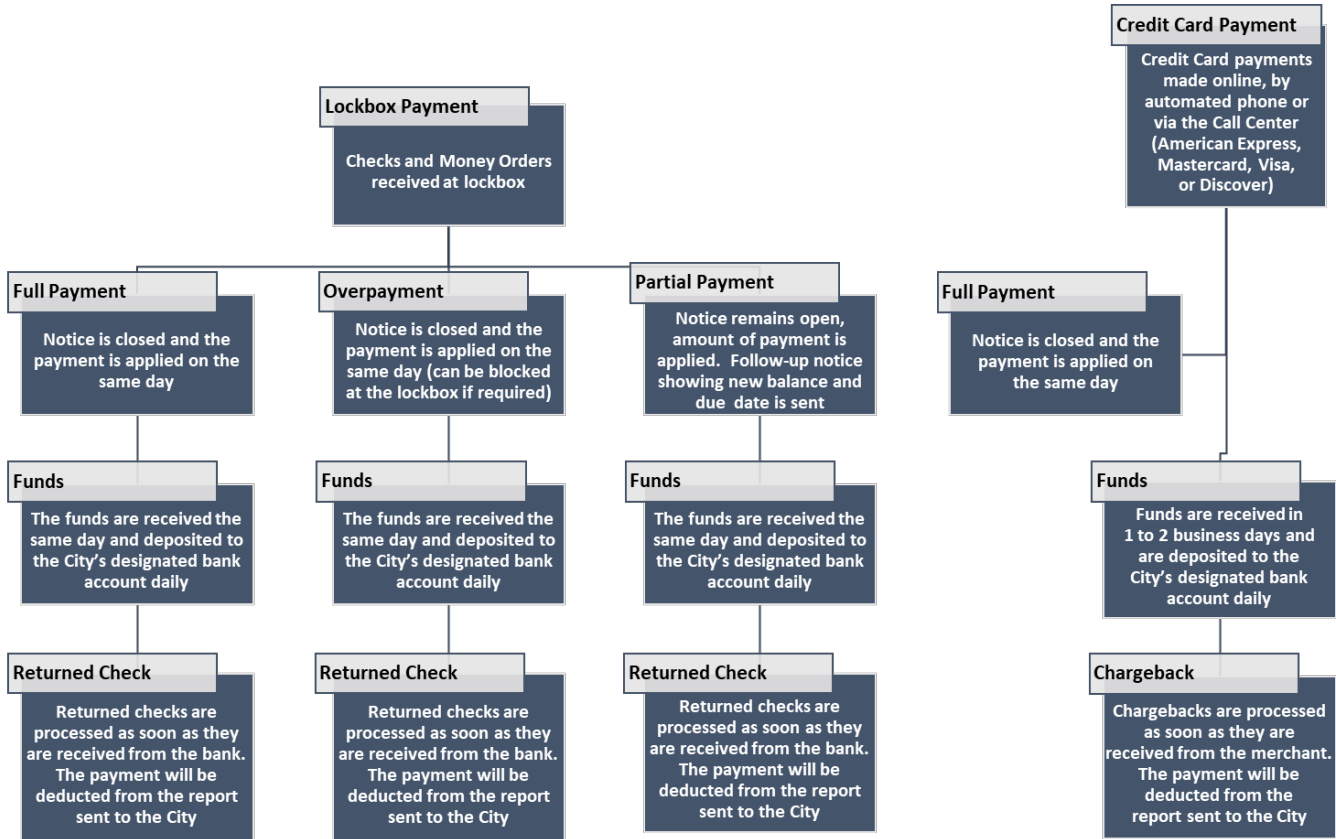
The bank lockbox verifies payments through the technology and auto-read capabilities of its processing equipment and reconciles each batch prior to the transmission of the file. A total payment file of all items received for the day is transmitted electronically to RedCheck™, where the file is reconciled again. Items such as duplicate payments, overpayments, and payments that are in a collection status are extracted and highlighted in a report which our Accounting Department uses to reconcile the day's payments. Once balanced, the payments are electronically matched against the reciprocating citations in RedCheck™. Payments are applied to the appropriate violation record using the unique citation identification number assigned to each violation at the time of capture.

RedSpeed is highly proficient in the handling of returned payments and has the technical means to research and identify the intended account and reconcile each occurrence.


- Partial payments are accepted and applied towards the balance. RedSpeed will follow the County's requirements for violator notification regarding partial payments and any fees that may be associated with a partial payment. A Partial Payment Notice is sent advising the violator of the remaining unpaid balance, including any additional fees (if applicable) assessed by the Town.
- In the event a payment is returned from the bank and uncollectible, RedSpeed will follow the County's requirements for violator notification regarding returned payments and any fees that may be associated with a returned payment. In this case an Insufficient Funds Notice is sent to the violator.
- In the event the payment received exceeds the amount owed, payment will be applied to close the citation and excess monies will be refunded directly to the violator in accordance with the County's procedures. In the event a citation has been paid in full and no monies are owed for that citation, the duplicate payment will be refunded in accordance with the County's procedures. RedSpeed will send a refund letter along with a refund check to the party who submitted the payment.
- Payments requiring additional investigation and research are handed off to the Accounting Department's research staff to locate the citation history and to resolve any issue which could include the application of unapplied payments, returned/insufficient fund check items, notes to the citation record, a personal phone call to the violator, sending a letter of correspondence, correcting incorrect information in RedCheck™, etc.

Situations such as the handling of payments without identifying violation numbers; payments received that were intended for another municipality; partial payments, overpayments, and double payments; the retention of stub and check copies; insufficient funds and closed account conditions; charge backs; and the transfer and support required of unpaid violations to a collection agency can be time-intensive and expensive to a municipality.

RedSpeed finance personnel conduct daily reconciliations of all Check, Money order and Credit Card payments received thru the Decatur Illinois based lockbox. Modifications can be implemented based upon the County's guidelines and preferences.



In the case of violations which the Town has approved and later wishes to dismiss (such as Authorized Emergency Vehicles) all that is needed is an email advising of the request sent to the Project Director. The violation is then placed in Wait for Submission to Court for Dismissal status, and the same evidence package described above is prepared once the violations are submitted to Court.



Easton Police Department
Automated Traffic Enforcement Unit
106 West Dover Street
Easton, MD 21801
(410) 822-1111

SUMMARY OF CITATIONS TO BE DISMISSED SENT TO DISTRICT COURT


Date Sent: 5/24/2021 Date Received: _____

FOR USE BY AGENCY		FOR USE BY DISTRICT COURT	
Citations Submitted	=	Citations Received	=
Speed Citations (621-609)	=	Speed Citations (621-609)	=
Work Zone Speed Citations (621-610)	=	Work Zone Speed Citations (621-610)	=
Red Light Citations	=	Red Light Citations	=
Police Citations	=	Police Citations	=
School Bus Citations	=	School Bus Citations	=
Electronic Toll Citations	=	Electronic Toll Citations	=
Total	=	Total	=

Verified by: _____

The following is a list of citation numbers that are being sent (or please see attached list).

1806700625535386 Officer Discretion	1806700626442787 Officer Discretion
--	--



DISTRICT COURT OF MARYLAND
District Number 2

SPEED MONITORING VIOLATION DISPOSITION DOCKET
 § 21-809 School Zone Residential (Montgomery Co. Only)

COURT LOCATION: 108 W. Dover Street, Easton, MD 21801 DATE: _____
 REPRESENTATIVE AGENCY: Easton Police Department COURTROOM: _____
 TIME: _____

VIOLATION INFORMATION

DEFENDANT: _____
 CITATION NUMBER: _____ LOCATION: EB Goldsborough St @ Easton Country School
 CHARGE: § 21-809 School Zone Speed Violation
 ISSUE DATE: 3/23/2021
 VIOLATION DATE: 3/19/2021
 TAG NUMBER: _____

DISPOSITION INFORMATION

POSTPONED DEF STATE COURT
 FAIL TO APPEAR AGENCY AVAILABILITY OTHER

PLEA: GUILTY NOT GUILTY NC

DISPOSITION: GUILTY NOT GUILTY DISMISSED

FINE: \$ _____ (Up To \$40)

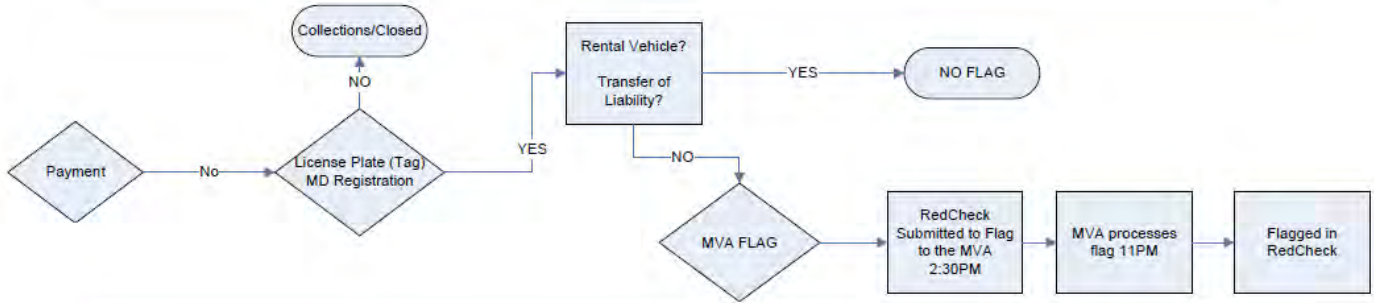
COSTS: \$22.50 COSTS WAIVED DUE TO INDIGENCY OF DEF

JUDGE: _____ ID #: _____
 DATE: _____

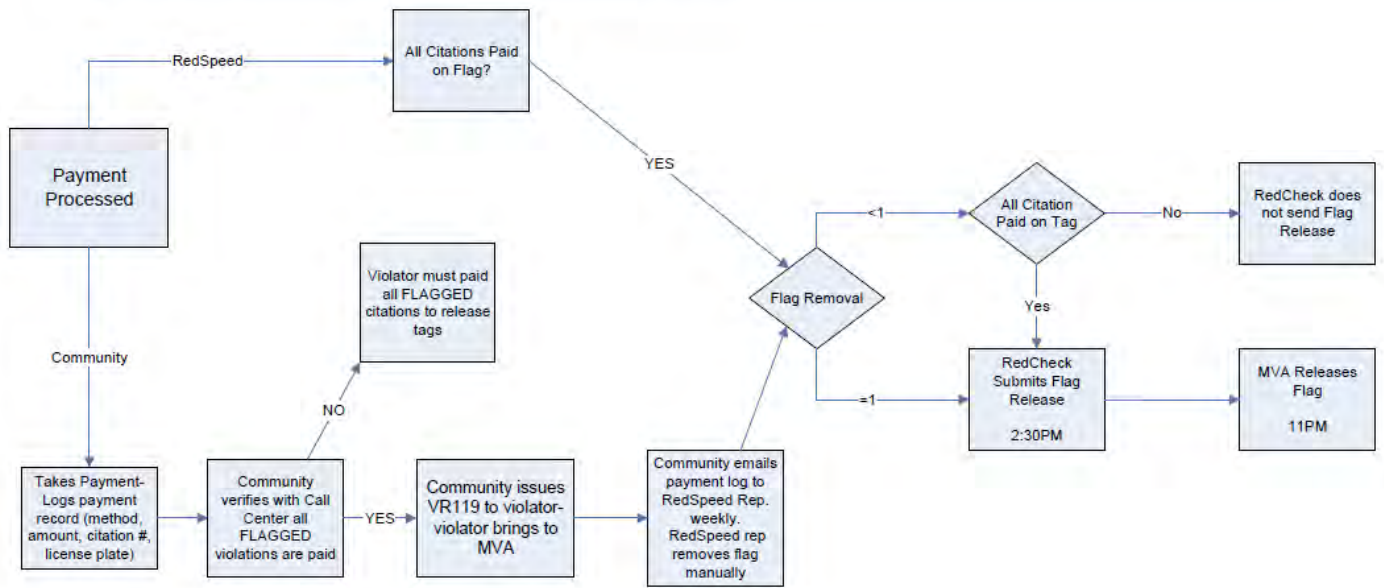
Responsible for Associated Hearing Costs

RedSpeed assumes responsibility for providing all relevant digital evidence relevant to school zone speed and red-light violations issued by the program for presentation at in-person hearings. RedSpeed also agrees to provide, upon request with advance notice, a representative capable of providing expert testimony on the theory, operation, and functional capabilities of the camera system at no cost to the Town. Upon request, RedSpeed shall also work with Town-identified individuals to educate them on all facets of the system, preparing them to provide expert testimony if necessary.

MVA FLAGGING



Flag Removal



Collection Strategy

As indicated in the letter of intent below, RedSpeed has partnered with the law firm of Linebarger Goggan Blake and Sampson, LLP to provide professional collection services for any unpaid photo enforcement violations issued by the Town. Monthly files detailing the delinquent accounts which are eligible for collection action will be forwarded by RedSpeed to Linebarger, who will pursue collection efforts.

LINEBARGER GOGGAN BLAIR & SAMPSON, LLP
ATTORNEYS AT LAW
1600 John F. Kennedy Blvd
4 Penn Center, Suite 910
Philadelphia, PA 19103

Main: 215.790.1117

*Email: mark.harris@lgbs.com
Direct: 267.386.3185*

Re: Proposal for Professional Collections Services

To Whom It May Concern:

Linebarger Goggan Blair & Sampson, LLP is pleased to submit this proposal to you to be considered as your provider of professional collection services of your delinquent municipal receivables. Since the Firm's founding in 1976, Linebarger has combined the disciplines of law, collections, accounting, and technology to achieve unprecedented results in the collection of delinquent property taxes, fees & fines and other government receivables for our municipal government clients. Our Firm has routinely provided customized collection programs to numerous cities, counties and school districts throughout the nation for over 45 years.

We have partnered with RedSpeed in this endeavor, with whom our Firm shares core values of efficient customer service, cost effectiveness and consistency. By partnering with RedSpeed, we feel that we will be able to deliver a collection program that exceeds all of your requirements, objectives and expectations.

Unlike collection agencies, we perform all work in-house. We utilize our own collectors, researchers, skip tracers, legal and IT personnel who will remain available during normal business hours to resolve issues that may arise throughout the contract period. Accordingly, our collection program will not result in surprise expenses or "farming out" of work to third parties, which increase costs. We will agree to be compensated at a rate of 20% of the principal amount per account referred to us on non-litigation related accounts. Should you require litigation on any account type, a fee would need to be negotiated based upon the account type, work and hours needed. The added benefit to you as the client is, we do not get paid until an account is collected on non-litigation related accounts.

Upon request, I can provide samples of our collection notices that have been approved by our Firm's Legal Standards Committee. Notices can be drafted based upon your requirements in conformance with Maryland's collection law and statutes.

As a capital partner of the Firm who is licensed by the State Bar of Maryland, I would supervise all significant operations of this engagement. I will serve as the principal contact person on behalf of the Firm for the performance under the contract. We welcome the opportunity to partner with you to provide a best-in-class collection program. Thank you for your time and consideration.

Respectfully submitted



Mark S. Harris, Esq.
Philadelphia Managing Partner

Sample generic collection notices are provided on the following pages. Each letter series includes a statement page that contains identifying citation and offender information along with the total fine amount due. These samples are not state specific but would be edited to the County's requirements.

In Linebarger's experience clients utilize a more generic 1st notification letter to advise debtors of the outstanding citation(s). Subsequent letters increase in demand and can include remedies the client is willing to seek, such as license suspension or the issuance of arrest warrants.

Depending upon the County's local municipal ordinance, Linebarger would edit the notices to encompass and requested language and all would be approved by both the Town and Linebarger's Legal Standards Committee prior to mailing.

F&F Texts Generic, TX - Muni/Non-JP No-Plg 1
TXClnwinn
GENERIC_MUN_E_01
5 JAN 2017 - LSC
Last cleared 21 DEC 2017

Linebarger Goggan Blair & Sampson, LLP

ATTORNEYS AT LAW
900 Aron Parkway, Suite 104
San Antonio, TX 78216
1(866) 234-9790 Toll-Free
(210) 495-0911 Fax
MONTH/DAY/YEAR

87654321

JOHN DOE
123 HOME STREET
CITY, STATE ZIP

Driver's License #: STATE & #
Citation #: ALPHA/NUMERIC
999 Citation(s) Totaling \$1,000.00

IMPORTANT NOTICE

Dear JOHN DOE:

Our law firm has been hired to represent the Client Name Municipal Court in the collection and disposition of the above-listed matter. Court records indicate there is an outstanding case(s) pending against you.

Please complete the detachable reply form at the bottom of this letter and return it, along with your payment in the amount of \$1,000.00, within 10 days. Payment must be in the form of a cashier's check or money order. Cash accepted in person at the Court. Partial payments are not accepted. Personal checks are not accepted. To pay by credit card, please call 1(xxx) xxx-xxxx or log on to <http://www.lgbswebpayments.com> and use Client Code CODE and Online Payment Number 87654321.

Failure to respond as requested will result in our recommending to our client that it enforce the collection of this obligation. Please be advised that IF an arrest warrant has been issued in your case, you may be arrested at any time by any peace officer.

Unless a final judgment of conviction has been entered in your case, you have the right to enter a plea or go to trial on any offense charged. To exercise such right, please contact the CLIENT NAME MUNICIPAL COURT.

We urge you to contact the Court if you are unable to pay the amount owed without undue hardship to yourself or your dependents. You may request a hearing before a Judge to consider your ability to pay and request any non-monetary compliance options available to you. You should be prepared to explain and document your financial situation to the Court.

If you have made payment or entered a plea within the last 10 days, please disregard this notice. Also be advised that juveniles who are sixteen years of age and under, and who wish to appear in court, must do so in person and be accompanied by a parent or guardian. If you are now a debtor in bankruptcy, or if you have been discharged from debts through a bankruptcy proceeding, then within 30 days of receipt of this letter, please provide us at the address at the top of this letter, in writing, the case number and the name of the court in which your bankruptcy case was filed.

It is very important that you give this matter your immediate attention. Our toll-free telephone number is 1(866) 234-9790. Our office hours are Monday through Thursday, 7:00 a.m. to 9:00 p.m., Friday, 7:00 a.m. to 5:00 p.m., and Saturday, 8:00 a.m. to noon.

Sincerely,

Linebarger Goggan Blair & Sampson, LLP

PLEASE DETACH THE REPLY FORM AND RETURN IN THE ENVELOPE PROVIDED

Linebarger Goggan Blair & Sampson, LLP
PO BOX 659443
SAN ANTONIO TX 78265-9443

3x9 BAR CODE - if remit
is PO Box 702118

QR code
if
requested

Driver's License #: STATE AND #
Citation #: ALPHA / NUMERIC
999 Citation(s) Totaling \$1,000.00
Amount Due: \$1,000.00 as of MONTH/DAY/YEAR

Payment should be in the form of a cashier's check or money order made payable to: CLIENT NAME MUNICIPAL COURT. Cash accepted in person at the Court. Partial payments will not be accepted. Personal checks will not be accepted. To pay by credit card, please call 1(xxx) xxx-xxxx or log on to <http://www.lgbswebpayments.com> and use Client Code CODE and Online Payment Number 87654321.

*If remitting to LGBS: requires EFT message

JOHN DOE
123 HOME STREET
CITY, STATE ZIP
IMB

REMIT NAME MUNICIPAL COURT
REMIT NAME LN2:
REMIT ADDRESS
CITY, STATE ZIP

F&F Texas Generic, TX - Multi/Non-JP No-Plg 2
TXClnvnm
GENERIC_M_N_E_0_2
5 JAN 2017 - LSC
Last cleared 21 DEC 2017

Linebarger Goggan Blair & Sampson, LLP

ATTORNEYS AT LAW
900 Arion Parkway, Suite 104
San Antonio, TX 78216
1(866) 234-9790 Toll-Free
(210) 495-0911 Fax
MONTH/DAY/YEAR

87654321

JOHN DOE
123 HOME STREET
CITY, STATE ZIP

Driver's License #: STATE & #
Citation #: ALPHA/NUMERIC
999 Citation(s) Totaling \$1,000.00

WARNING

Dear JOHN DOE:

Our law firm has been hired to represent the Client Name **Municipal Court** in the collection and disposition of the above-listed matter, Court records indicate there is an outstanding case(s) pending against you.

You have failed to respond to our previous correspondence. To avoid possible additional action by the Court, please complete the detachable reply form at the bottom of this letter and return it, along with your payment in the amount of **\$1,000.00**, within 5 days. Payment must be in the form of a cashier's check or money order. Cash accepted in person at the Court. Partial payments are not accepted. Personal checks are not accepted. To pay by credit card, please call 1(xxx) xxx-xxxx or log on to <http://www.lgbswebpayments.com> and use Client Code **CODE** and Online Payment Number **87654321**.

A warrant for your arrest may have been issued by the Court. IF a warrant has been issued, you may be arrested at any time by any peace officer.

Unless a final judgment of conviction has been entered in your case, you have the right to enter a plea or go to trial on any offense charged. To exercise such right, please contact the CLIENT NAME **MUNICIPAL COURT**.

We urge you to contact the Court if you are unable to pay the amount owed without undue hardship to yourself or your dependents. You may request a hearing before a Judge to consider your ability to pay and request any non-monetary compliance options available to you. You should be prepared to explain and document your financial situation to the Court.

If you have made payment or entered a plea within the last 10 days, please disregard this notice. Also be advised that juveniles who are sixteen years of age and under, and who wish to appear in court, must do so in person and be accompanied by a parent or guardian. If you are now a debtor in bankruptcy, or if you have been discharged from debts through a bankruptcy proceeding, then within 30 days of receipt of this letter, please provide us at the address at the top of this letter, in writing, the case number and the name of the court in which your bankruptcy case was filed.

It is very important that you give this matter your immediate attention. Our toll-free telephone number is 1(866) 234-9790. Our office hours are Monday through Thursday, 7:00 a.m. to 9:00 p.m., Friday, 7:00 a.m. to 5:00 p.m., and Saturday, 8:00 a.m. to noon.

Sincerely,

Linebarger Goggan Blair & Sampson, LLP

PLEASE DETACH THE REPLY FORM AND RETURN IN THE ENVELOPE PROVIDED

Linebarger Goggan Blair & Sampson, LLP
PO BOX 659443
SAN ANTONIO TX 78265-9443

3x9 BAR CODE - if remit
is PO Box 702118

QR code
if
requested

Driver's License #: STATE AND #
Citation #: ALPHA / NUMERIC
999 Citation(s) Totaling \$1,000.00
Amount Due: \$1,000.00 as of MONTH/DAY/YEAR

Payment should be in the form of a cashier's check or money order made payable to: CLIENT NAME **MUNICIPAL COURT**. Cash accepted in person at the Court. Partial payments will not be accepted. Personal checks will not be accepted. To pay by credit card, please call 1(xxx) xxx-xxxx or log on to <http://www.lgbswebpayments.com> and use Client Code **CODE** and Online Payment Number **87654321**.

*If remitting to LGBS: requires EFT message

JOHN DOE
123 HOME STREET
CITY, STATE ZIP
IMB

REMIT NAME **MUNICIPAL COURT**
REMIT NAME LN2?
REMIT ADDRESS
CITY STATE ZIP

Statistical Analysis & Reporting Systems

Town of Bladensburg, MD

Automated Enforcement Program. RFQ-FY 2024-004

RedSpeed®

Statistical Analysis and Reporting Systems

The RedCheck™ Violation Processing and Document Management System includes numerous pre-configured reports to provide municipal clients with detailed statistics pertaining to all aspects of their photo enforcement program. These reports have been designed based upon requests from existing clients and can certainly be customized to meet any specific requirements of the Town. All reports are accessible online by authorized municipal users at any time.

Location Performance by Lane

SARASOTA

Location Performance Summary Report By Lane

Date: 08/01/2021 - 08/31/2021

Location	A Violation Events	B (C+D+E) Violation Event Rejections	C Non- Violations	D Non- Controllable Rejections	E Controllable Rejections	F Violation Events Still in Workflow	G (A-B-F) Citations Issued	H (G/(G+E)) Issuance Rate	I (B/A) Rejection Percentage	J (E/A) Controllable Rejection Percentage
Bahia Vista St @ S Tuttle Ave EB										
Lane 1	142	55	48	7	0	67	20	100.00%	38.73%	0.00%
Lane 4	1117	1015	940	75	0	102	0	0.00%	90.87%	0.00%
Lane 3	47	27	26	1	0	14	6	100.00%	57.45%	0.00%
Lane 2	83	64	60	4	0	15	4	100.00%	77.11%	0.00%
	1389	1161	1074	87	0	198	30	100.00%	83.59%	0.00%
Bee Ridge Rd @ Tamiami Trail WB										
Lane 2	197	157	157	0	0	39	1	100.00%	79.70%	0.00%
Lane 3	39	30	29	1	0	4	5	100.00%	76.92%	0.00%
Lane 1	78	39	38	1	0	30	9	100.00%	50.00%	0.00%
Lane 4	4524	3960	3660	300	0	535	16	100.00%	87.53%	0.00%
	4838	4186	3884	302	0	608	31	100.00%	86.52%	0.00%
Beneva Rd @ Fruitville Rd SB										
Lane 4	394	341	320	21	0	49	3	100.00%	86.55%	0.00%
Lane 2	277	137	128	9	0	100	40	100.00%	49.46%	0.00%
Lane 3	61	25	23	2	0	23	13	100.00%	40.98%	0.00%
Lane 1	64	19	19	0	0	38	7	100.00%	29.69%	0.00%
	796	522	490	32	0	210	63	100.00%	65.58%	0.00%

Violation Status by Location

RedSpeed® Florida,LLC

VIOLATION STATUS BY LOCATION (based on violation date)

Date: 08/01/2018 - 08/31/2018

LOCATION	WORKING VIOLATIONS	POLICE REVIEW QUEUE	DISMISSED	NOV	PAID	ADMIN. HEARING	FINAL ADMIN ORDER	REGISTRATION HOLD	UTC ELIGIBLE	UTC
Tuttle Ave & Bahia Vista St S/B	82		503	65	32	1			1	
Bahia Vista St & S Tuttle Ave E/B	52		157	44	22				1	
Tuttle Ave & Bahia Vista St N/B	90		270	84	38	1				
Beneva Rd & Fruitville Rd S/B	49		178	42	18				1	
Tuttle Ave & Fruitville Rd S/B	403		421	342	188	4	2		6	
Fruitville Rd & N Tuttle Ave W/B	174		810	117	68					
Lockwood Ridge Rd & Fruitville S/B	110		1139	59	29				3	
Fruitville & N Lockwood Ridge W/B	7		73	6	1				1	
Fruitville & N Lockwood Ridge E/B	58		132	52	30				1	
Tamiami Trail & University Pkwy N/B	169		1181	34	10				1	
Tamiami Trail & University Pkwy S/B	166		321	143	57				4	
Tamiami Trail & Bee Ridge Rd N/B	70		231	62	34	1			1	
Tamiami Trail & Bee Ridge Rd S/B	361		449	300	175	2			3	
Bee Ridge Rd & Tamiami Trail W/B	29		118	28	18					
Tamiami Trail & Bahia Vista St N/B	79		262	74	32				1	
Tamiami Trail & Bahia Vista St S/B	137		262	124	64				3	
Washington Blvd & Fruitville Rd N/B	189		374	151	73				2	
Fruitville & N Washington Blvd E/B	205		588	177	93	2	1		5	
Washington Blvd & 17th St S/B	139		1281	34	14					
Tamiami Trail & Siesta Dr N/B	248		2191	48	17				1	
2817			10941	1986	1013	11	3		35	

Payment by Camera Location

RedSpeed® Florida,LLC

2099 Adams Ln
Sarasota, FL 34237

Payment By Camera Location

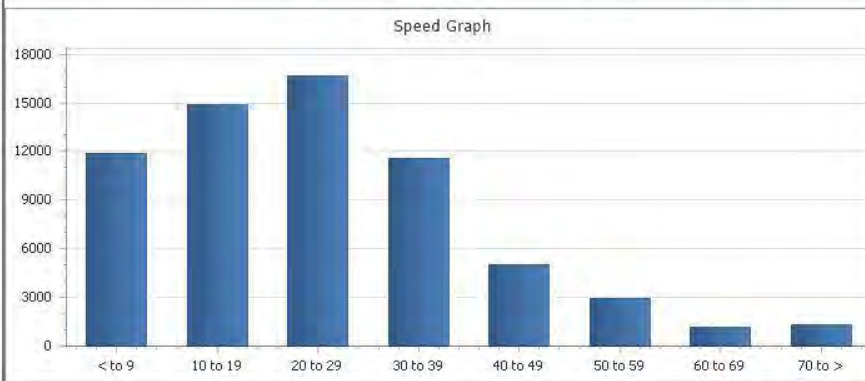
Submission Criteria				Sort by: LOCATION		In Collections: ALL		
From Date: 08/01/2018		To Date: 08/31/2018		Violation Type: ALL		Payment Status: All Payments		
Transaction Date	Status	User Id	Payment Channel	Payment Type	Terminal Number	Notice Number	Applied Date	Applied Amount
08/30/2018	Applied	SYSTEM	Lockbox	Paper Check	1371000002017	2010200002039168	08/30/2018	\$158.00
08/30/2018	Applied	SYSTEM	Lockbox	Paper Check	1371000002017	2010200002707294	08/30/2018	\$158.00
08/31/2018	Applied	SYSTEM	Web	Credit Card	Q38058-35	2010200002779947	08/31/2018	\$158.00
08/31/2018	Applied	SYSTEM	Web	Credit Card	Q38058-35	2010200002208225	08/31/2018	\$158.00
08/31/2018	Applied	SYSTEM	Web	Credit Card	Q38058-35	2010200001982826	08/31/2018	\$158.00
Washington Blvd & Fruitville Rd N/B				128				\$20224.00
Total Transactions:				966			Total Amount:	\$152593.27

Traffic Count and Speed Analysis

Tuttle Ave & Bahia Vista St S/B

Information	Live Camera View	Monthly Maintenance Log	Speed Report	Traffic Count Report	Support	Settings
Posted Speed Limit (mph):	0	Date Range				
Amber Phase Time (seconds):	4	6/8/2018	...	6/15/2018		
Average Vehicle Speed (mph):	24.8	Apply				

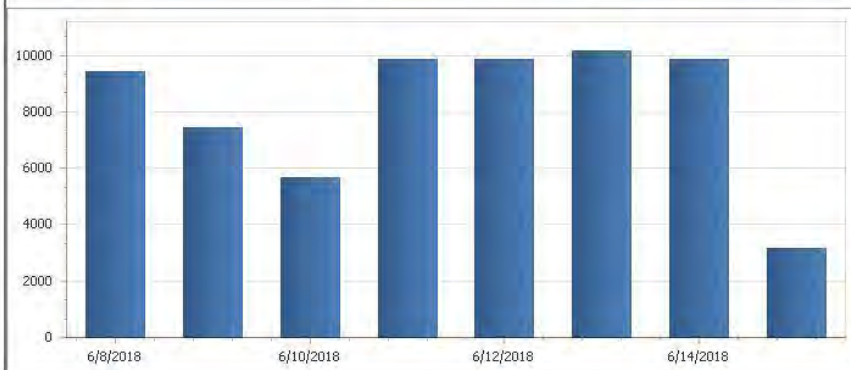
Date / Speed Range (mph)	< to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to >
6/8/2018	1,633	2,156	2,540	1,724	678	412	76	198
6/9/2018	1,611	1,800	1,572	1,205	609	281	159	210
6/10/2018	1,312	1,243	1,054	744	663	512	60	64
6/11/2018	1,698	2,182	3,006	1,453	848	340	156	189
6/12/2018	1,726	2,306	2,229	2,241	464	365	256	254
6/13/2018	1,628	2,207	2,434	2,570	358	500	245	231
6/14/2018	1,738	2,147	3,003	1,240	960	491	209	81
6/15/2018	520	818	849	363	469	32	16	87
Total	11,866	14,859	16,687	11,540	5,049	2,933	1,177	1,314



Tuttle Ave & Bahia Vista St S/B

Information	Live Camera View	Monthly Maintenance Log	Speed Report	Traffic Count Report	Support	Settings
Average Daily Traffic Count by Lane (#):	2725	Date Range				
Total Traffic Count (#):	65425	6/8/2018	...	6/15/2018	Apply	

Date	Lane 1	Lane 2	Lane 3	Lane 4	Total
6/8/2018	1,280	4,723	3,414		9,417
6/9/2018	965	3,650	2,832		7,447
6/10/2018	765	2,706	2,181		5,652
6/11/2018	1,379	5,086	3,407		9,872
6/12/2018	1,297	5,040	3,504		9,841
6/13/2018	1,382	5,361	3,430		10,173
6/14/2018	1,393	4,907	3,569		9,869
6/15/2018	367	1,704	1,083		3,154
Total	8,828	33,177	23,420	0	65,425



Officer Approval Report

RedSpeed® Florida,LLC

CORAL GABLES
2801 Salredo St
Coral Gables, FL 33134

Officer Approval Report

Submission Criteria		
From Action Date: 08/01/2018	To Action Date: 08/31/2018	Violation Type: ALL VIOLATION TYPES

Officer	Violations Reviewed # of Violations	Violations Approved # of Accepted	Violations Rejected # of Rejected	% Approved
	0	0	0	0.000
	0	0	0	0.000
	0	0	0	0.000
	0	0	0	0.000
	0	0	0	0.000
	0	0	0	0.000
	0	0	0	0.000
	0	0	0	0.000
	984	694	290	70.528
	0	0	0	0.000
	0	0	0	0.000
	0	0	0	0.000
	1	0	1	0.000
	0	0	0	0.000
Totals:	985	694	291	70.457

Rejection Factors	Count
ADMINISTRATIVE DECISION	26
DMV - NO MATCHES OR RECORDS	6
SLOW ROLL - RIGHT TURN	258

Review Overpayments and Underpayments

RedSpeed® Florida,LLC

2099 Adams Ln
Sarasota, FL 34237

Review Overpayments and Underpayments

Submission Criteria			
From Date: 04/01/2019	To Date: 04/07/2019	Violation Type: ALL	In Collections: ALL Payment Status: All Payments

Overpayment									
Payment Date	Payment Channel	Payment Type	Terminal Number	Notice Number	Applied Date	Balance Before Payment	Received Amount	Return	Payment Received on Status
04/01/2019	Lockbox	Paper Check	1371000002017	2010200002977509	04/01/2019	-\$265.00	\$158.00	\$423.00	Uniform Traffic Citation
04/01/2019	Lockbox	Paper Check	1371000002017	2010200003605099	04/01/2019	\$0.00	\$158.00	\$158.00	Uniform Traffic Citation
04/01/2019	Lockbox	Paper Check	1371000002017	2010200005075406	04/01/2019	\$158.00	\$159.00	\$1.00	Notice Of Violation

Payment Detail Report

RedSpeed® Florida, LLC

From Date: 10/01/2018 To Date: 10/01/2018

Client	Notice Number	Name	Violation Date	Trans Date	Payment Method	Payment Type	Dispost Date	Payment Amount	Service Fee	Payment Status	General Revenue Fund	Health Administration Fund	Brain and Spinal Fund	Location Code	Location Intersection	Payment Bank ID	Payment Applied to Fine	Payment Applied to Fee	Escrow
Florida, Sarasota	2010200002952893		07/07/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0018	Tamiami Trail & Ben Ridge Rd S/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002711118		06/08/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0023	Fruitville & N Washington Blvd E/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200003129782		09/12/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0006	Tulle Ave & Bahia Vista St S/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002544672		07/05/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0010	Tulle Ave & Fruitville Rd S/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002585498		07/09/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0018	Tamiami Trail & University Pkwy S/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	201020000253188		07/04/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0018	Tamiami Trail & University Pkwy S/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002553359		07/07/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0020	Tamiami Trail & Bahia Vista St N/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002590602		07/09/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0023	Fruitville & N Washington Blvd E/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002978321		08/30/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0018	Tulle Ave & Fruitville Rd S/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002652420		08/20/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0021	Tamiami Trail & Bahia Vista St S/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002585872		07/07/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0021	Tamiami Trail & Bahia Vista St S/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200003134883		09/12/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0010	Tulle Ave & Fruitville Rd S/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002383482		07/13/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0014	Fruitville & N Lakewood Ridge E/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002869288		08/23/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0010	Tulle Ave & Fruitville Rd S/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002979688		08/30/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0022	Washington Blvd & Fruitville Rd N/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002801814		08/18/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0014	Fruitville & N Lakewood Ridge E/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002548581		07/04/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0018	Lee Ridge Rd & Tamiami Trail N/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002779070		08/14/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0010	Tulle Ave & Fruitville Rd S/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002981080		08/30/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0018	Tamiami Trail & Ben Ridge Rd S/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002972126		07/08/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0011	Fruitville Rd & N Tulle Ave N/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002924204		07/04/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0024	Washington Blvd & 17th St S/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002586051		07/08/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0028	Tamiami Trail & Bahia Vista St N/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002970844		07/08/2018	10/01/2018	Telephone	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0020	Tamiami Trail & Bahia Vista St N/B		\$158.00	\$0.00	\$0.00
Florida, Sarasota	2010200002944019		08/27/2018	10/01/2018	Web	Credit Card	10/01/2018	\$158.00	\$7.90	Applied	\$70.00	\$10.00	\$3.00	RSFL0010	Tulle Ave & Fruitville Rd S/B		\$158.00	\$0.00	\$0.00

Escrow	\$0.00
Hearings	\$0.00
City	\$9000.00
State	\$9960.00
Total	\$18960.00

10/1/2018

10:01 PM

Page 1 of 5

Repeat Offenders

*Information has been redacted for privacy reasons.

PlateNumber	# of times	First Time	Last Time	Owners
CR	3	2020-02-26 07:45:44.100	2020-03-03 07:48:45.643	MAYBI
GN	3	2019-07-12 11:02:50.123	2019-12-04 18:07:07.043	MARY
JEU	3	2020-02-04 04:46:50.387	2020-02-21 04:42:13.107	ERIC E'
JUC	3	2019-07-02 14:18:17.353	2019-08-22 01:09:33.550	MARTI
LUI	3	2020-02-19 15:25:57.947	2020-02-28 08:54:44.543	JACQU
ZHG	2	2019-08-31 00:54:21.430	2019-10-09 21:56:28.807	IAMIE
478	2	2020-01-21 18:58:06.530	2020-03-07 06:40:22.013	WHITN
994	2	2019-08-13 08:36:43.403	2019-09-23 08:33:44.253	MERCY
AZI	2	2019-07-16 18:10:57.837	2019-09-24 18:02:17.353	DILCIA
AZI	2	2019-08-06 08:29:16.150	2019-09-17 06:48:45.123	MARIA
AZS	2	2019-07-05 12:17:49.933	2019-10-03 10:26:16.650	MELISS
BCI	2	2019-12-12 13:33:18.510	2020-02-19 12:47:51.880	SUNRI
CBH	2	2019-07-23 08:41:17.910	2019-07-31 09:17:16.953	ODALIS
CDI	2	2019-07-09 18:34:14.743	2020-03-23 13:00:23.717	ENRIQU
CEI	2	2019-10-24 17:43:07.260	2019-11-15 17:19:07.373	FRANC

Ad Hoc Reports

The ability to generate ad hoc reports is available in addition to the pre-designed reports available thru RedSpeed's proprietary RedCheck violation processing software. Authorized municipal users can establish data parameters, exporting the information into pre-selected chart, graph or table formats.

Ad Hoc Reporting

Columns
Drag the columns from the left side into the table in the middle to display them in your report. Drag them into the outer right table to use them for sorting.

Data

- Id
- Name
- USASate
- Address
- City
- Zip
- Ordinance
- StartDate
- WarningPeriod
- TicketCost
- InsufficientAmount
- PartialAmountPenalty
- IncreaseAmount
- ORINumber
- Active
- NumberOSites

Columns

- Municipalities.City
- Municipalities.Address
- Municipalities.Zip
- Municipalities.Ordnance
- Municipalities.StartDate
- Municipalities.ORINumber
- Municipalities.NumberOSites

Sorting

- Municipalities.City

Drag Column from here Drop Data here Drop Data here

City Address Zip Ordinance StartDate ORINumber Nu

Ad Hoc Reporting

Visual Database Wizard
Drag the database tables into the right-hand area to use their data for your report.

local

- dbo
 - Table_1
 - View
 - Municipalities

Municipalities

- Id
- Name
- USASate
- City
- Address
- Zip
- Ordinance
- StartDate
- WarningPeriod
- TicketCost
- InsufficientAmount
- PartialAmountPenalty
- IncreaseAmount
- ORINumber
- Active
- NumberOSites

RedSpeed will be responsible for compiling and preparing all State and Federal mandated reports. An abridged sample from Maryland appears the below through the following pages.

**MARYLAND STATE HIGHWAY AUTHORITY
AUTOMATED SPEED ENFORCEMENT**

**July 1, 2019 – June 30, 2020
ANNUAL REPORT**

**TOWN OF
CHESTERTOWN, MD**

The Chestertown has been utilizing an Automated Speed Camera in this school zone since January 2011. This report includes data from the fiscal year July 01, 2019 - June 30, 2020.

Camera Location

- Camera site: 401 Morgnac Road
- Deployment Time: 6:00 AM - 8:00 PM Monday through Friday
- Speed Limit: 30 mph

Violation Data

	Total Violations Recorded	Total Citations Issued	Ratio of Citations Issued to Violations Recorded	Paid Citations	Taken to Trial	Overturned
2019 July	300	238	79%	297	4	1
2019 August	342	320	94%	254	0	0
2019 September	317	312	98%	289	3	2
2019 October	323	318	98%	235	0	0
2019 November	305	255	84%	260	3	2
2019 December	309	323	105%	229	0	0
2020 January	262	289	110%	280	0	0
2020 February	255	225	88%	246	0	0
2020 March	222	240	108%	213	1	0
2020 April	247	220	89%	175	0	0
2020 May	233	217	93%	184	0	0
2020 June	246	260	106%	207	0	0
TOTAL	3,381	3,217	96%	2,861	11	5

CITATION ANALYSIS DETAILS

Maryland Speed Statistics

Dates: 07/01/2019 - 06/30/2020

Chestertown (T)

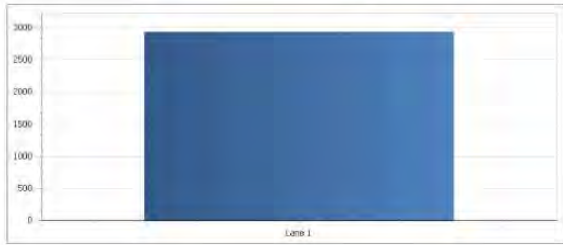
EB 400 Block Morgnac Road

Violation Speed	Citations Issued	% Citations /Speed
00.0 - 41.9	0	0.00%
42.0 - 42.0	182	5.03%
42.1 - 45	1,545	48.03%
45.1 - 47.5	748	23.25%
47.6 - 50	380	11.81%
50.1 - 52.5	221	6.87%
52.6 - 55	108	3.36%
55.1 +	53	1.65%
Total	3,217	100.00%

Average Daily Traffic Count by Lane (ft)	2932
Total Traffic Count (ft)	2932

Date Range: 7/27/2020 - 7/27/2020

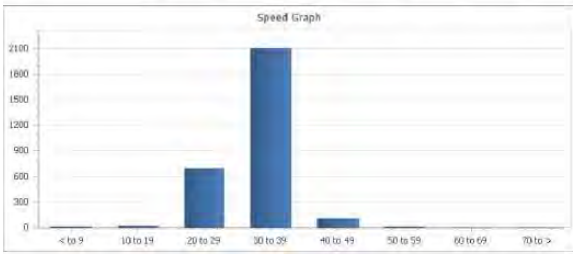
Date	Lane 1		
7/27/2020		2,932	2,932
		2,932	2,932



Posted Speed Limit (mph)	10
Anticlock Phase Time (seconds)	4
Average Vehicle Speed (mph)	32.0

Date Range: 7/27/2020 - 7/27/2020

Date / Speed Range (mph)	< to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to >
7/27/2020	6	15	690	2,099	110	10	2	0
	6	15	690	2,099	110	10	2	0



BEFORE

Morgnet Rd @ Chestertown Christian Academy	2011 Speed Study		
Morgnet Rd Eastbound	AM 557	PM 716	Daily 1,273
Peak Hour	07:00-08:00	08:00-09:00	

*Traffic study performed in 2011 from 12:00AM to 11:59PM

EB Morgnet Rd @ Chestertown Christian Academy	EB Morgnet Rd
Speed Limit (mph)	30
Average Speed (mph)	30
85th Percentile Speed (mph)	34
Lowest Speed (mph)	5
Highest Speed (mph)	38
Percent within Speed Limit	58.29%
Percent Exceeding Speed Limit by 1-10 mph	39.04%
by 11-20 mph	2.51%
by 21-30 mph	0.10%
above 30 mph	0.00%

AFTER

Morgnet Rd @ Chestertown Christian Academy	Monday 7/27/2020		
Morgnet Rd Eastbound	N/A	N/A	Daily 2,932
Peak Hour	N/A	N/A	

*Traffic study performed 7/27/2020 from 12:00AM to 11:59PM

EB Morgnet Rd @ Chestertown Christian Academy	EB Morgnet Rd
Speed Limit (mph)	30
Average Speed (mph)	N/A
85th Percentile Speed (mph)	N/A
Lowest Speed (mph)	≤ 9
Highest Speed (mph)	61
Percent within Speed Limit	N/A
Percent Exceeding Speed Limit by 1-10 mph	N/A
by 11-20 mph	N/A
by 21-30 mph	0.34%
above 30 mph	0.07%

CITIZEN FEEDBACK



Chestertown Police Department
601 High Street
Chestertown, Maryland, 21620

October 26, 2020

To Whom It May Concern:

Please accept this letter as documentation that the Chestertown Police Department has not received any citizen feedback during the last 12 months, related to the department's speed monitoring program.

Sincerely,

Sgt Stephen Lozar #0704
Department Speed Camera Administrator
Senior Supervisor / Patrol Division

Date Security & Storage

Town of Bladensburg, MD

Automated Enforcement Program. RFQ-FY 2024-004

RedSpeed®

Data Security

From RedSpeed's inception, RedCheck™ back-office system was developed to maintain the highest levels of security. RedCheck™ and the systems that support the program are hosted at a state-of-the-art DuPont facility just outside Chicago which provides 24/7/ security staff, video surveillance and dual-factor authentication via biometric and proximity scanners to limit access to only authorized users.

RedSpeed recently completely overhauled its entire infrastructure to mirror the same system security software used by the US Military, DARPA, Raytheon and NASA. A wide range of technologies, including on-prem agent software, firewalls, security certificates, all report to a centralized intuitive system that automatically identifies and remediates outbreaks and threats via SaaS threat intelligence data identification. This multi-layered approach ensures the availability and integrity of the data as well as the system itself are fully protected.

Enterprise level Next-Gen Intrusion Prevention System (NGIPS) Cisco firewalls with Cisco's FirePOWER AMP modules scan all incoming network connections. All connections are filtered through a set of Access Control Lists (ACL's) and allowed protocols. RedSpeed's email system is protected by NGIPS using geofencing and Exchange 365 heuristic filters to only allow emails from the United states and anyone outside that region must be white listed. Malicious messages automatically get discarded when embedded code is detected by filters. All the NGIPS FirePOWER syslog node points (Cisco networking devices) and AMP agents report back to the latest security information and event management (SIEM) LogRhythm software. Outgoing user connections are monitored via Cisco Umbrella (formerly OpenDNS) SaaS DNS services for malicious activity and policy-based proxy filters which also report back to the SIEM for closer analysis.

The proprietary RedCheck™ and SiteOps™ web sites are protected with SSL security certificates to provide authorization and authentication services to users. All data transfers are also encrypted to prevent data snooping. Each authorized user has a unique login and a complex password comprised of a minimum of 7 characters. During log-in, all users are validated against a Kerberos secured Microsoft Active Directory database.

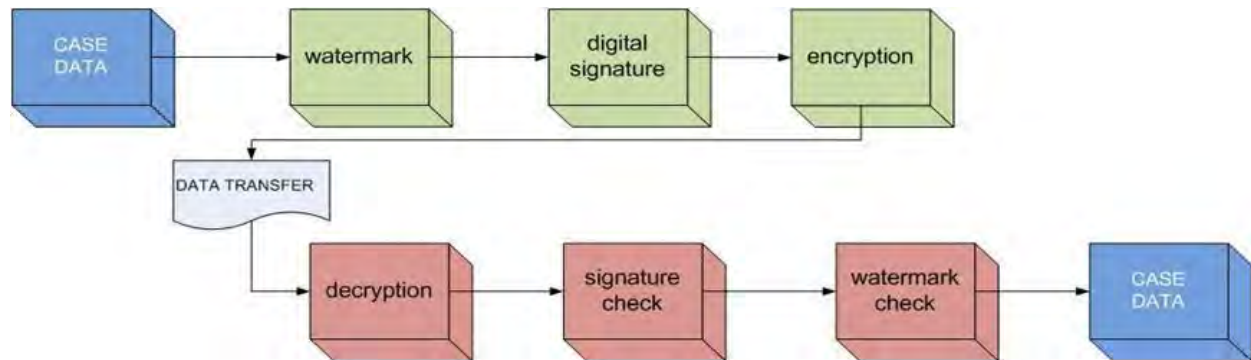
User account access is also defined thru permissions applied using role-based templates. Each user has a specific set of roles that will allow them to perform limited actions. If the user's account has not been granted access to a specific role, the user will not be able to perform that function. This prevents users from gaining access not previously authorized or applied. Additionally, all user activities are audited within a Microsoft SQL Database and the SIEM with logs retained and backed up at another site using VEEAM multi-site replication backups per CJIS policy for data retention.



The reliability and speed of the RedCheck™ system is never in question, as the data backup, disk redundancy, and network speed have been optimized for multiple connections. A fully managed fiber-optic internet connection into the facility allows for hundreds of concurrent connections to access the live database without any decrease in performance. This would also include a full copper redundancy back up line. Our server cluster provides reliability and a high percentage of available uptime. This type of network configuration will guard against loss of data entry and information integrity degradation.

Unlike many vendors who rely on antiquated magnetic tapes for storage, these purged images and video are stored digitally on a full secondary back up system, as well as being stored in the cloud. This data can be easily accessed on request of the municipality. All data can be sorted and organized into relevant reports.

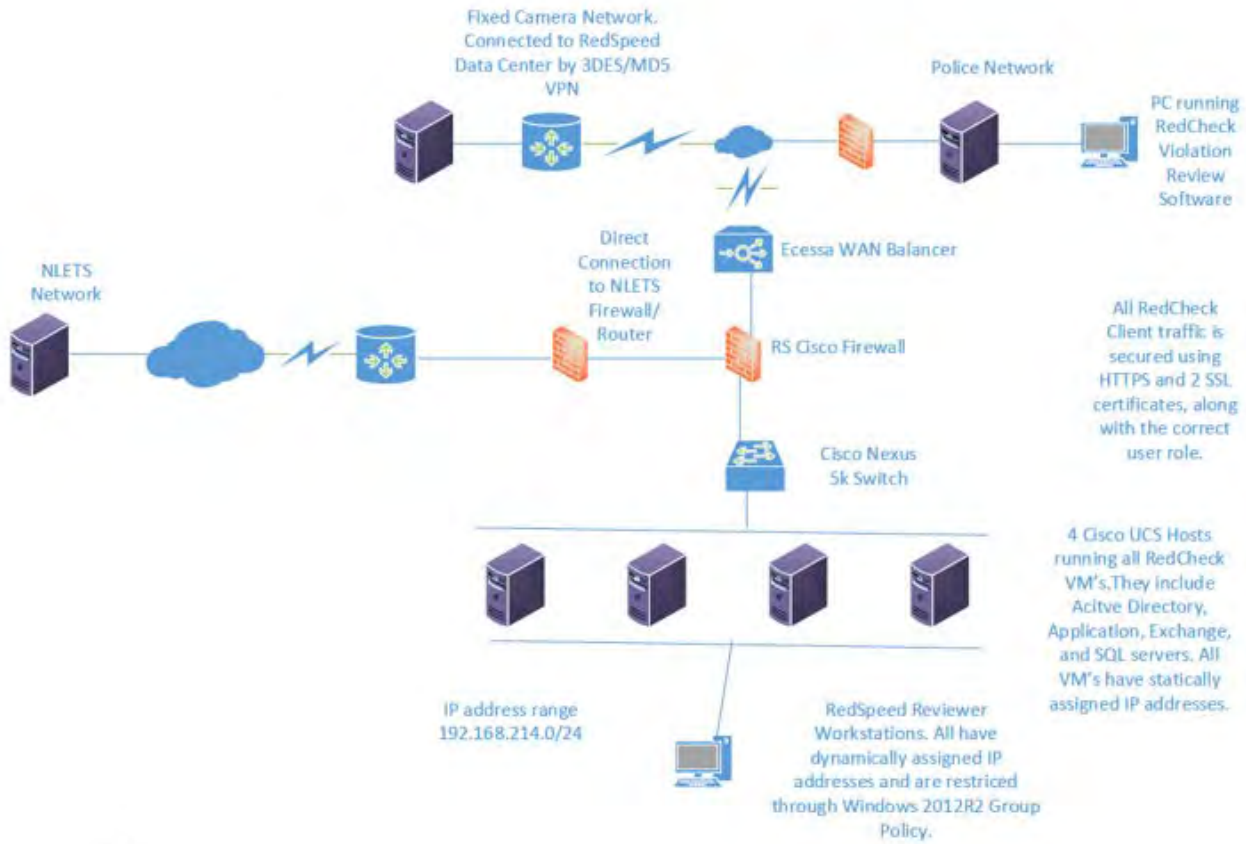
The RedCheck™ system secures the integrity of violation data by using a combination of digital signature, Public Key Cryptography Infrastructure (PKI), and Virtual Private Network (VPN) technology. Each violation is assigned a unique digital signature before being encrypted. Using PKI requires a pair of keys to successfully decrypt and import the violation. One half of the key resides in our data center and the other half resides inside the camera system. Both keys must match exactly for the violation data to be decrypted and the digital signature verified. If one part of the process does not match, the violation will not be imported. While PKI protects the violation data, the VPN protects the data transfer to RedSpeed's back office. The VPN uses many high levels of encryption to ensure no tampering has occurred during transmission as demonstrated in the following flow chart:



A secure room has been established to allow access to the Nlets database. Equipped with computer terminals running on a system completely independent of main system servers, a limited number of authorized users who have passed stringent security checks and finger printing are able to access Nlets information. Requiring a unique access pass card which is restricted to only business hours Monday thru Friday, users are monitored by security cameras while using the terminals in securely controlled spaces remotely.

RedSpeed further safeguards the security of the RedCheck system and violation data by maintaining high levels of security at the Lombard headquarters and processing facility. Employees are assigned access scan cards which allow them to enter the building thru two specific entrances monitored by external card reader entry systems. As a result, Management can track the time and date any individual has entered or departed the facility. Within the building access to specific departments, such as the printing and mailing department, is available only to authorized users during specific times of day.

RedSpeed has also augmented its staff to include 365 24/7 NOC (also FBI background cleared) for monitoring and remediation to ensure that our systems are always running. This incorporates the latest monitoring software of all nodes by SolarWinds Orion and LogRhythm for event notifications.



Public Awareness

Town of Bladensburg, MD

Automated Enforcement Program. RFQ-FY 2024-004

RedSpeed®

Public Awareness

Recognizing community support, cultivated thru education, is paramount to the continued success of Smyrna’s program, RedSpeed will work closely with the Town to ensure the existing message remains consistent. These materials designed to educate the community about the objectives of the School Zone Speed Photo Enforcement Program and its applicability to improve traffic safety (and benefit all residents) will be provided prior to deployment and for the duration of the partnership. The continuous dissemination of accurate information will ensure continued community support and eliminate the potential for speculation and misinformation.

With the County's approval the media materials will include:

- Town Specific Flyers based upon the results of the speed studies for community publications,
 - Town specific “Frequently Asked Questions” document for upload to the municipal website and for distribution thru Town identified channels.
 - Map detailing the locations at which Photo Enforcement is being utilized. This can be disseminated with printed material or posted to the County's website,
 - Posters urging residents to “Slow in the Zone” for display throughout the community. Posters are customized with both Speed Enforcement Locations and the Municipal Website where residents may view the Frequently Asked Questions document and location maps.
- ✓ Print News Releases announcing the County's plan to continue utilizing School Zone Speed Enforcement technology,
 - ✓ Newsletter Articles for community publications,
 - ✓ Town specific “Frequently Asked Questions” document for upload to the municipal website.
 - ✓ 11”x17” Glossy Posters to display throughout the community directing residents to visit the Smyrna Public Safety Department website for additional information.



For Information on the City of Alpharetta's School Zone Speed Enforcement Program Visit www.Alpharetta.ga.us



For Information on the City of Alpharetta's School Zone Speed Enforcement Program Visit www.Alpharetta.ga.us Public Safety Department Page

SCHOOL ZONE SAFETY PROGRAM RedSpeed®USA

During a school zone speed study conducted during regular school hours at *Baldwin Elementary School*

538 DRIVERS exceeded posted speed limit by at least 11 mph within 9 hours.

School Zone Speed Limit

SCHOOL SPEED LIMIT 25	7:30 - 8:30 am 2:15 - 3:15 pm	SPEED LIMIT 35
-----------------------	----------------------------------	----------------

40 mph If you are hit by a car at 40 mph, there is a 90% chance you'll be killed.

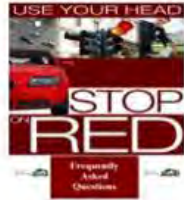
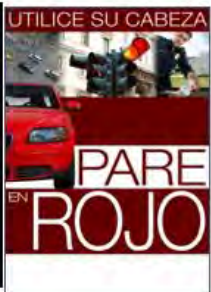
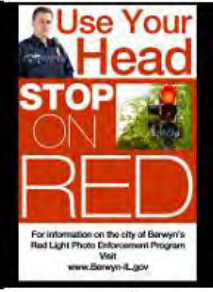
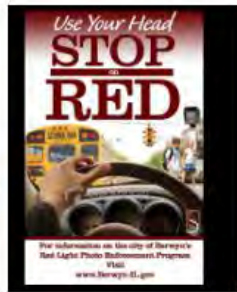
30 mph At 30 mph, it's 50%

20 mph ...and at 20 mph, it's reduced to 10%.

95 FEET Cars traveling at 35 mph require an average stopping distance of 95 ft.

136 FEET At 45 mph, the average stopping distance increases to 136 ft.

180 FEET ...and at 55 mph exceeds 180 ft.



Frequently Asked Questions: Village of YOUR TOWN Automated Red Light Enforcement Program

What do I do if I receive a Notice of Violation?
How much time do I have to pay my Red Light Violation Notice? You must pay the civil penalty on or before the due date on your Notice. The due date for payment is located on the top and bottom your Notice of Violation.

What are my Options?
Two Options are available: **PAY THE FINE OR CONTEST THE VIOLATION**

OPTION 1. Pay the Fine

- Pay Online:** Logon to www.RedLightViolations.com I Violation Notice Number and License Plate Number no and bottom right of your Notice of Violation. The convenience fee for paying on-line, assessed at the time of payment.
- Pay By Mail:** Mail your check or money order (payable to City of _____ Photo Enforcement Program) in the envelope provided. Be sure to include the payment stub from the notice you received along with your payment. Please do not staple.
- Pay By Credit Card:** A Toll Free number will be established by the Village of _____ and there is a \$3.50 convenience fee for the transaction confirmation number will be provided as well confirmation for your permanent records if you wish.

** In-Person Payments are not available.*

Drivers Take Notice—Red Light Cameras Are Coming To Improve Intersection Safety

In an effort to enhance safety at some of the most dangerous intersections, the Village of _____ Board has approved the installation of an automated traffic enforcement system, also known as Red Light Cameras, for various intersections within the community. Intersections under consideration include Route 12 & Berwyn, Route 170 & Lakeside and Route 170 & Main Street. OR The cameras will be installed at the intersections of Route 12 & Berwyn (Starts Normal) in early February 2024.

According to recent studies conducted by the U.S. Dept. of Transportation, Red Light Camera Programs can decrease red light violations up to 80%. Traffic accidents caused by red light runners are among the most serious, often resulting in severe injuries and fatalities. Studies have shown that approximately 1,000 people die and 170,000 people are injured annually in the United States because of drivers running red lights.

There are Two Types of Red Light Violations:

- Right Turn on Red Without coming to a complete stop and
- Entering an intersection after the traffic signal has turned red

A common misconception is that the cameras will be photographing everyone as they drive thru the community. In fact, sensors placed in the pavement activate the camera only when a vehicle enters the intersection during the red light cycle. A total of 3 photographs will be taken plus 8-10 seconds of digital video. The images include: the car entering the red light intersection, the car passing thru the intersection and finally, a close-up of the license plate. All 3 images, plus a link to view the video footage online, will be provided to the vehicle's registered owner who is mailed the violation. According to Illinois Law, it is illegal to photograph the faces of other drivers or passengers.

Frequently Asked Questions:

- Is the citation valid if it was not issued by a uniformed police officer?**
Yes. These violations will be reviewed and authorized by sworn officers of the TOWN Police Department. Each reviewing Officer will be specifically trained in the operation and review process of the Red Light Photo Enforcement Program. These tickets are treated as a civil violation (just like a parking ticket) and will not impact the registered owner's driving record or insurance rates.
- What do I do if I receive a Citation?**
If you receive a citation in the mail you should follow the instructions on the back. Detailed information is provided on how to pay or contest the violation. Should the individual decide to contest the violation, he/she may do so through the Village's City's adjudication program.
- What if I wasn't driving the car?**
Under Illinois State Law, HD 493E, the registered owner of the vehicle is liable for any automated traffic law violations that occur to the vehicle, regardless of who is operating it.

Why does Rosemont need Red Light Cameras?

Traffic studies show that Red Light Running is a problem at several intersections within the Village. The goal of the camera program is to change driver behavior by encouraging compliance with traffic signal laws through ground-level, clock enforcement.

Why aren't Police Officers monitoring these intersections?

The Rosemont Police Department is committed to the safety of their residents, but no community can afford to police every red light intersection 24 hours a day. Traditional enforcement also creates a safety hazard for the violator, other drivers, pedestrians and the officer when police chase a violator through a red light. This technology frees up officers to assist and protect residents in other ways.

Is this simply a way for the Village to make money?

The objective of this program is to deter drivers from disobeying the law, not catch them. There is no cost to the Village for installing, operating or maintaining the system. The program is completely violator funded.

Red Light Photo Enforcement

Deaths caused by red light running are increasing at more than three times the rate of increase for all other fatal crashes. Sadly, the victims are often occupants of other vehicles or pedestrians who happen to be in the intersection, across, behind, before, or in front of the vehicle.

The Village is asking the residents of Rosemont to respect the rules of the road and to consider not only their safety but the safety of others.

The Red Light Camera System is designed to encourage everyone to adopt safer driving habits and eliminate unnecessary injuries and deaths.

The Village of Rosemont's Red Light Cameras are located at:

River Road and Higgins Road North and Eastbound

Red Light Photo Enforcement

Changing Driver Behavior One Intersection at a Time

Is Red Light Running really a problem?

Each year in the United States, Red Light Running results in nearly 200,000 crashes, more than 800 deaths and 180,000 injuries.

Four in five crashes happened within 150 feet of an intersection.

Someone runs a red light every 3 minutes in rush hour.

Source: Insurance Institute for Highway Safety

Municipal Personnel Training & Training Materials

RedSpeed believes the success of the program is dependent upon every authorized municipal agent involved having a thorough and solid understanding of all operational elements of the School Zone Speed and Red-Light Enforcement programs. As such, top priority will be given to ensuring authorized personnel involved with the County's program will receive customized training that addresses each core component of the RedCheck™ and SiteOps™ systems.

Beginning with an initial "Business Rules" meeting to outline RedSpeed's project approach, no aspect of the program is overlooked without full disclosure and discussion.

Business Rules Topics include:

- MVA constraints and timelines
- Launch Schedules – locations, dates, Warning period, public awareness campaign
- Equipment – what equipment will be supplied, installation guidelines, Training
- Violation Review – Initial screening (if Town prefers RedSpeed violation review personnel conduct an initial screening), Officer review and approval / rejection, Notice mailing
- Hearing Process – existing process, role of Town, clerks, payment process, scheduling, and violator notification
- Revenue Collection and Reporting – Various methods of submitting payment, reconciliation of funds, disbursements to Town.

Site Visit:

The RedSpeed Project Director will take Town personnel out to an enforced intersection to familiarize them with the system's hardware:

- Camera Enclosure
- Vehicle Detection
- Processor
- Pole
- Electric connections
- Placement of Required Signage



- On-site, classroom style training, in addition to one-on one hands-on instruction, will be conducted by a RedSpeed representative, with all necessary training materials provided by RedSpeed.
- On-site training will be provided at no cost for as many individuals as the Town requests, to ensure all personnel are fully versed on the system. Scheduling will be based upon the most convenient times for Town personnel.
- Major topics within RedCheck™ include navigating the violations summary and details screen to access violations, approving, and rejecting violations and generating the various customized reports available thru the system.
- This training will be supplemented by on-going support and additional "refresher courses" for existing personnel, as well as training for new personnel as needed.
- SiteOps™ training will explore the many facets of the system. Personnel will learn how to utilize the Live View module and the steps involved with accessing and downloading archived video footage.

Ongoing support for all municipal users will be provided by the same individuals providing the training. These individuals will be available at any time to address any of the County's questions or requests. RedSpeed provides detailed, screen-by-screen function related training materials for all Town personnel. As staff adjustments are made, RedSpeed will provide additional materials to ensure all active participants in the program have their own reference manual. Upon request, refresher training will be provided for both existing and new personnel at no cost to the Town.

Vendor Qualifications

Town of Bladensburg, MD

Automated Enforcement Program. RFQ-FY 2024-004

RedSpeed®

COMPANY PROFILE

RedSpeed Maryland was established in 2010 as a subsidiary of RedSpeed USA. RedSpeed's capability to meet the Town's requirements are exemplified in its 15 years' operating performance within Illinois, Iowa, Florida, Maryland, and Georgia. The dedicated team which has been assembled has worked together with each partner community, developing installation policies and procedures, identifying potential enforcement locations, developing state specific workflows for permit acquisition and program launch. These programs were customized to strictly adhere to State law, as well as tailored to meet the individual requests of each community. **This is exactly the type of personalized and committed service Bladensburg can expect by partnering with RedSpeed.**

RedSpeed's adaptability and commitment to customer service have enabled us to successfully meet and exceed the expectations of 160 programs in five states.

RedSpeed's longstanding financial strength and available financial resources underpin ongoing success. We are well capitalized and ready to execute immediately upon award of the contract.

PROPOSING FIRM NAME AND OFFICE ADDRESS

RedSpeed Maryland
450 Eisenhower Lane North
Lombard, IL 60148

**Point of Contact to whom all correspondence should be sent and
Authorized Signer on behalf of RedSpeed Maryland:**

Robert Liberman
Managing Director
630-317-5710 Office Direct
630-424-0217 Facsimile
Robert.Liberman @ RedSpeed-USA.com



RedSpeed® Corporate Headquarters

PROJECT MANAGEMENT APPROACH – HYBRID

The project management approach is truly a partnership between the Town of Bladensburg and RedSpeed. While local officials bring an intimate knowledge of the County's specific issues and traffic enforcement needs, RedSpeed will provide the technical expertise and strategic plan for executing the County's vision in a timely and efficient manner.

Utilizing tried and true methods which has successfully launched over 160 Speed and Red-Light programs across 5 states, the dedicated Project Director (Erwin Lanier) will initiate a Business Rules meeting with Town officials and the Bladensburg Police Department immediately upon receiving confirmation of the award. As the County's objectives, concerns and ideas are clarified, Mr. Lanier will visit the existing enforced locations to determine the most efficient camera equipment transition approach as well as identifying any potential new locations for enforcement. Consideration will be paid to lane and traffic configurations, signage, compliance with Virginia Department of Transportation (DOT) guidelines, easements, location of power, internet, etc.

During the evaluation process, Mr. Lanier will be working closely with the Town and a RedSpeed Client Relations Specialist to initiate all "Back Office" requirements, including District Court approval of all citation notices, client accounts, toll free numbers, vendor ORI number, training materials and public awareness campaign specifics.

Transition / New Installation Timelines for Traffic Enforcement Devices

Erwin Lanier will be initially assigned to the Town to facilitate a 70-day installation timeline. Upon award of the contract, RedSpeed will begin the sequence of activity to deliver the system beginning with redeployment of engineering field engineers presently operating in Prince George's County Maryland. Phase I Deployment Schedule is referenced in the Technical Report. (RedSpeed is not responsible for delays beyond its control.)

SEQUENCE OF EVENTS

1. Town of Bladensburg issues a formal notice to proceed to Redspeed.
2. Redspeed will meet with Bladensburg Town officials and Police Department Command Staff to review the Business Rules. The business rules will outline the roles and responsibilities.

Details covered includes the following:

1. Identify staff officers involved in the program
2. Identify Town Finance Officer and establish banking and wire transfer
3. Establish Originating Agency Identifier (ORI) number via Criminal Justice Information System (CJIS) and the Virginia State Police (VSP)
4. Submit letter to National Law Enforcement Telecommunications System (NLETS) for tag retrieval information
5. Generate citation and delinquent notices and submit to District Court for approval
6. Create client hot line and toll-free payment number
7. Collect Bladensburg Police Department logo
8. Complete flagging participation letter to DOT

3. Redspeed will perform a full accounting of the County's current system, vendor, and protocols.

To include:

1. All laptop or desktops (including those inside patrol vehicles), with access to the vendors database. This will provide a map of current staff that will need access to Redspeed's violation processing.
2. Redspeed will perform an extensive site visit to determine current deployment data such as vegetation, sight lines, position of the sun in relation to the cameras, all signage, utilities, foot traffic, lane configuration, volume of traffic, manholes and more. This will determine the best equipment for deployment and accuracy.
3. Once the site visits are completed, Redspeed will commission new drawings for existing and new site deployment.
4. Redspeed will order new signage
5. Redspeed will submit all drawings and applications for Right of Way (ROW) approval to Department of Transportation (DOT), County and City permitting. Redspeed will submit the individual packages to the City for approval and signatures
6. Redspeed will engage its trusted contractors to begin construction on fixed site deployments
7. Redspeed will first focus on the existing enforcement locations and install with "Rapid Deployment" systems to minimize delay, then collaborate with to develop additional enforcement locations.
8. Redspeed will employ its system engineers to ensure integration with the Smart Ops Platform

4. Maintenance & Repair & Testing

1. Redspeed will maintain at its disposal, eight (8) complete fixed and mobile spare systems to ensure same day or near same day maintenance and repair. This does not apply to vehicle or handheld units, they will each have one spare
2. Redspeed will provide annual calibrations for all red light and speed camera equipment annually. The calibration certificate is admissible as evidence in court
3. Redspeed will install "Rapid Disconnect" hot boxes at fixed sites to facilitate removal or redeployment within fifteen (15) days.
4. Redspeed will provide site analysis and traffic counts using non-invasive data acquisition in support of new site selections. These traffic studies are completed in-house using similar "Rapid Deployment" equipment
5. Redspeed will record all maintenance tasks in its web based SiteOps platform. This will facilitate annual reporting obligations to DOT or Town permit requirements.
6. Redspeed will perform weekly "Mobile System Checks" to test system accuracy and ensure the results are within +/- 1 MPH.
7. Redspeed's speed camera systems provide daily systems check each morning at 0600 hours. This form is completed each morning by law enforcement and is admitted as evidence. Access to this form is via Redspeed's web based SiteOps platform
8. Redspeed will provide all law enforcement program participants a certificate of training that will be kept on file and is admissible as evidence

5. Violation and Processing

1. Redspeed will provide to program participants access to captured evidence data collected by all cameras via Redspeed's Webcheck link. No firmware or special devices are required. Only internet service is needed. Webcheck provides access to citation evidence, search queue, all citation data (date, time, tag, name, address, registered vehicle, make, model and color, direction of travel, etc). In addition, webcheck allows the user to access all correspondence relating to the specific violation in PDF document format.

2. Redspeed's SiteOps website is designed for the user to access maintenance records, daily logs, live camera views and full access to all recorded data in the systems hard drive. SiteOps can retrieve up to 60 days of an event with clear precision.
3. Redspeed LPR service operates simultaneously with either speed or red light systems. It can also track vehicle in other states Redspeed operates in
4. Once a violation is captured, it is reviewed 3-4 times for accuracy before being submitted as evidence to law enforcement.
5. Redspeed's camera systems can monitor up to 7 lanes of traffic in each direction

Note: *Our timeline assumptions are based on the expediency of all parties, including MVA, Bladensburg, DOT and Town ROW applications, power utility and internet carrier.*

IMPLEMENTATION SCHEDULE

Schedule attached:

PRE-CONTRACT – Feasibility, Need Assessment & Planning

- Obtain the County's list of sites.
- Review site conditions
- Camera Placement Evaluation: Review Traffic Studies / Perform new Traffic Studies
- Negotiate and execute Contract

WEEK 1 – Back Office Setup

- Approve Traffic Studies & Camera Placement Form
- Generate and approve Deployment Schedule
- Onboarding tasks with Town staff (systems, banking, admin coordination)
- Create user accounts
- Set up citation notice and letter templates
- Set up toll free & hotline numbers
- Conduct Town staff training
- Issue Training Certificates
- Secure ORI number
- Set up MVA account for database tag look-up
- Establish violation Town rejection and approval criteria
- Integrate with Smart Ops platform
- Populate RedSpeed's proprietary platforms
- Commission Engineering Drawings
- Upload Public Awareness pages and Newsletter to Town website

WEEK 2 – Engineering & Design (Site Specific)

- Elec Pwr – confirm available service
- Apply for ROW Permit
- Apply for Traffic Control Permit

WEEK 3 – Engineering & Design (Site Specific)

- Respond to Engineering & Design Questions
- Confirm installers availability & priority

WEEK 4 – Advanced Field Prep

- Initial site inspections with Installer
- Order Installer Price Quotes
- Meet with Electrical & Internet Contractors
- Initiate Electric & Internet Service Request

WEEK 5 – Administrative Preparation

- Review Price Quotes
- Subcontractor Selection
- Commence Construction

WEEK 6 – Field Deployment

- Construction Complete
- Schedule Final Inspection

WEEK 7 – Field Deployment

- Deliver electric power and internet to fixed sites
- Verify ROW Permit
- Verify Traffic Control Permit
- System calibration and certifications
- Test live operations

WEEK 8 – Implementation Setup

- Coordination with Town staff to commence active operations
- Deliver handheld or mobile units to be deployed
- Commence maintenance recordkeeping upon live operation for each unit
- Install and commence pay station
- Commence Call Center service
- Open adjudication dockets