

**COMPLIANCY MATRIX / DEVIATIONS TO THE RFP**

**The requirements of the Scope of Services are listed below.**

**Any areas where RedSpeed deviates from the requirement are highlighted for easy identification and review.**

General Requirements	YES / PAGE	NO/ DEVIATION
1.1 Use of a high-quality digital camera system with an output in excess of 10 million pixels per image is required.	28	
1.2 The equipment capable of gathering traffic data for statistical analysis.	39	
1.3 Equipment capable of deployment in a wide range of operating conditions; (e.g., heavy traffic volumes, adverse weather conditions, road surface configurations, etc., and across five (5) moving lanes of traffic).	40	
1.4 Equipment that provide a reliable non-intrusive, non-physical connection to the red phase signal.	40	
1.5 System capable of providing at least three (3) digital color still images of each violating event. The images must be taken so that the rear of the vehicle and license plate are captured and are readable. The first (1st) image shall capture the vehicle before the front wheels strike the legal infraction limit line. The second (2nd) image shall capture the vehicle after the rear axle has crossed the crosswalk or legal limit line. The third (3rd) one shall depict a close up of the license plate. Preference will be given for the ability to capture a short duration video of the infraction	41	
1.6 The camera system shall record data pertinent to each infraction at the time of capture.	42	
1.7 Data that is recorded in a flexibly configured data bar that is embedded with each scene, license plate and stop bar detection images that may be used to prove the infraction. The data bar shall include, but is not limited to, the following information for each infraction: <ul style="list-style-type: none"> <li>a) Unique infraction identifier incorporating the City;</li> <li>b) Location of infraction;</li> <li>c) Date (MM/DD/YYYY);</li> <li>d) Time of the infraction in 24-hour clock including hours, minutes and seconds;</li> <li>e) Elapsed time between images;</li> <li>f) Direction of travel;</li> <li>g) Traffic signal phase;</li> <li>h) Time into the red phase displayed in thousandths of a second;</li> <li>i) Duration of the prior amber phase;</li> <li>) Vehicle lane of travel;</li> <li>j) Camera ID; and</li> <li>k) Frame sequence number.</li> </ul>	42	

General Requirements	YES / PAGE	NO/ DEVIATION
1.8 Provide an ancillary video system as supporting information to the infraction provided by the still images. The video must be full motion at the rate of thirty (30) frames per second or greater and allow aperture adjustment.	43	
1.9 Each imaging unit's operation shall be microprocessor controlled and fully automatic.	44	
1.10 The Camera System shall be capable of on-site or remote activation and maintenance support.	44	
1.11 The Camera System shall perform self-test on set-up; simulate an infraction being recorded for testing; communicate error messages; record date and time of system shutdown in the event of a malfunction.	44	
1.12 The Camera System shall allow a malfunction to be easily identified and debugged on-line.	44	
1.13 The Camera System shall record event-specific evidence to substantiate multiple, simultaneous and/or concurrent infractions occurring during any red signal phase (Sample infraction images to demonstrate this capability are required as part of this proposal.	50	
1.14 System shall provide 24/7 "live" intersection monitoring and viewing capabilities and be accessible to the City.	51	
1.15 All camera system component operations must be synchronized to a single, standard, independent, external and verifiable time and date source.	54	
1.16 The selected Firm may provide more than one vehicle detection method (In-ground loops will not be considered), and shall detail the vehicle detection methods that can be used by the proposed system, including the benefits and limitations of each (if more than one is offered).	54	
1.17 Red light camera enclosures must be tamper-proof and vandal proof.	58	
1.18 Preference will be given to systems that require the least infrastructure at Intersection.	58	
1.19 Red light camera enclosures must be as small as possible and use as little power as possible. State the size of the red-light camera system enclosure and the normal power draw of the system, including the power usage during the flash phase.	60	
1.20 Red light camera enclosures must be designed in such a fashion that maintenance and other operations can be accomplished easily and quickly without creating a public safety hazard.	61	

## General Requirements

1.21 The Firm's system shall be able to simultaneously monitor traffic in up to five (5) lanes.	61	
1.22 In addition to monitoring straight-through infractions, the system shall be capable of detecting and recording evidence of left and right turn infractions, regardless of vehicle speed.	61	
1.23 The selected Firm shall preferably have the capability, but not be required unless directed in writing by the City of Miami Beach, to do Optical Character Recognition (OCR) on ALPR, and store those reads in a centrally located database such as Microsoft SQL Server. The read would have the following components for bare-minimum integration: a) Plate Read b) Latitude c) Longitude d) Scan Time e) GMT Scan Time f) Plate Image g) Vehicle Image	33-35 62	
1.24 Firm shall provide a project manager for the project as the single point of contact of the City.	62	
1.25 Firm shall provide intersection design and installation plans for review and approval by the City and Miami-Dade County Traffic Engineering, if applicable.	62	
1.26 Firm shall provide two (2) laptops for the City's Red-Light Camera Team, at no additional cost to the City. In the event that laptops require repairs and/or updates during the contract period, loaner laptop(s) shall be provided in the interim, at no cost to the City	64	
1.27 At no additional cost to the city, Firm shall provide mounting pole(s), and all related mounting equipment and hardware for each red-light camera installed	58-59 64	
<b>II. Infraction Processing</b>		
2.1 There shall be no requirement to install the Firm's processing software on City-owned/ maintained IT systems.	66	
2.2 Firm's infraction processing system shall allow the City a detailed view into all of the information related to the program.	66	
2.3 All access to the infraction processing system for the purpose of pre-processing evidence, police authorization, notice printing, payments tracking and generation of special master evidence packages shall be Internet enabled and shall be available 24/7 for authorized users.	66	

General Requirements	YES / PAGE	NO/ DEVIATION
<p>2.4 The infraction processing system shall provide the following functions:</p> <ul style="list-style-type: none"> <li>a) Web-enabled access and operation;</li> <li>b) Secure user log-in and access;</li> <li>c) Automatic presentation of images and data captured by the camera system onto review PC's;</li> <li>d) Easy review of infraction evidence against regulations;</li> <li>e) Ability to both "play" full motion video and view multiple scene and plate images;</li> <li>f) Ability to view each image as a full screen enlargement with a single click;</li> <li>g) Ability to view all original images;</li> <li>h) Ability to "crop" a license plate image area from the optimal license plate image in the multiple-image license plate set to establish vehicle ID, and subsequently print the cropped plate area image to the notice;</li> <li>i) Ability to "accept" or "reject" infraction sets and record rejection reasons;</li> <li>j) Ability to generate printed warning letters (during the first ninety [90] days of the program at the City's discretion);</li> <li>k) Ability to automatically generate printed infraction notices;</li> <li>l) Ability to store and archive all processed infraction evidence into a secured database;</li> <li>m) 24/7 ability to access any stored infraction image from the system's database subject to agreed archive rules;</li> <li>n) 24/7 ability to request and immediately view Special Master Evidence Package image sequences displayed as video or as individual high resolution still shots, or send images to print locally;</li> <li>o) 24/7 ability to immediately request, view and print both standard and user-defined reports;</li> <li>p) Secured Access Control and automatically generated Electronic Audit Trails; and</li> <li>q) Encryption and decryption management.</li> </ul>	66	
<p>2.5 Firm system shall be capable of:</p> <ul style="list-style-type: none"> <li>a) Preparing and mailing one notice letter for all chargeable infractions to vehicle owners.</li> <li>b) Preparing and mailing a second notice for any infractions that remain unpaid as of their due date.</li> <li>c) Upon notification by City, preparing and mailing Notices of Hearings to violators whose fines are not paid within thirty (30) days of mailing of second notice.</li> </ul>	73	
<p>2.6 Infractions for which registered owner data is available shall normally be issued within seven (7) business days after police review of the incident. Initial notice letters described in Section 2.6(a) shall not be sent until Firm is advised to do so by the City.</p>	73	

General Requirements	YES / PAGE	NO/ DEVIATION
2.7 Firm shall be responsible for loading, optimizing and license plate data entry processing of images for review (final review to be processed by authorized City police personnel).	69	
2.8 Firm will prepare the notice letters referenced in Section 2.6 for all chargeable infractions and will mail such notice letters to vehicle owners. The Firm shall include a return envelope for payments with all notice letters.	73	
2.9 Infractions for which registered owner data is available shall be issued within the legally required number of days of the infraction event date.	73	
2.10 Firm may be asked to provide all required notice processing supplies including, paper, envelopes, postage, toner and any and all notice printing supplies.	73	
2.11 Notices shall include one set of images and a license plate image, as well as instructions as to viewing the alleged infraction through the internet.	74	
2.12 Firm shall provide a means for the fines to be paid on-line by credit or debit card.	85	
2.13 Firm shall provide a means for the fines to be paid by phone using a credit or debit card.	88	
2.14 Firm shall provide for a third-party collection service for the collection of delinquent accounts, at City's discretion.	89	
2.15 Firm must give first consideration to the City's preferred gateway and merchant processor and must use the City's current banking services for receipting. If the proposer cannot use the City's current providers they must provide justification as to why. The rates associated with the proposer's third party or own gateway and merchant processor must be competitive with the City's current negotiated rates.	90	
<b>III. Statistical Analysis and Reporting Systems</b>		
3.1 Systems with the capacity to produce statistical analysis of camera locations and operations will be preferred, including, at minimum: a) Hours of use per camera by operational site; b) Results achieved by each camera by site; c) Offenses recorded by site; d) Traffic counts by lane, date and hour; and e) Ability to do ad hoc reports on all data.	92-102	

General Requirements	YES / PAGE	NO/ DEVIATION
<p>3.2 The Firm's Processing system shall be capable of immediately generating operations reports 24 hours a day, 7 days a week, including:</p> <ul style="list-style-type: none"> <li>a) Number of infractions recorded;</li> <li>b) Count of infractions where notices not prepared;</li> <li>c) Notices prepared and mailed; and</li> <li>d) Status of notices issued (i.e., outstanding, canceled, reissued).</li> </ul>	92-102	
<p>3.3 The Firm system shall also supply reports of:</p> <ul style="list-style-type: none"> <li>a) Camera equipment hours of service and hours lost; and</li> <li>b) Number and description of camera or other equipment malfunctions.</li> </ul>	92-102	
<p>3.4 The Firm's system shall be capable of providing Infraction and Traffic Statistics as follows:</p> <ul style="list-style-type: none"> <li>a) Real-time traffic volume and vehicle counts; and</li> <li>b) Real-time infraction graphs and chart by: <ul style="list-style-type: none"> <li>i) individual lane;</li> <li>ii) time of day; and</li> <li>iii) day of week.</li> </ul> </li> </ul>	39 92-102	
<p>3.5 Preference will be given to systems, that can analyze results obtained from each camera location to show the prosecutable image rate (e.g., the number of notices issued compared to the number of infractions captured) and the traffic count statistical information.</p>	92-102	
<p>3.6 Preference will be given to systems that have online reporting capability in real time; and allow the Firm to provide the City with a monthly activity report within ten (10) days following the end of the month.</p>	92-102	
<p>3.7 The monthly report shall indicate the following:</p> <ul style="list-style-type: none"> <li>a) The number of events detected, notices/infractions issued and prosecutable image rate by location and in total;</li> <li>b) The total number of infractions that occurred and percentage of total vehicle traffic by lane; and</li> <li>c) The total number and percentage of rejected images by reason.</li> </ul>	92-102	
<p><b><u>IV. Image Transmission Security and Data Storage</u></b></p>		
<p>4.1 Firm must provide for image and data security that shall prevent unauthorized persons from accessing the camera images and databases and tampering with images (explain methodology).</p>	104	
<p>4.2 The Firm must store all enforceable images produced by cameras for no less than 180 days after final disposition, or greater duration requested by City.</p>	105	
<p>4.4 Firm shall maintain a proper chain of evidence that meets the needs of the City, and hearing officers and court functions.</p>	106	

General Requirements	YES / PAGE	NO/ DEVIATION
4.5 Firm shall provide a qualified expert witness who is knowledgeable on the theory, operation and functional capabilities of the red-light camera unit.	108	
<b><u>V. Maintenance, Support and Training</u></b>		
5.1 All maintenance of camera, video, sensors, computer, and related equipment shall be the responsibility of the Firm. This shall include provisions of electricity or other sources of power to the equipment, at Firm's expense.	110	
5.2 Firm shall guarantee to repair or replace any inoperable equipment within 72 hours of detection by the Firm or notification by the City.	110	
5.3 Firm shall maintain cleanliness of camera lens upon request	113	
5.4 Firm must provide ongoing training support for their product.	116	
5.5 Provide hands-on training as necessary to personnel, as required by the City.	116	
5.6 Firm shall furnish training materials to the City.	116	
<b><u>VI. Operations and Public Awareness</u></b>		
6.1 Firm will provide assistance with the content and design of a public education program and associated materials to be funded by the City and implemented by the Community Relations Department.	121	
6.2 Firm will support the City by training staff on how to present the Firm's systems at public seminars or presentations. The Firm will provide staff for public forums as necessary.	121	