

## Appendix I

### RFP Traffic Control Citation and Issuance Management System - Requirements Matrix

Using the tables in the matrix document below, the Vendor should respond to each individual requirement by entering an 'X' in one of the columns provided. Select the appropriate response using the following guidelines below.

The functional requirements are presented in tabular format. The columns in the table include:

<b>Reference Number</b>	The internal cross-reference number for the requirement. See appendices for detail requirements that were summarized to this internal cross-reference number.
<b>Requirement</b>	The specific function or behavior necessary to satisfy City business needs.
<b>Standard</b>	The requirement is satisfied by the solution proposed without configuration. Where the requirement is satisfied by third-party software, indicate the third party product proposed. Also mark here for questions in which the Vendor satisfies the requirement.
<b>Configured</b>	The requirement is not satisfied by the solution out of the box, but is satisfied by configuration.
<b>Customized</b>	A modification to the solution is required to satisfy this requirement. Provide an explanation of the volume of labor and work complexity. In addition, indicate whether the requirement will be satisfied by an upcoming release, and if so, give the version number and date of release.
<b>Not Available</b>	The solution will not satisfy the requirement. Also mark here for questions in which the Vendor does not satisfy the requirement.
<b>Describe how this requirement will be satisfied</b>	Details regarding the delivery of the requirement. Narrative will adequately describe how the Vendor solution can satisfy the requirement. Screen shots, sample reports, or supporting documentation may be included in the response. Use extra pages as necessary and include the Requirement Ref #.

The Vendor also must enter a response in each requirement table under the row heading: "Describe how this requirement will be satisfied."

Where Vendor has indicated that modifications/exceptions are needed to meet the requirement, Vendor must use this section to provide an explanation of the amount of work, the level of complexity and your availability to perform the modification. Where appropriate, indicate whether the requirement is planned for upcoming releases, and give the version number and date of release if known.

To understand associated data requirements, Vendor should reference the appendices or links provided. Additionally, Vendor can provide further comments outlining additional information or functionality of the system relevant to the requirement by attaching documents to the completed appendix and indicating the appropriate reference number.

**Appendix I**  
**RFP Traffic Control Citation and Issuance Management System - Requirements Matrix**

The Vendor may also include screen shots, samples, and inventories for any requirement listed.

The items listed should not be construed as to be an exhaustive list of system requirements. As part of the implementation process, we expect Vendor to conduct an assessment of our process and business requirements, determine how their product meets the City of Minneapolis requirements, and identify possible gaps. The City would anticipate that this process would occur on-site and in collaboration with the relevant stakeholders.

Reference Number	Requirement	Standard	Configure	Customize	Not Available	Describe how this requirement will be satisfied
<b>1.0 General</b>						
1.01	Solutions offered must be supported by a single Vendor. Solution must include all the elements necessary to meet the requirements outlined in this RFP.					
1.02	Entirely scalable to meet the expanding needs of the client over time.					
<b>2.0 Citation System Capabilities</b>						
2.01	Back office software and handheld device hardware must synchronize with a master clock to record accurate times for citations issued and processed.					
2.02	Repository for status updates from Cale					
2.03	Ability to display current status of multiple parking spaces by operational zone or block					
2.04	Keeper of the prefix and citation numbers issued by the Court. The Prefix number changes annually. The Citation numbers are issued in blocks of					

**Appendix I**  
**RFP Traffic Control Citation and Issuance Management System - Requirements Matrix**

Reference Number	Requirement	Standard	Configure	Customize	Not Available	Describe how this requirement will be satisfied
	numbers by the Court. Warning and tow tickets require a separate set of numbers.					
2.05	Interface transmissions to adjudicating authority					
2.06	Retrieve meter payment information and maintain history. Ability to purge payment information based on legal requirements.					
2.07	Retrieve and maintain status and payment information from adjudicating authority					
2.08	Provide and maintain an inventory of violations issued.					
2.9	Maintain a complete inventory of metered spaces and corresponding addresses which can be updated daily					
2.10	Able to accept input from other sources, such as LPR, QR code, barcode					
<b>3.0</b>	<b>Device Application Capabilities</b>					
3.01	Integrates input source information, static references and transitory references, to populate display form, generates formatted file for printer, sends file to connected / assigned printer, and retains copy					
3.02	Ability to query for status, pending updates for on-street space					
3.03	Capable of displaying on-street parking status by block; paid, expiring, or expired					
3.04	Capable of displaying updated information against a					

**Appendix I**  
**RFP Traffic Control Citation and Issuance Management System - Requirements Matrix**

Reference Number	Requirement	Standard	Configure	Customize	Not Available	Describe how this requirement will be satisfied
	graphic map					
3.05	Record a geo point when the citation is issued					
3.06	Application software driven by menu selection					
3.07	Application menu's identify type of citation to be generated					
3.08	Application software input source can be from multiple sources					
3.09	Application input source can be a photo, hand entered, QR, or bar code					
3.10	Ability to attach and store a photo, tow report, audio recording and other related information to a record					
3.11	Code Compliance Specialist (CCS) enters minimal data					
3.12	CCS gathers situational data via QR or bar code					
3.13	CCS has optional boxes to check for related or extended actions (i.e. tow slips)					
3.14	Ability to print tow slips and store data with the citation. Tow slips must contain tow type, vehicle make, state and license plate, electronic signature of CCS, time tow will take place and all other related data					
3.15	Application software utilizes static reference data (meter numbers) and transitory data (BOLO list)					
3.16	Application software generates date and time					
3.17	Application software references user sign-on information for name, badge number, and electronic signature					

**Appendix I**  
**RFP Traffic Control Citation and Issuance Management System - Requirements Matrix**

Reference Number	Requirement	Standard	Configure	Customize	Not Available	Describe how this requirement will be satisfied
3.18	Citation specific print characteristics contained in specific application					
3.19	Capability of storing a reserve of citation numbers for continuity of use if server is down					
3.20	Citation date time synched with master clock					
3.21	Citation stored on field device until successfully downloaded and retrieved					
3.22	Capability of meeting or exceeding current performance times for exchanging data used to issue a ticket. All data exchanges described in Section 3 must meet or exceed current timeliness levels (20-45 seconds). Printing a ticket should take no more than 15 -20 seconds (the whole process should take no more than a minute).					
<b>4.0</b>	<b>Device Hardware Capabilities</b>					
4.01	In field device subject to the rigors of outdoor inclement weather and temperature ranges of below zero to above 90 Fahrenheit should be capable of supporting the following requirements					
4.02	Display and keyboard readable at night as well as in the full light of day					
4.03	Display resistant to scratches and abrasions of daily use					
4.04	Battery life greater than one 12 hour shift, and ability to recharge battery in a timely manner					
4.05	Shock resistance: capable of withstanding multiple					

**Appendix I**  
**RFP Traffic Control Citation and Issuance Management System - Requirements Matrix**

Reference Number	Requirement	Standard	Configure	Customize	Not Available	Describe how this requirement will be satisfied
	4 foot drops to concrete without sustaining operational damage					
4.06	Electro Static Discharge (ESD) control of device data not impaired by human movement or contact with clothing or other external elements					
4.07	ISO standard IP58 or better - water resistant to 1.5 meters for 30 minutes immersion					
4.08	Cell network communication 3G minimum and capable of working with best performing cellular services in the local area					
4.09	WiFi network capable					
4.10	Common operating system capable of supporting custom as well as COTS applications					
4.11	Docking station; recharges device, unloads data, updates device, refreshes memory					
4.12	Device capable of storing all transactions generated during shift /day					
4.13	Device capable of wired or wireless print connection					
4.14	Device capable of alphanumeric entry to include special characters					
4.15	Device dimensions and weight suitable for grasping with or without gloves					
4.16	Device dimensions and weight suitable for all day carry by hand, cargo pocket, or combination					
4.17	Device capable of drop protection by lanyard, securing to waist belt, or wrist strap					
4.18	Device capable of scanning barcodes or QR codes					
4.19	Device capable of displaying battery status with					

**Appendix I**  
**RFP Traffic Control Citation and Issuance Management System - Requirements Matrix**

Reference Number	Requirement	Standard	Configure	Customize	Not Available	Describe how this requirement will be satisfied
	alerts; visual and audible					
4.20	Option for general maintenance issues, such as replacing batteries, to be done in-house					
<b>5.0</b>	<b>Printers and Printing Capabilities</b>					
5.01	In field device subject to the rigors of outdoor inclement weather and temperature ranges of below zero to above 90 Fahrenheit should be capable of supporting the following requirements					
5.02	Printer capable of wireless operation or wired					
5.03	Printer capable of output on weather durable paper					
5.04	Printer capable of ticket like strip suitable for inserting into envelope (A7, A6, #9)					
5.05	Dustproof and water resistant in windblown conditions					
5.06	Shock resistance: capable of withstanding multiple 4 foot drops to concrete without sustaining operational damage					
5.07	Electro Static Discharge (ESD) control of device data not impaired by human movement or contact with clothing					
5.08	Battery life greater than one 12 hour shift					
5.09	Re-print capability					
<b>6.0</b>	<b>Issuance Capabilities</b>					
6.01	Application Issuing software is able to query for					

**Appendix I**  
**RFP Traffic Control Citation and Issuance Management System - Requirements Matrix**

Reference Number	Requirement	Standard	Configure	Customize	Not Available	Describe how this requirement will be satisfied
	status, pending updates for on-street space (reference 3.02 above)					
6.02	Application Issuing Software is capable on-street parking status by block; paid, expiring, or expired (reference 3.03 above)					
6.03	Application Issuing Software is driven by menu selection (reference 3.05 above)					
6.04	Application Issuing Software's menu identify type of citation to be generated (reference 3.06 above)					
6.05	Application Issuing Software can receive input data from multiple sources (reference 3.07 above)					
6.06	Application Issuing Software can utilize as input sources transformed photos, hand entered, QR, or bar code data (reference 3.08 above)					
6.07	Application Issuing Software has optional boxes to select for related or extended actions i.e. tow slips (reference 3.11 above)					
6.08	Application Issuing Software utilizes static reference data (meter numbers) and transitory data (BOLO or scofflaw list) (reference 3.12 above)					
6.09	Application Issuing Software can contain unique print characteristics for specific citation types (reference 3.15 above)					
6.10	Application Issuing Software retrieves and records citation number when issuing citation (reference 3.16 above)					

**Appendix I**  
**RFP Traffic Control Citation and Issuance Management System - Requirements Matrix**

Reference Number	Requirement	Standard	Configure	Customize	Not Available	Describe how this requirement will be satisfied
<b>7.0 Recording Capabilities</b>						
7.01	Application Issuing Software records retrieved citation in Citation Management database and on field device until cradled at end of shift or day (reference 3.18 above)					
<b>8.0 Storing Capabilities</b>						
8.01	All issued citations with uniquely issued citation numbers are retained in database in one row or in normalized tables					
8.02	May need to keep Citation and/or reference number assigned by the court					
<b>9.0 Processing Capabilities</b>						
9.01	Citation Issuance and Management System Software is the manager of transaction transmission to adjudicating authority (reference 2.06 above)					
<b>10.0 Reporting Capabilities</b>						
10.01	Ability to produce summary reports such as but not limited to: <ul style="list-style-type: none"> <li>• how many tickets issued by a CCS in a given area over a specific period of time so a comparison can be done by various</li> </ul>					

**Appendix I**  
**RFP Traffic Control Citation and Issuance Management System - Requirements Matrix**

Reference Number	Requirement	Standard	Configure	Customize	Not Available	Describe how this requirement will be satisfied
	<p>areas/neighborhoods/police precinct</p> <ul style="list-style-type: none"> <li>reports by code violation</li> </ul>					
10.02	Ability to produce ad-hoc reports and choose which data fields to display					
10.03	Ability to produce historical reports such as the number of citations issued per quarter or year					
10.04	<p>Produce canned reports such as but not limited to:</p> <ul style="list-style-type: none"> <li>status of each citation and when issued</li> <li>when the citation was sent to state interface, and when return notification was received</li> <li>CCS activity status (enforcement, traffic, white tag tow etc.)</li> </ul>					
10.05	Mechanism to display data graphically or with maps					
10.06	Ability to export reports to Excel, Access or other applications					
10.07	Ability to add data elements in a timely manner					
10.08	Desktop search function by citation number, license plate or address. View data related to each citation (photo, notes, etc.)					
10.09	Ability to view, export and print reports					
10.10	Ability to allow read only connectivity to the databases for reporting applications and the data dictionary for those databases					
10.11	If Consultant cannot accommodate the factors listed above, please describe your reporting capability					

**Appendix I**  
**RFP Traffic Control Citation and Issuance Management System - Requirements Matrix**

Reference Number	Requirement	Standard	Configure	Customize	Not Available	Describe how this requirement will be satisfied
<b>11.0</b>	<b>Additional Capabilities</b>					
11.01	Traffic control has License Plate Readers. Please provide options or descriptions that can utilize the features and functions of these tools.					
11.02	Traffic Control is interested in knowing how your proposal supports concepts of electronic chalking					
11.03	Describe any Snow Emergency capabilities your software provides					
11.04	Does your software provide solutions for towing and impound lot					
11.05	Traffic Control currently uses the Court's judicial citation process. Traffic Control is interested in being able to issue and manage administrative citations also. The desire would be a system that parallels the judicial issue, record, and store but does not interfere with the judicial system and is not sent to the courts for adjudication.					
11.06	Mechanism to read Drivers License and populate a field on the device					